University of Mississippi

eGrove

Honors Theses

Honors College (Sally McDonnell Barksdale Honors College)

Spring 5-2-2021

Parental and Peer Influences on College Students' Relationships with Food, Body Image, and Intuitive Eating Behaviors

Ann McQueen Whatley

Follow this and additional works at: https://egrove.olemiss.edu/hon_thesis

Part of the Dietetics and Clinical Nutrition Commons, and the Other Mental and Social Health Commons

Recommended Citation

Whatley, Ann McQueen, "Parental and Peer Influences on College Students' Relationships with Food, Body Image, and Intuitive Eating Behaviors" (2021). *Honors Theses*. 1627. https://egrove.olemiss.edu/hon_thesis/1627

This Undergraduate Thesis is brought to you for free and open access by the Honors College (Sally McDonnell Barksdale Honors College) at eGrove. It has been accepted for inclusion in Honors Theses by an authorized administrator of eGrove. For more information, please contact egrove@olemiss.edu.

PARENTAL AND PEER INFLUENCES ON COLLEGE STUDENTS' RELATIONSHIPS WITH FOOD, BODY IMAGE, AND INTUITIVE EATING BEHAVIORS

By Ann McQueen Whatley

A thesis submitted to the faculty of The University of Mississippi in partial fulfillment of the requirements of the Sally McDonnell Barksdale Honors College.

Oxford, MS April 2021

Approved By

Advisor: Dr. Melinda Valliant

Reader: Dr. Kathy Knight

Reader: Dr. Anne Bomba

© 2020 Ann McQueen Whatley ALL RIGHTS RESERVED

DEDICATION

This thesis is dedicated to everyone who guided and encouraged me throughout the entire process from devising a topic to defending my research project. I would especially like to dedicate this work and research to children, adolescence, and young adults who struggle with their relationships with food, eating behaviors, body image, and/or parents and peers. Everyone deserves to be fed physically by the food they eat and to be fed mentally and emotionally by the relationships they engage in with themselves and others. Thank you.

ACKNOWLEDGEMENTS

First of all, I would like to thank my thesis advisor Dr. Melinda Valliant without whom this thesis project would not be possible. Thank you for your encouragement, enthusiasm, and constant support throughout this entire process. I would also like to thank Dr. Kathy Knight and Dr. Anne Bomba for serving as my second and third readers on my thesis defense committee. A special thanks to Dr. Scott Knight for helping with the statistical analysis of my data. I would also like to thank the Sally McDonnell Barksdale Honors College and the University of Mississippi for giving me the opportunity and resources to research and complete this thesis project. Lastly, but most importantly, I would like to thank my family and friends for their unfailing support and encouragement with this project and everything else.

ABSTRACT

Society is flooded with beliefs and knowledge concerning health, diet, and beauty, which all significantly impact people's relationships with food, eating, body image, and parental and peer relationships. The present study sought to investigate parental and peer influences on college students' relationships with food, body image, and intuitive eating behaviors by distributing a self-report survey to a sample of 197 undergraduate students at the University of Mississippi. The survey consisted of six demographic questions regarding age/undergraduate classification, gender, geographical region of hometown, relationship status, childhood living arrangements, and current living arrangement to serve as the independent variables. In addition, the survey contained four questionnaires which measured Body Appreciation (BAS-2), Body Image Flexibility and Self-Assessment (BI-AAQ), Parental and Peer Influences, Intuitive Eating Scale (IES-2) to serve as dependent variables. Data were analyzed using Statistical package for the Social Sciences (SPSS Version 27.0. Armonk, NY: IBM Corp) software. The results of this study revealed that Southern, single individuals (especially women) who live alone are more likely to have negative attitudes and relationships with food, eating behaviors, and body image and/or be influenced by friends' and peers' eating behaviors. Findings suggest that lower levels of intuitive eating characteristics and/or higher levels of negative thoughts and attitudes towards food are predictors of negative feelings, thoughts, and attitudes towards one's body image and a presence or lack of intimate, close relationships with friends and partners.

TABLE OF CONTENTS

LIST OF TABLES & FIGURES	vii
CHAPTER I: INTRODUCTION	1
CHAPTER II: REVIEW OF LITERATURE	4
CHAPTER III: METHODS	30
CHAPTER IV: RESULTS	34
DISCUSSION & CONCLUSION	41
BIBLIOGRAPHY	51

LIST OF TABLES AND FIGURES

FIGURE 1	Percent Responses to Statement 9, "I shut down when I feel bad about my body shape of weight."	36
FIGURE 2	Percentage of Responses to the Question 30, "Have attempts by your close friends ever made you feel so worried about your weight that you have actually gone on a diet?"	39

CHAPTER I: INTRODUCTION

With advances and discoveries in science and medicine, there are many different beliefs concerning the best way to care for and feed the human body. Moreover, there are various ways the healthcare system and individuals measure and define health: body mass index (BMI), weight, blood pressure, heart rate, cholesterol levels, diet, amounts and types of physical activity, and many other measures. In terms of diet and nutrition in particular, there have been various ideas proposed and advertised by medical and nonmedical communities alike as to what constitutes the diet and lifestyle of a "healthy" person.

While more knowledge and scientific information about human health is beneficial for individuals and society as a whole, in many ways we have lost sight of the basic principles of health and wellness, especially regarding eating and nutrition. Diet culture has continued to grow for many years and shape the ideas and beliefs. Two of the most overpowering ideas that have become ingrained in our society are the intertwining beliefs that a lower body weight and consuming less calories are equivalent to good health. The dominating food environment and lifestyles in our society are not always conducive to eating behaviors and food choices that honor the body's physiological cues and needs (Denny et al., 2013).

Today's society and food environment offer numerous and sometimes conflicting pressures, such as food advertisements, restaurants, diets, and parental habits, that disregard humans' innate hunger signals (Dyke & Drinkwater, 2013). In response to diet culture, the concept of intuitive eating was developed during the 1980s alongside the antidieting movement (Herbert et al., 2013). Researchers believe that humans are naturally equipped to use internal cues to regulate their food consumption for optimal energy balance (Denny et al., 2013). Motivations that individuals possess for eating can be described by three groups: physical, emotional, or environmental (Denny et al., 2013). Intuitive eating consists of eating in response to internal physiological needs related to hunger and satiety cues and eating in response to these cues, rather than relying on diet plans, environmental cues, and emotional states (Herbert et al., 2013). The central components of intuitive eating are: unconditional permission to eat when hungry and what food is desired, eating for physical rather than emotional reasons, reliance on internal hunger and satiety cues to determine when and how much to eat (Herbert et al., 2013). Intuitive eating can be simplified to mean body wisdom and better awareness and responses to innate hunger and satiety signals (Dyke & Drinkwater, 2013). Research findings investigating the practice of intuitive eating suggests that the body will instinctively choose a variety of foods that provide nutritional balance (Dyke & Drinkwater, 2013). Intuitive eating focuses on eating motivated by physical reasons, encouraging people to rely on their connectedness to and understanding of physical hunger and satiety cues rather than emotional or environmental motivators (Denny et al., 2013). Many researchers claim that individuals have a natural mechanism within themselves that will ensure good nutrition and a healthy weight if this natural mechanism is allowed to function (Herbert et al., 2013).

Intuitive eating has become more and more popular as an alternative to dieting (Herbert et al., 2013). Furthermore, the anti-dieting movement grew on the basis of the

belief that restraining dieting is not sustainable and may contribute to negative outcomes and weight cycling, dysfunctional relationships with food, and a higher risk of eating disorders (Herbert et al., 2013). In addition, it has been noted that programming and policy efforts to fight obesity and focus on dietary restriction might be more successful by making efforts to improve the food environment and encourage the trust and understanding of one's own satiety and physical hunger cues, promoting eating behaviors that have positive emotional and physical health impacts (Denny et al., 2013).

The primary purpose of this study is to investigate parental and peer influences on college students' relationships with food, body image, and intuitive eating behaviors. The study focuses on a nonclinical sample of undergraduate students at the University of Mississippi. Moreover, the present research questions are based on evidence which is drawn from nonclinical samples and investigated using self-reported methods.

Hypothesis

The study investigates whether intuitive eating and an individual's relationship with his or her body, parents and peers, food, and his or her own eating habits are positively related. It is predicted that higher levels of intuitive eating will be positively related to an individual's healthy relationships with his or her body, parents and peers, food, and his or her eating habits.

CHAPTER II: REVIEW OF LITERATURE

Overview of Intuitive Eating

Eating behaviors are influenced by social cues, emotional states, and dieting (Craven & Fekete, 2019). It is suggested that intuitive eating promotes eating in response to bodily cues for hunger and satiety and permits individuals to eat unconditionally, removing rules for what, when, and how much to eat (Bruce & Ricciardelli, 2016). Intuitive eating proposes an eating style that encourages a positive relationship with food, the body, and physical activity and thus, is associated with less disordered eating, a more positive body image, greater emotional functioning, and other psychosocial correlates (Bruce & Ricciardelli, 2016). Furthermore, research demonstrates that infants as young as six weeks old and young children have the ability to respond to and compensate for the energy density of their diet and self-regulate their caloric intake based on their physiological needs (Denny et al., 2013).

Intuitive eating is associated with a lower BMI, weight maintenance, satisfaction with body image, self-esteem, affect, optimism, and life satisfaction (Bruce & Ricciardelli, 2016). Intuitive eating has shown promise in promoting healthy dietary practices and improving physical (lower BMI, cholesterol, and blood pressure) and emotional health (greater unconditional self-regard and body satisfaction and lower levels of depression and disordered eating behaviors) outcomes (Denny et al., 2013). Studies show that intuitive eating correlates with greater focus on body functioning and feeling rather than appearance (Bruce & Ricciardelli, 2016). The present review of literature seeks to provide research and findings concerning the relationship between intuitive eating and the concepts of: gender, physical health and weight, self-compassion and body image, and psychological health and disordered eating behaviors. In addition, the present review of literature also offers information regarding parental feeding practices and children's eating habits, the influence of parental feeding practices on college students' current eating behaviors, and the influence of friends' body image and eating behaviors.

Intuitive Eating, Body Image, Relationships, and Gender

Gender differences play a role in eating habits and awareness of body signals and needs. Research suggests that there are significant gender differences on all measures of eating attitudes, body image, and esteem (Ata et al., 2007). In current research, males and females differed in their average levels of self-esteem, and perceived parental, peer, and media influences (Ata et al., 2007). As individuals, girls and women in particular, are socialized growing up, they are taught to subjectively perceive themselves as "fat" or "overweight" regardless of their actual body size (Webb & Hardin, 2016). Also, findings suggest that while college-aged women are expected to look beautiful, men are often expected to have a high sexual prowess (Hoyt & Kogan, 2001). Males demonstrated very little discrepancy between ideal and actual body, whereas females had a larger discrepancy between their actual and ideal figures (Ata et al., 2007). Girls were shown to be more aware and trusting of their bodily hunger and satiety cues than boys (Moy et al., 2013). In another study, more males reported trusting their bodies to tell them how much to eat than did females (Craven & Fekete, 2019). But, girls regain their abilities to be more attune to their bodies' hunger and fullness than boys (Moy et al., 2013).

Girls were able to perceive pressure in child feeding and were aware of child feeding practices aimed at restricting and pressuring their intake because girls reported a focus on external and emotional cues in eating and a lack of attention to internal hunger and satiety cues (Carper et al., 2000). Also, relationships between child feeding practices and eating behaviors were more apparent with females, who more readily complied with parental demands about food consumption than boys did (Galloway et al., 2010). Research findings suggest that girls learn to associate eating with relief from negative emotions at a young age, and this may be caused by pressures from parents concerning when and how much they consume (Moy et al., 2013).Some studies report that there are no gender differences in the relationships between controlling parenting practices in general and emotional eating, but parents may still adapt their feeding practices based on the gender of the child (Galloway et al., 2010).

Females who have healthy relationships with their mothers and fathers report fewer weight and eating concerns (Ata et al., 2007). Intuitive eating also correlated negatively with a controlling interpersonal style of a woman's mother, in terms of eating behavior, and attachment style and perfectionistic traits (anxious or avoidant attachment style), an anxious or insecure attachment to God, self-oriented perfectionism, and discrepancy perfectionism (Bruce & Ricciardelli, 2016). Some researchers believe that girls with certain personality characteristics such as perfectionism, low self-esteem, or high body dissatisfaction, might be most susceptible to peer influences (Eisenberg & Neumark-Sztainer, 2010). Females reported higher peer support, teasing from family about weight, pressure from family and friends to lose weight, and media pressure than males (Ata et al., 2007).

Females showed more high risk eating behaviors, which were associated with more psychosocial risk factors, than males (Ata et al., 2007). Furthermore, women who reported that they stop eating when they are full had lower chances of reporting chronic dieting and binge eating than those who reported that they do not stop eating when full, but did not differ in reporting unhealthy weight control behaviors (Denny et al., 2013). Women can protect themselves from maladaptive eating patterns by having higher levels of self-compassion regarding their appearance (Kelly & Stephen, 2016). Males and females who reported trusting their body to tell them how much to eat had lower odds of utilizing disordered eating behaviors compared to those who did not have this trust (Denny et al., 2013). One study showed that over a four-day time period, college women engaged in less disordered eating on days when they were more self-compassionate toward their perceived appearance-related flaws (Kelly & Stephen, 2016). Women who eat intuitively may be less likely to engage in problematic eating behaviors when feeling shame and guilt because they rely more on actual physical hunger and satiety cues instead of emotional eating triggers (Craven & Fekete, 2019).

Women with greater body image flexibility engage in disordered eating behavior less than those with lower body image flexibility (Moore et al., 2014). Early adolescent girls are more likely to diet and are more likely to have negative feelings about their bodies, while early adolescent boys are more likely to focus their concerns on muscularity and have more positive feelings about their bodies (Ata et al., 2007). One study revealed that encouraging and teaching a woman to treat herself more selfcompassionately may increase positive feelings towards her body and may help her approach eating in a more intuitive and less restrictive way (Kelly & Stephen, 2016). While females reported more negative perceptions regarding eating and their bodies, males also exhibited poor body image and risk patterns (Ata et al., 2007). Women indicated significantly higher dissatisfaction than men did with all body parts except their forearms, and research indicates that women are typically more dissatisfied with their appearance and weight than men are (Hoyt & Kogan, 2001). Pertaining to relationships, men indicated significantly greater dissatisfaction with their relationship status than women did (Hoyt & Kogan, 2001). Intuitive eating has been associated with lower BMI, especially in female college students and in early and mid-age women in cross-sectional surveys (Herbert et al., 2013).

Intuitive Eating and a Person's Physical Health and Weight

Intuitive eating offers a shift from weight-loss focus to promoting health with a well-being focus (Webb & Hardin, 2016). By becoming attune to one's physical needs and eating in a way that supports health, adequate body weight, and nutrition, one can avoid overeating, obsessive food consumption, and harmful dieting (Herbert et al., 2013). In regards to BMI, one study found significant positive relationships between eating in the absence of hunger and poor eating compensation abilities and the child's BMI (Monnery-Patris et al., 2019). This means an increase in eating in the absence of hunger and poor eating increases a child's BMI (Monnery-Patris et al., 2019). If using BMI and weight as health indicators, studies have also shown that intuitive eaters have a lower BMI than non-intuitive eaters (Dyke & Drinkwater, 2013). Generally, it is shown that people who eat intuitively consume more nutritious foods and are able to maintain a weight that is healthy for their height and sex (Moy et al., 2013).

of being overweight in young children (Monnery-Patris et al., 2019). One of the leading causes of overweight and obesity is poor dietary behaviors, such as binge eating which does not correlate with intuitive eating (Craven & Fekete, 2019). Also, intuitive eating has been shown to be negatively associated with BMI, especially in young women (Herbert et al., 2013).

Intuitive Eating and Self-Compassion and Body Image

Researchers have looked at whether people who are less self-compassionate have better body image and more adaptive eating habits than those who are less selfcompassionate (Kelly & Stephen, 2016). Self-compassion can be defined as the tendency to treat oneself with care and kindness at times of distress and disappointment, and it derives from an orientation of care, not evaluation (Kelly & Stephen, 2016). Another study investigated college women's internalized weight stigma, intuitive eating, body shame, body image flexibility, and self-compassion (Webb & Hardin, 2016). Internalized weight bias is a form of self-stigmatization in which higher weight individuals adopt stereotypically derogative attitudes and beliefs around larger body size, and it can have many negative health and quality of life complications (Webb & Hardin, 2016). Body image flexibility is the ability to openly experience body dissatisfaction and other disordered eating thoughts without attempting to avoid or transform them in any way (Moore et al., 2014).

Attitudes of "fat stigmatization" are shown to correspond less frequently to engagement in a healthy way of relating to the process of eating (Webb & Hardin, 2016). Pertaining to geographical region, in metropolitan regions, older ages were significantly more dissatisfied with their body size than younger ages (Craike et al., 2016). Moreover, an anti-fat bias is inversely related to practicing an adaptive intuitive eating style (Webb & Hardin, 2016). Poor body image is associated with feelings of depression, lower self-esteem, negative affect, and eating disorders (Ata et al., 2007). Research suggests that regional differences in body satisfaction might vary according to stage in adolescence (Craike et al., 2016). In addition, body-related self-conscious emotion derives from: believing one has failed to achieve the cultural standard of the thin beauty ideal and having perceptions of being at a lower social rank based on physical appearance norms (Webb & Hardin, 2016). Additional research is needed to clarify how body size related norms and pressures differ by geographic region and the influence of family and peers on body image perceptions (Craike et al., 2016).

A self-compassion and intuitive eating study done by Schoenefeld and Webb among college women investigated the contributions of distress tolerance and body image acceptance and action (Schoenefeld & Webb, 2013). The inverse association between internalized weight bias and intuitive eating can be explained partly by low body image flexibility and low self-compassion (Webb & Hardin, 2016). Also, more reports of body shame correlate with decreased intuitive eating in the college student sample (Webb & Hardin, 2016). Research shows that higher levels of internalized weight bias are associated with lower self-compassion, body-image flexibility, and intuitive eating (Webb & Hardin, 2016).

Intuitive eating is shown to be associated with greater acceptance of body image and less body-related shame (Craven & Fekete, 2019). Participants who scored higher on self-compassion, body-image acceptance, and distress tolerance scored higher in their intuitive eating practices (Schoenefeld & Webb, 2013). Researchers have found that selfcompassion is linked to more adaptive and less maladaptive forms of body image and eating (Kelly & Stephen, 2016). Promoting intuitive eating behaviors has shown to lead to improvements in body image, in body image avoidance and dissatisfaction, and reduced the drive for thinness and internalization of the thin-deal (Bruce & Ricciardelli, 2016). In addition, body image flexibility is shown to have a strong, positive link to selfcompassion and intuitive eating (Schoenefeld & Webb, 2013). Self-compassion interventions have produced adaptive changes in body image and eating behavior (Kelly & Stephen, 2016). Research has found large connections between eating intuitively and the mediators for body shame, body image flexibility, and self-compassion in U.S. undergraduate females (Webb & Hardin, 2016). Intuitive eating was associated with greater body acceptance by others among women ages 18 to 65 years, female university athletes, and physically active university students, and undergraduate psychology students (Bruce & Ricciardelli, 2016). To help facilitate intuitive eating, it is suggested to adopt a self-compassionate stance towards difficult internal experiences related to the body (Schoenefeld & Webb, 2013). In one study in which students completed nightly measures of self-compassion, self-esteem, dietary restraint, intuitive eating, body appreciation, body satisfaction, and state body image, the study found that daily selfcompassion was a significant predictor of intuitive eating, and daily self-criticism is a positive predictor of restraint (Kelly & Stephen, 2016). Moreover, in the study young adult women's average level of self-compassion over the week predicted their average levels of body image and eating behavior over the week (Kelly & Stephen, 2016).

Intuitive Eating and Psychological Health

Previous literature has shown an association between positive body outcomes, like body image acceptance and body image flexibility, and intuitive eating (Craven & Fekete, 2019). Also, intuitive eating is strongly and positively associated with psychological health indicators such as better body image and self-esteem, more focus on body function rather than body appearance, satisfaction with life, optimism, proactive coping, and lower levels of depression (Dyke & Drinkwater, 2013). Intuitive eating is largely aligned with interoceptive sensitivity. Interoceptive sensitivity is the ability to perceive and process bodily signals, and interoceptive sensitivity has been shown to be associated with emotion processing and behavior regulation (Herbert et al., 2013). Intuitive eating can also be undermined by a maladaptive connection with one's body, which could diminish the capacity to pay attention to and discern the interoceptive cues signaling hunger and fullness (Webb & Hardin, 2016). In addition, replacement of internal signals with external cues has been shown to be related to weight gain and unhealthy eating practices, such as dietary restraint, eating in the absence of hunger, and eating in response to emotions (Denny et al., 2013). Also, in a study done concerning dieting, exercise, and intuitive eating among early adolescents, it was discovered that dieting to lose weight and focus on calorie restriction can disrupt the intuitive eating process (Moy et al., 2013). A review of literature on research concerning intuitive eating and health indicators found that intuitive eating results in weight maintenance, more positive associations with psychological health, and potential improved dietary intake and/or eating behaviors (Dyke & Drinkwater, 2013). One study's findings were that a self-compassionate attitude may help foster acceptance of internal, unwanted events and

would facilitate greater engagement in intuitive/adaptive eating styles (Schoenefeld & Webb, 2013). Self-compassion has been shown to help women's relationship with food because when a woman treats herself with more self-compassion, she may be more trusting of her body signals to direct her eating and she may eat in a more relaxed, rather than anxious, manner (Kelly & Stephen, 2016).

If children and adolescents grow up maintaining increasingly rigid cognitive and behavioral controls, they may stop understanding their bodies' signals and eat more in response to emotions rather than physical hunger (Moy et al., 2013). Also, higher emotional and external eating behaviors lead to over-eating in response to emotions or food-related stimuli regardless of internal states of hunger and satiety in overweight children or adolescents (Monnery-Patris et al., 2019). Intuitive eating has been shown to be positively related with self-reports of increased physical and reduced emotional eating, improved emotional wellbeing, and less preoccupation with food choice (Herbert et al., 2013). In addition, intuitive eating has been shown to be negatively related to eating disorder symptomatology, body dissatisfaction, poor interoceptive awareness, pressure for thinness, internalization of the thin ideal and body mass, and positively associated with measures of psychological well-being (Dyke & Drinkwater, 2013).

Intuitive Eating and Disordered Eating Behaviors

When comparing traditional diet programs to intuitive eating practices, individuals practicing intuitive eating had reduced depression, body dissatisfaction, and binge eating behavior (Craven & Fekete, 2019). Studies show that 46% of U.S. high schoolers report dieting behaviors, and research indicates that dieting behaviors observed in adolescence have a tendency to continue into adulthood (Denny et al., 2013). One

study showed that among a sample of middle school boys and girls dieting was related to feeling less freedom in his/her eating choices and feeling more likely to eat more to soothe emotions rather than to satisfy physical hunger (Moy et al., 2013). Learning to use and consume food on the basis of emotions over physical hunger can be a dangerous habit to form early on in adolescence that has the potential to negatively affect a person's overall health and well-being in his/her adult years. Moreover, females who reported that they stop eating when they are full had lower chances of chronic dieting and binge eating than those who did not stop eating when full (Denny et al., 2013). Also, in their literature review, Dyke and Drinkwater found that dieting, especially repeated dieting, may be harmful to physical and mental health (Dyke & Drinkwater, 2013). In addition, dieting may disrupt intuitive eating processes and has been associated with long-term weight gain (Moy et al., 2013). Moreover, surveys showed that dieters felt like they had less permission to eat what they wanted, when they wanted and were more likely to eat for emotional, rather than physical reasons (Moy et al., 2013). Also, it is shown that unconditional permission to eat whatever food one desires based on physical cues, regardless of nutrient or caloric content, may decrease excessive preoccupation with food (Denny et al., 2013). Also, studies show that the appreciation and trust of one's body's signals is positively associated with intuitive eating and decreased non-adaptive eating behaviors like dieting (Herbert et al., 2013). Dieting clearly does not promote a healthy lifestyle, seeing as dieters may experience large weight fluctuations, emotional distress, depression, and are at risk for developing eating disorders (Denny et al., 2013). Women who were underweight were the most dissatisfied with their relationships with peers of the same gender in one study, so being thinner seems to be linked to less satisfying

relationships with other women (Hoyt & Kogan, 2001). Also, researchers believe that helping people recognize and respond to internal signals of hunger and satiety may offer a healthier alternative to dieting (Denny et al., 2013).

In order to understand how intuitive eating can be protective against shame and poor dietary behaviors, it is important to understand disordered eating behaviors. Not accepting natural body signals has been suggested to contribute to symptoms of disordered eating and dietary restraint (Herbert et al., 2013). Binge eating occurs when individuals attempt to manage negative affect by using food to cope and distract (Craven & Fekete, 2019). In addition, guilt and shame often precede binge eating, especially with Western society emphasizing the "thin ideal" among women (Craven & Fekete, 2019). Internalized weight bias can be a driving force behind many negative health and quality of life complications and is related to many maladaptive eating processes (binge eating, emotional eating, food addiction, poor eating-related self-efficacy) and forms of body image disturbance (body shame, body dissatisfaction, fear of fat, weight concerns) (Webb & Hardin, 2016). Also, feelings of non-weight related shame have been associated with disordered eating (Craven & Fekete, 2019). Another study explored intuitive eating among young adults and associations between intuitive eating and disordered eating behaviors (Denny et al., 2013). The ability to use physical hunger and satiety cues to effectively regulate energy consumption is innate, but when a person's innate ability is diminished because of more focus on external cues, naturally regulated energy consumption is replaced by unhealthy eating practices (Denny et al., 2013).

Intuitive eating is a form of adaptive eating, in which adaptive eating is most often defined as the absence of eating disorder symptoms (Herbert et al., 2013). One

study revealed that weight-related shame and guilt were connected to increased binge eating symptomatology (Craven & Fekete, 2019). Individuals who do not practice intuitive eating may be more easily disconnected from physical cues of hunger, leading to dysregulated eating behaviors such as binge eating (Craven & Fekete, 2019). Research shows that sociocultural influences on eating problems are family, media, and peers (Hutchinson & Rapee, 2007). However, intuitive eating emphasizes being able to change one's relationship to eating, and unconditional self-acceptance is associated with less binge eating symptomatology (Craven & Fekete, 2019). Young adults who reported they trust their bodies to tell them how much to eat had significantly lower opportunities for all disordered eating behaviors compared to those who reported that they did not trust their body (Denny et al., 2013). Intuitive eating encourages being able to recognize and respond to hunger cues appropriately, without intentionally restricting food (Craven & Fekete, 2019). Individuals who reported that they trust their body to tell them how much to eat and stop eating when full had lower chances of dieting and engaging in disordered eating behaviors and lower odds of reporting binge eating and chronic dieting (Denny et al., 2013). Results show positive effects of body image flexibility on improving disordered eating behavior (Moore et al., 2014). In addition, when an individual responds to her perceived appearance flaws with greater self-compassion, she reported less disordered eating (Kelly & Stephen, 2016). Another study investigated whether body image flexibility accounts for disordered eating behaviors above and beyond disordered eating thoughts, mindfulness, and psychological inflexibility (Moore et al., 2014).

Parental Feeding Practices and Children's Eating Habits

Parental feeding practices can be defined as encouraging children to eat or not eat specific foods, requiring children to clean their plates at mealtimes, rewarding behaviors with favorite foods, and restricting intake of healthy or unhealthy foods (Loth et al., 2013). Caregivers' messages about eating and weight can impact a child's eating behavior (Denny et al., 2013). An example of parental control that can have negative consequences is when children are regularly encouraged to "clean their plate," often resulting in children associating fullness with the cleanness of their plate rather than their physical sensation of fullness (Denny et al., 2013). In a study done on food-related parenting practices (techniques parents use to influence children's eating), findings suggest that the use of controlling, food-related parenting practices, such as pressuring children to eat and restricting children's intake, is common among parents of adolescents (Loth et al., 2013). Certain foods can become more desirable to children if they are withheld from them or less desirable if they are forced upon them (Denny et al., 2013).

Other factors that can influence food-related parenting practices are social and economic influences and pressures on parents that in turn impact a child's dietary patterns and weight status (Loth et al., 2013). It is shown that parental feeding practices varied based on the parent sociodemographic characteristics (Loth et al., 2013). Also, reports suggest that in addition to parental economic resources, social or cultural traditions may contribute to parents' decision to use certain feeding practices (Loth et al., 2013). Results showed that parents from ethnic and racial minority groups reported higher levels of restriction and pressure-to-eat compared to white parents (Loth et al., 2013).

Impact of Parental Feeding Practices on Children

Parents shape children's eating environment and are the most important vehicle for implementing eating habits (Gouveia et al., 2019). Food-related parenting practices have been identified as significantly correlating to a child's weight and dietary intake patterns (Loth et al., 2013). Research has demonstrated that a change in focus from internal cues to external cues, especially environmental pressures like parental control and messages, can disrupt the ability to innately regulate energy intake (Denny et al., 2013). Parental awareness of children's cues was negatively associated with both children's eating in the absence of hunger and poor eating compensation abilities, meaning if parental awareness was high, then children's eating in the absence of hunger and poor eating compensation abilities was low and vice versa (Monnery-Patris et al., 2019). In addition, parental control over when, what, and how much a child eats is negatively associated with the child's ability to self-regulate their own energy intake (Denny et al., 2013). Food and eating-related pressures within the family and home environment (such as food restriction and pressure to eat) can cause problems with children and adolescents' relationship with emotional eating and their ability to eat intuitively (Moy et al., 2013). One study investigated the links between children's selfregulation of eating and related parental feeding practices through a questionnaire and interviews with mothers (Monnery-Patris et al., 2019). Children's ability to self-regulate their food intake becomes influenced by their external environment (portion sizes or parental control in feeding) as they age (Monnery-Patris et al., 2019). Environmental influences could lead children to focus their attention on external cues rather than internal cues to self-regulate their eating (Monnery-Patris et al., 2019). Research has found that

restriction and pressure-to-eat food-related parenting practices can negatively impact children's current and future dietary intake (Loth et al., 2013). Parental feeding practices such as these encourage behaviors that override children's innate, internal hunger and satiety cues and encourage children to eat in response to external cues (Loth et al., 2013). External cues that are common in the social environment and can pressure children in negative ways are eating at specific times, the size of food portions being set, and cleaning one's plate (Loth et al., 2013). Also, it is shown that mothers play a large role in teaching their daughters cultural values regarding weight, shape, and appearance (Carper et al., 2000).

A solution to correct negative parental feeding practices is developing an "appropriate division of responsibility" in which the parent controls which foods are offered and made available to the child who then decides how much to eat (Loth et al., 2013). The basis of mindful parenting is lower use of food as a reward and emotional regulation strategy and having foods more available with encouragement and consumption of healthier and varied food for the child (Gouveia et al., 2019). It is shown that child-feeding practices that set limits while allowing children to make eating decisions about what and how much to eat may foster self-control in eating (Carper et al., 2000). Studies done regarding mindful parenting and mindful feeding have found positive associations between these parenting approaches and healthier eating habits among children (Gouveia et al., 2019). Mindful parenting was negatively associated with children's emotional eating through lower levels of parenting stress and less frequent use of food as a reward (Gouveia et al., 2019). It was suggested that mindful parenting can help children and adolescents engage in less disordered eating behaviors through lower levels of parenting stress and the adoption of more adaptive child-feeding practices (Gouveia et al., 2019). Higher levels of mindful parenting skills were associated with lower rates of children and adolescents having disordered eating behaviors due to lower levels of parenting stress and more adaptive parental child-feeding practices (Gouveia et al., 2019). Practices such as these could be very comparable to intuitive eating and help a child grow into an intuitive eater. Parents' control in child feeding shapes food intake behaviors during early childhood (Carper et al., 2000).

Parental Pressure to Eat.

The dietary restraint and emotional disinhibition that girls reported was related to their perceptions of parental pressure to eat more: girls who reported dietary restraint were three times more likely to report high levels of emotional disinhibition than were girls with low levels of dietary restraint (Carper et al., 2000). In addition, some parental feeding practices and styles, such as feeding when an infant is not hungry, seem to promote overeating in children by impairing the infant's response to his or her internal states of hunger and satiation (Monnery-Patris et al., 2019). Moreover, girls who perceived greater pressure to eat from their parents were twice as likely to perceive restriction as were girls who received less pressure to eat (Carper et al., 2000). Also, daughters who reported greater levels of parental pressure to eat were three times more likely to report dietary restraint, emotional, and external disinhibition than were girls who perceived less parental pressure to eat (Carper et al., 2000). Greater parental pressure to eat increased the likelihood of limiting their food intake and eating in response to external factors like emotions and the presence of appealing foods (Carper et al., 2000). Also, the use of food as a reward is associated with higher consumption of unhealthy foods in

children (Monnery-Patris et al., 2019). Pressuring children to eat has been associated with greater intake of unhealthy foods and lower intake of healthy foods with greater pickiness (Gouveia et al., 2019). Boys are more likely to receive higher pressure to eat (Galloway et al., 2010). However, an increased frequency of family meals was associated with healthier consumption among children (Monnery-Patris et al., 2019).

Parental Restrictions on Eating.

On the other hand, restrictive feeding practices may discourage adequate selfcontrol of eating by increasing a child's desire to eat restricted foods when available, even in the absence of hunger (Carper et al., 2000). Also, some controlling feeding strategies were associated with children/adolescents' disordered eating behaviors (Gouveia et al., 2019). In addition, studies show that highly controlling approaches to child feeding may have unintended effects on children's eating by diminishing children's senses of their own hunger and satiety cues (Carper et al., 2000). The use of restrictive strategies has been associated with unhealthy eating behaviors, such as increased eating of palatable and high energy-dense food and with disordered eating behaviors such as emotional eating and overeating (Gouveia et al., 2019). Research shows that girls receive higher levels of controlling feeding practices and are rewarded more for eating compared to boys (Galloway et al., 2010). Also, higher levels of restrictive parental feeding practices were related to daughters' recollections of less eating for physical reasons of hunger and satiety (Galloway et al., 2010). Parents who recollected more restriction of their sons' food intake had sons with heavier BMIs (Galloway et al., 2010). In addition, caregiver feeding patterns that are unresponsive to child hunger and/or fullness cues may

contribute to over consumption because this promoted eating in the absence of hunger or eating past fullness (Monnery-Patris et al., 2019).

Influence of Parental Feeding Practices on College Students' Current Eating Behaviors and Weight

Young children have an innate ability to self-regulate food intake by mainly paying attention to hunger and satiety cues but this ability decreases as a child ages (Monnery-Patris et al., 2019). Early eating behaviors seem to set the stage for later eating behaviors (Denny et al., 2013). Evidence suggests that eating behaviors are consistent from childhood to adolescence (Monnery-Patris et al., 2019). In addition, many parents report exercising some level of control over their adolescent's food choices and portions, and it is shown that parents' influence on adolescent dietary intake patterns help establish behaviors during adolescence that often become lifelong behaviors (Loth et al., 2013). Adult-like problematic eating styles begin to emerge by middle childhood and adolescence, especially among girls (Carper et al., 2000). It is shown that restriction and pressure on child eating are inversely related with eating in response to internal hunger and satiety cues later in life (Denny et al., 2013). Moreover, among adults, problematic styles of food intake regulation are related to adverse health outcomes such as being overweight, body dissatisfaction, binge eating, and depression (Carper et al., 2000). It was also suggested that mindful parenting may have an important role in promoting healthier eating behaviors among children and adolescents and can diminish disordered eating among youth (Gouveia et al., 2019). Studies show that pressure to eat by parents is linked to adolescents' lower weight status and restrictive parental feeding practices are positively related to heavier body weight (Galloway et al., 2010). In addition, child

feeding practices recollected by parents are linked to the development of emotional eating and weight of women in early adulthood (Galloway et al., 2010). Higher recollections of parental restriction and monitoring were positively correlated with higher BMI and higher levels of emotional eating (Galloway et al., 2010). Since adolescent development involves increasing individuation from both family and peers, girls may be more susceptible to social influence in the early stages of adolescence (Hutchinson & Rapee, 2007).

Due to lack of research, little is known about how feeding practices used in childhood relate to eating behaviors and weight status in early adulthood (Galloway et al., 2010). However, one study was done to assess college students' and their parents' retrospective reports of child feeding practices used when the students were in middle childhood and college students' current reports of their eating behavior by using the Dutch Eating Questionnaire, Intuitive Eating Scale, and current BMI (Galloway et al., 2010). Results showed positive correlations between parental child feeding practices, BMI, and emotional eating in female students but not male students (Galloway et al., 2010). Relationships with parents that are more conflict-ridden and less warm and supportive are predictive of increased dieting and lower body image (Ata et al., 2007). The use of psychological control that is not specific to feeding in general parenting was positively related to emotional eating in adolescents (Galloway et al., 2010). In addition, parental monitoring and controlling child feeding practices were positively associated with students' restrained eating behaviors and current emotional eating in students (Galloway et al., 2010). Parents' own dieting behavior has been shown to be associated with adolescents' body satisfaction and dieting behaviors (Eisenberg & NeumarkSztainer, 2010). Parents who recollected monitoring and restricting their daughters' food intake more had daughters who reported significantly more emotional eating and had higher BMIs (Galloway et al., 2010). It is shown that some eating disorders can start out during early to mid-adolescence as minor body image distortions and dieting behaviors and then during mid- to late-adolescence can develop into more EWLB and clinical disorders (Hutchinson & Rapee, 2007). Moreover, dieting in adolescence has been shown to predict weight gain over time (Eisenberg & Neumark-Sztainer, 2010). Also, studies show that women who were teased about their weight in childhood were more dissatisfied with their weight during adulthood (Ata et al., 2007). Two of the studies reviewed showed that intuitive eating was negatively associated with restrictive or critical messages by caregivers (Bruce & Ricciardelli, 2016).

Influence of Friends' and Relationship Status on Body Image and Eating Behaviors

Friends' body image concerns and eating behaviors predict adolescents' own concerns and behavior (Ata et al., 2007). Also, friends' involvement with dieting may be associated with the development of disordered eating, after accounting for other influences like parents' dieting (Eisenberg & Neumark-Sztainer, 2010). One study suggests that support from peers may play a larger role in predicting negative eatingrelated behaviors than parental support (Ata et al., 2007). Peer influence has been in literature moderately; however, developmental and clinical researchers have established that during adolescence young people place significant importance on the attitudes, beliefs, and behaviors of peers (Hutchinson & Rapee, 2007). Previous research suggests that friends may be an important influence, especially among females (Eisenberg & Neumark-Sztainer, 2010). Pressures from peers to be thin or muscular are particularly powerful during adolescence as females and males are likely to talk to their friends about dieting or muscle-building (Ata et al., 2007). Young people tend to resemble their friends in appearance, social attributes, interests, attitudes, and behaviors (Hutchinson & Rapee, 2007). Adolescents' negative body esteem, body image, and eating attitudes were associated with low self-esteem and social support, weight-related teasing, and greater pressures to lose weight (Ata et al., 2007).

There is clearly a need for prevention and early intervention within friend peer groups and targeting emotional and physical problems alongside body image and eating disturbances (Hutchinson & Rapee, 2007). Reducing adolescents' perceptions of appearance-related pressure from family and friends may be significant for enhancing body image and decreasing connections between low self-esteem and negative eating behaviors and weight-related perceptions (Ata et al., 2007). In addition, men and women who are single and displeased with being single might attribute their lack of relationship to not being "attractive enough" (Hoyt & Kogan, 2001).

There is a significant connection between self-esteem and physical appearance that is affected by and affects how adolescents interpret feedback and interactions in their relationships with family members and friends (Ata et al., 2007). Peers are influential in the development of personality traits, physical characteristics, and behavioral tendencies (Hutchinson & Rapee, 2007). Strong links between self-esteem and body image may also be accounted for by other family and friend influences (Ata et al., 2007). The aim of one study was to examine the extent of peer similarity in body image and eating problems in early adolescence and whether cliques/social groups classified as high and low on physical, psychological, and peer influence variables (Hutchinson & Rapee, 2007). When friendships involve discussions pertaining to body appearance and ways to enhance appearance, adolescents are more likely to have poor body image themselves (Ata et al., 2007). Adolescent girls compare their developing bodies to unrealistic physical ideals and are very frequently exposed to information about how to diet and exercise to attain this thin-ideal (Hutchinson & Rapee, 2007). Lower peer acceptance, perceived social support, and friendship intimacy predict poor body image in adolescent females (Ata et al., 2007). Findings show that socialization contributes significantly to changes in body image concerns and eating behaviors in young adult women, and adolescent friends share similarities in their body attitudes and weight loss behaviors (Hutchinson & Rapee, 2007). Also, the way a woman perceives her own level of attractiveness seems to influence her comfort in and enjoyment of sexual relationships, and this could be due to the societal message that appearance is most important to finding a mate (Hoyt & Kogan, 2001). While parents and friends may provide social support, they may also increase adolescents' body image concerns through teasing or increasing pressures youth feel to change their appearance (Ata et al., 2007). In addition, peer attitudes and behaviors also contributed to individual body image and eating disturbances (Hutchinson & Rapee, 2007). In a retrospective study of college women, around 3/4 of women reported they were teased repeatedly and/or criticized about their appearance during adolescence (Ata et al., 2007). Adolescents who are teased about their weight, body shape, and appearance tend to exhibit poorer body image and are more likely to diet (Ata et al., 2007).

Research suggests that friends' social support and acceptance may help adolescents rise above sociocultural pressures and feel more positively about their bodies (Ata et al., 2007). Friends who are less appearance and weight-oriented may provide a protective environment (Ata et al., 2007).

It is significantly shown that adolescents adopt behaviors similar to their peers' behaviors in which they are already engaged (Eisenberg & Neumark-Sztainer, 2010). While the etiology of disordered eating behaviors in adolescents is multifactorial, researchers have suggested friends may be an important influence (Eisenberg & Neumark-Sztainer, 2010). One study investigated the role of friendship networks and peer influences in body image concern, dietary restraint, extreme weight loss behaviors (EWLB), and binge eating in young adolescent females (Hutchinson & Rapee, 2007). This study sought to determine whether girls' perceptions of their friends' weight and shape related attitudes and behaviors contributed to the prediction of individual body concern and eating behaviors (Hutchinson & Rapee, 2007). An individual girl's dieting and EWLB use could be predicted from her friends' respective dieting and EWLB scores, showing the significance of the peer environment in body image and eating problems during early adolescence (Hutchinson & Rapee, 2007). Friends' dieting has been positively associated with chronic dieting, unhealthy weight control behaviors, extreme weight control behaviors, and binge eating five years later among females and with extreme weight control behaviors five years later among males (Eisenberg & Neumark-Sztainer, 2010). In a few studies, perceived peer pressure to be thin was more strongly associated with disordered eating attitudes and behaviors in adolescent girls than perceived peer pressure from other sources like family, male friends, or the media (Hutchinson & Rapee, 2007). Many studies emphasize the importance of peer influence on weight concerns and disordered eating (Hutchinson & Rapee, 2007). The more female

28

adolescents perceived their friends dieting, the more likely they were to report chronic dieting, extreme weight control behaviors, and binge eating 5 years later (Eisenberg & Neumark-Sztainer, 2010). Studies have found that weight-related attitudes and behaviors among friendship groups are associated with body dissatisfaction, dieting onset, chronic dieting, unhealthy weight control behaviors, and eating disorder symptoms (Eisenberg & Neumark-Sztainer, 2010). Early adolescent friendship group members shared similarities in dietary restraint, EWLBs, and binge eating, but not body image concern (Hutchinson & Rapee, 2007). Girls with friends who diet were also likely to diet (Hutchinson & Rapee, 2007). Perceived friend concern with thinness and dieting predicted individual dieting (Hutchinson & Rapee, 2007). Girls who engage in disordered eating might project their own weight and shape concerns onto their friends (Hutchinson & Rapee, 2007). Among female adolescents who reported that their friends were involved in dieting, around 27% reported using extreme weight control behaviors five years later (Eisenberg & Neumark-Sztainer, 2010). One study indicates that members of female friendship cliques shared similarities in dieting, use of EWLBs, and binge eating (Hutchinson & Rapee, 2007). Among males, greater friends' dieting was associated with extreme weight control behaviors (Eisenberg & Neumark-Sztainer, 2010). In terms of dating, individuals who had less satisfying dating situations and sex lives were less satisfied with their overall appearance (Hoyt & Kogan, 2001). Females who were most dissatisfied with their dating relationships were also most dissatisfied with the overall body image (Hoyt & Kogan, 2001).

The results of one study indicates that reduction or elimination of dieting behaviors in a peer group might prevent uptake of disordered eating behaviors among adolescents (Eisenberg & Neumark-Sztainer, 2010). Findings suggest that parents should heighten their awareness regarding dieting practices among their children's friends and discuss strategies for dealing with diet related comments their peers make (Eisenberg & Neumark-Sztainer, 2010). Also, health care providers can ask adolescents about their friends' eating and dieting behaviors in order to better understand an adolescent's peer culture and address these issues (Eisenberg & Neumark-Sztainer, 2010).

CHAPTER III: METHODS

Participants

All participants were recruited from the University of Mississippi. Participants were at least 18-years-old and enrolled at the University of Mississippi as undergraduate students.

Procedure

The current study was exempt by the Institutional Review Board under 45 CFR 46.101(b)(#2). Participants completed an anonymous, online survey. Prior to the survey, the purpose of the study, duration, procedures and activities, risks, benefits, alternatives, confidentiality, right to withdraw, and statement of consent were presented to the participants. The following measures were administered to assess body appreciation, body image flexibility and self-assessment, parental and peer influences, and intuitive eating prevalence.

Measures

Body Appreciation (BAS-2)

In order to assess an individual's level of body appreciation, 10 items from the BAS-2 (Avalos et al., 2005) were administered. Its items were rated based on a 5-point scale ranging from labels of strongly disagree to strongly agree. The BAS was created to reflect aspects of positive body image that have been identified in literature that describe positive body image and ways to increase positive body image. Items were designed to assess the extent to which people: (a) hold favorable opinions of their bodies, (b) accept

their bodies in spite of their weight, body shape, and imperfections, (c) respect their bodies by attending to their body's needs and engaging in healthy behaviors, and (d) protect their body image by rejecting unrealistic images of the thin-ideal prototype portrayed in the media (Avalos et al., 2005). These concepts/traits reflect unconditional approval and respect of the body, which is a concept of positive body image which was termed body appreciation (Avalos et al., 2005).

Body Image Flexibility and Self-Assessment (BI-AAQ)

A self-assessment of body image was given by administering 12 items from the BI-AAQ (Sandoz et al., 2013). Its items were rated based on a 5-point scale ranging from labels of strongly disagree to strongly agree. The self-report scale measures the extent to which a person is consumed by difficult body image beliefs, the degree to which one avoids or is affected by body image-related negative psychological experiences, and the extent to which one's values and activities are disrupted by body dissatisfaction. The assessment of body image flexibility can help improve the prediction of disordered eating behaviors over existing measures of flexibility. The BI-AAQ was developed with the ultimate goal of facilitating continued prevention and treatment development in the area of disordered eating (Sandoz et al., 2013).

Parental and Peer Influences

Retrospective Parental Feeding Practices.

Three items developed by the principal investigator of this study were administered. Its items were rated based on a 5-point scale ranging from labels of *strongly disagree* to *strongly agree*. These items (e.g. "Did your parents encourage you to "clean your plate" as a child?) were created to assess parental feeding practices and attitudes a person experienced as a child.

Retrospective Child Feeding Questionnaire (CFQC).

Three items from the CFQC (Galloway et al., 2010) were administered. Its items were rated based on a 5-point scale ranging from labels of *strongly disagree* to *strongly agree*. The questionnaire was designed to examine college students' recollections of the feeding practices used by their parents when they were younger. This questionnaire was adapted from the Child Feeding Questionnaire for Children designed to assess children's perceptions of child feeding practices used by their parental use of pressure to eat and restriction. The children's questionnaire was modified to use with college students and the items were changed to past tense. The CFQC is proven to predict restrained eating and emotionally disinhibited eating (Galloway et al., 2010).

Perceived Pressure to Be Thin and Diet.

Four items from The Friends' Concern with Thinness and Dieting Scale (Paxton et al., 1999) were administered. Its items were rated based on a 5-point scale ranging from labels of *strongly disagree* to *strongly agree*. The items were designed to examine the degree to which friends were considered important in influencing a person's body attitudes and weight loss behaviors and the perceived pressure to be thin and diet (Hutchinson & Rapee, 2007).

Intuitive Eating Scale (IES-2)

The 23-item Intuitive Eating Scale (Tylka & Kroon, 2013) was also administered to assess participants' tendency to eat in response to their internal hunger and satiety cues rather than emotional or situational cues when determining when, what, and how much to eat. Its items were rated based on a 5-point scale ranging from labels of *strongly disagree* to *strongly agree*. Items were averaged with higher scores indicating greater intuitive eating. This scale has demonstrated reliability and validity with college women in particular, and the IES-2 was developed to improve upon assessment of additional components of intuitive eating, especially among men too. IES-2 has also been proven to be a good predictor of psychological well-being above and beyond eating disorder symptomatology (Tylka & Kroon, 2013).

Statistical Analysis

Data were analyzed using Statistical Package for the Social Sciences (SPSS Version 27.0. Armonk, NY: IBM Corp) software. The survey contained six demographic questions (Q1 – Q6) to highlight and provide information for the independent variables as well as 54 self-report questions (Q7_1 – Q7_54) reporting on eating behaviors and intuitive eating, body image, and parental and peer influences (with one through five Likert Scale responses) to serve as the dependent variables. Before analyzing the data, Q5 was removed because there was one respondent who selected "other" which made the question statistically invalid. In addition, any incomplete surveys were removed from the data, to give a total of 197 respondents. 270 individual tests were run on the data, using the two tests Kruskal-Wallis H and Mann-Whitney U. The Mann-Whitney U test is used to analyze independent variables with two possible groups (in this case, gender). The Kruskal-Wallis H is the non-parametric ranked test equivalent of the Analysis of Variance, used when the distribution of data is not equal. Significance was p <= 0.05 indicating that any differences between items is unlikely to be due to random chance.

CHAPTER IV: RESULTS

The sample included 197 nonclinical undergraduate students. 35 (17.11%) of the participants were men and 160 (81.22%) participants were women. The ages/undergraduate classifications (Q1) were 44 (22.34%) Freshmen, 51 (25.89%) Sophomores, 43 (21.83%) Juniors, and 59 (29.95%) Seniors. The sample's gender (Q2) was 35 (17.77%) men, 160 (81.22%) women, and 2 (1.02%) non-binary/non-conforming. For hometown geographical locations (Q3) the responses were as follows: 5 (2.54%) East, 27 (13.71%) North, 157 (79.70%) South, 7 (3.55%) West, and 1 (0.51%) left this question blank. In terms of relationship statuses (Q4) 82 (41.62%) are dating, 3 (1.52%) are married, and 112 (56.85%) are single. Also, in terms of childhood living arrangements (Q5), 196 (99.49%) lived with their parents and 1 (0.51%) lived with "Other." As for current living arrangements (Q6), 18 (9.14%) live alone, 178 (90.36%) live with others, and 1 (0.51%) selected "Other."

Eating Behaviors and Intuitive Eating

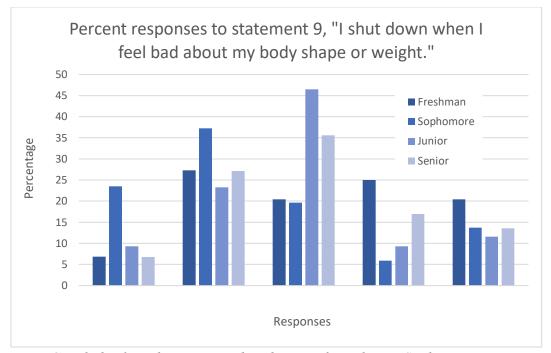
The most significant findings regarding eating behaviors included the items: Q7_35 and Q7_40. Both Q7_35 and Q7_40 are from IES-2, specifically the section "Unconditional Permission to Eat Subscale (Tylka & Kroon, 2013). Q7_35 stated: "I get mad at myself for eating something unhealthy." For the independent variable gender (Q2), 31.43% of men selected "Agree." 28.13% of women selected "Agree" and 20.63% of women chose "Strongly agree." In terms of the independent variable of participants' current living arrangement (Q6), 44.44% of participants who currently live alone selected "Agree." However, only 27.53% of respondents who currently live with others selected "Agree." Q7_40 stated: I have forbidden foods that I don't allow myself to eat. For the independent variable of a person's relationship status (Q4), 45.12% of respondents who are in a dating relationship strongly disagreed with this statement. However, only 22.32% of respondents who are single strongly disagreed with this statement. In terms of the independent variable of a respondent's current living arrangement, 33.33% of participants who live alone selected "Agree." However, only 12.36% of participants who live with others agree with this statement.

Body Image

The most significant findings pertaining to body image included the following items: Q7_9, Q7_14, Q7_7, Q7_16, Q7_18, Q7_21, and Q7_22. Q7_9 stated: "I shut down when I feel bad about my body shape or weight." For the independent variable of undergraduate classification (Q1), 23.53% of Sophomores answered "Strongly Agree" compared to only 6.82% of Freshmen, 9.30% of Juniors, and 6.78% of Seniors answering "Strongly Agree."

Figure 1

Percent Responses to Statement 9, "I shut down when I feel bad about my body shape or weight."



Note. Graph displays the response distribution of Freshmen, Sophomores, Juniors, and Seniors for the statement "I shut down when I feel bad about my body shape or weight." Majority of respondents who agreed are Sophomores.

For the independent variable gender (Q2), 68.57% of men either "Disagree" or "Strongly Disagree." For women, 31.88% selected "Agree" and 28.75% selected "Disagree." Pertaining to the independent variable relationship (Q4), 36.59% of those who are in a dating relationship selected "Disagree." 33.93% of those who are single selected "Agree." Q7_14 stated: "When I start thinking about the size and shape of my body, it's hard to do anything else." For the independent variable gender (Q2), 39.09% of respondents disagreed with this statement, but 79.22% of those that disagreed were

women. Pertaining to the independent variable of hometown (Q4), 39.09% of respondents disagreed with this statement and of those that disagreed, 29.95% of those respondents are from the South. For the independent variable relationship status (Q4), 9.14% of respondents "Strongly agree" but of those 9.14%, 72.22% are single. Q7 7 stated: "Worrying about my weight makes it difficult for me to live a life that I value." For the independent variable geographical location of hometown (Q3), 37.56% selected "Disagree" but of those 74.32% are from the South. Pertaining to the independent variable relationship status (Q4), 9.64% of respondents selected "Strongly agree" and of those 73.68% are single. Q7 16 exclaimed: "I take a positive attitude towards my body." Pertaining to the independent variable relationship status (Q4), 20.73% of respondents who are in a dating relationship strongly agreed, while only 5.36% of respondents who are single selected "Strongly Agree." In terms of the independent variable current living arrangement (Q6), 95.45% of respondents who currently live with others agreed with this statement, while only 4.55% of those who chose "Agree" live alone. Q7 18 stated: "I feel love for my body." Pertaining to the independent variable hometown (Q3), 87.5% of participants who were neutral regarding this statement are from the South, while of the other respondents 10.71% are from the North and 1.79% are from the West. For the independent variable current living arrangement (Q6), 82.76% of respondents who currently live with others chose "Disagree," while only 17.24% of participants who live alone selected "Disagree." Q7 21 makes the statement: "Worrying about my body takes up too much of my time." In terms of the independent variable gender (Q2), 93.88% of participants who chose "Agree" were women, while only 6.12% of respondents who agreed with this statement were men. For the independent variable relationship status

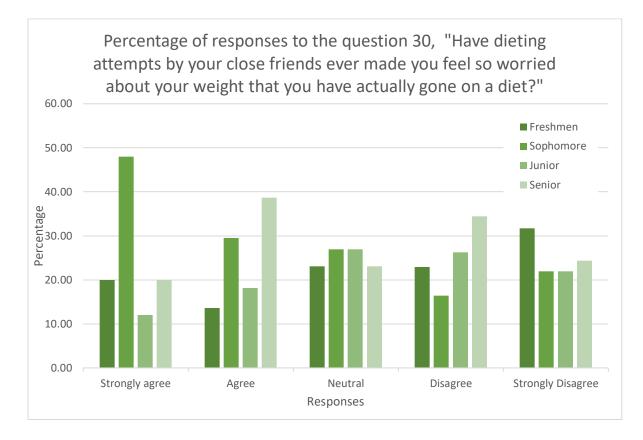
(Q4), 69.39% of respondents who agreed with this statement are single, and only 28.57% of participants whole chose "Agree" are in a dating relationship. Q7_22 states: "If I start to feel fat, I try to think about something else." In terms of the independent variable gender (Q2), of the participants who agreed with this statement, 92.41% were women, and only 6.33% were men. For the independent variable hometown (Q3), of the respondents who chose "Agree" for this statement, 74.68% were from the South, 20.25% were from the North, 3.80% were from the West, and 1.27% were from the East.

Parental and Peer Influences

The most significant findings pertaining to parental and peer influences include items: Q7_30, Q7_15, and Q7_31. Q7_30 asked: "Have dieting attempts by your close friends ever made you feel so worried that you have actually gone on a diet?" Concerning the independent variable undergraduate classification (Q1), 48.00% of Sophomores "Strongly agree" compared to 20.00% of Freshmen, 12.00% of Juniors, and 20.00% of Seniors answering "Strongly agree."

Figure 2

Percentage of Responses to the Question 30, "Have attempts by your close friends ever made you feel so worried about your weight that you have actually gone on a diet?"



Note. Graph displays the response distribution of Freshmen, Sophomores, Juniors, and Seniors for the statement "Have dieting attempts by your close friends ever made you feel so worried about your weight that you have actually gone on a diet?" Majority of respondents who strongly agreed are Sophomores.

For the independent variable gender (Q2), 22.34% chose "Agree" and of those 81.82% were women. 30.96% chose "Disagree" and of those 88.52% were women. 42.86% of all men selected "Strongly Disagree." Q7_15 stated: "My relationships would be better if my body weight and/or shape did not bother me." For the independent variable of a participant's hometown (Q3), 25.38% chose "Agree" and of those 88.00% are from the South. Concerning the independent variable relationship status, 11.68% selected

"Strongly agree" and of those 82.61% are single. Q7_31 asked: "Have you ever gone on a diet, not because you really thought you needed to lose weight, but because one or more of your friends were dieting?" For the independent variable gender (Q2), 51.43% of men chose "Strongly Disagree." Whereas, only 30.00% of women chose "Strongly Disagree." Pertaining to the independent variable relationship status (Q4), 47.32% of participants who are single chose "Disagree." Whereas, of the participants who are dating, 30.49% chose "Disagree" and 46.34% chose "Strongly Disagree."

Eating behaviors and intuitive eating, body image, and parental and peer influences are highlighted in the most significant findings of this study. For eating behaviors and intuitive eating, a significant number of men and women who live alone have negative attitudes towards "unhealthy" foods. Also, single individuals who live alone were found to have an unhealthy relationship with certain foods and negative eating behaviors. In terms of body image, there were many significant findings but the most highlighted patterns within the significant findings suggest that single women who live alone experience more negative thoughts and feelings towards their body than those who are in a dating relationship and live with others. Also, Southern women in particular are more prone to possess a negative body image. Pertaining to parental and peer influences, single, sophomore women are most likely to be influenced by their friends' eating behaviors. In addition, Southern, single individuals are most likely to believe their relationships would be better if their body weight and/or shape did not bother them.

DISCUSSION & CONCLUSION

Eating Behaviors and Intuitive Eating

The two most significant items regarding intuitive eating fall under IES-2 "Unconditional Permission to Eat Subscale" (Tylka & Diest, 2013).

Regarding the statement: "I get mad at myself for eating something unhealthy," a significant number of men and women agreed or strongly agreed with this statement. Also, significantly more participants who currently live alone agreed with this statement. These findings suggest that both men and women have negative reactions to consuming foods they deem unhealthy. Moreover, the results could be due to the pressure both college-aged men and women feel to be healthy and physically attractive, and being healthy is largely tied to an individual's eating habits and food choices. In addition, respondents who live alone are more likely to get mad at themselves for eating something unhealthy, due to the increased likelihood that people will over eat foods that are unhealthy. However, previous research shows that more males reported trusting their bodies to tell them how much to eat than did females (Craven & Fekete, 2019). But, girls regain their abilities to be more attune to their bodies' hunger and fullness than boys (Moy et al., 2013). Since college-aged men and women may be more removed from their innate hunger and fullness cues, both men and women (especially those who live alone) may struggle more with overeating than they did in childhood, which causes negative attitudes towards "unhealthy" foods.

For the statement: "I have forbidden foods that I don't allow myself to eat," a significant number of participants who are in a dating relationship disagreed with this statement. In addition, a significant number of respondents who live alone agreed with this statement. The findings suggest that individuals who are single and live alone are more likely to have forbidden foods that they label as "bad" and do not eat. Having forbidden foods may also serve as a protective factor against overeating for people who are single and live alone, and therefore are not as likely to have others to hold them accountable for or pass judgements on what foods and how much they consume. Previous research states that adolescents' negative body esteem, body image, and eating attitudes were associated with low self-esteem and social support, weight-related teasing, and greater pressures to lose weight (Ata et al., 2007). The lack of social support that single people who live alone experience may very likely contribute to their unhealthy relationship with certain foods and negative eating behaviors.

Body Image

Body image was considered to be very significant in the findings of the present study. Firstly, findings suggest that sophomores, women, and participants who are single are more likely to shut down when they feel bad about their body shape or weight (Q7_9). This is supported by previous research, which states that males demonstrated very little discrepancy between ideal and actual body, whereas females had a larger discrepancy between their actual and ideal figures (Ata et al., 2007). The discrepancy women have between their ideal and actual figures could lead women to more easily feel bad and shut down about their body shape or weight compared to males. Also, the way a woman perceives her own level of attractiveness seems to influence her comfort in and enjoyment of sexual relationships, and this could be due to the societal message that appearance is most important to finding a mate (Hoyt & Kogan, 2001). Women who are single may be more likely to have insecurities and negative feelings about their actual versus ideal body shape or weight due to the lack of an intimate, significant relationship in their lives.

Secondly, findings suggest that of those participants that start thinking about the size and shape of their body and find it hard to do anything else (Q7_14), the majority of those that strongly agreed with this statement were single. However, of those that disagreed with this statement, the majority of them were women. Some single women who do not have a significant other and may not experience healthy relationships in which their friends encourage them to have a positive body image may be more negatively affected by thoughts about their body. Previous research shows that lower peer acceptance, perceived social support, and friendship intimacy predict poor body image in adolescent females (Ata et al., 2007). However, the present findings reveal that those not engaged in a healthy, intimate relationships may experience more harmful impacts of negative body image, regardless of gender.

Significantly, the results revealed that for those who worry about their weight and find it difficult to live a life they value (Q7_7), the majority of participants who strongly agreed with this statement are single. Also, more participants who are in dating relationships disagreed with this statement than those who are not in a dating relationship. Previous research reveals that body-related self-conscious emotion derives from: believing one has failed to achieve the cultural standard of the thin beauty ideal and having perceptions of being at a lower social rank based on physical appearance norms

(Webb & Hardin, 2016). The present study's findings suggest that participants who are not engaged in a dating relationship and who worry about their weight are more likely to lack the ability to find value in their lives and this may be due to the unattainable cultural standard of beauty society pressures individuals (women in particular) to achieve.

For those that strongly agreed with the statement: "I take a positive attitude towards my body" (Q7_16), the majority are in a dating relationship. Also, the vast majority of respondents who agree with this statement currently live with others. These findings suggest that individuals who participate in close relationships in their living situations and love life have a more positive relationship with their body. Research shows that young people tend to resemble their friends in appearance, social attributes, interests, attitudes, and behaviors (Hutchinson & Rapee, 2007). The results suggest that individuals who have multiple, intimate relationships are able to find value in parts of their lives other than their body and body image.

Moreover, for the statement "I feel love for my body" (Q7_18), the majority of participants who are neutral towards this statement are from the South. Also, the majority of respondents who chose "Disagree" for this statement currently live with others. These findings contradict other findings regarding an individual's close relationships increasing a person's positive attitudes towards his or her body. Previous research suggests that there is a significant connection between self-esteem and physical appearance that is affected by and affects how adolescents interpret feedback and interactions in their relationships with family members and friends (Ata et al., 2007). Since one's roommates can serve a similar, significant role as family members do in a person's life, roommates may carry a similar, large influence over a person's attitudes towards his or her body. The

results that reveal that people who live with others may be more likely to feel less love for their bodies, could be due to the fact that while intimate relationships can have positive impacts on a person's body image, they can also have very negative impacts.

Q7_21 states: "Worrying about my body takes up too much of my time." The vast majority of participants who agreed with this statement were women. Also, the majority of those who selected "Agree" are in a dating relationship. The findings that more women than men worry about their body for what they believe to be too much of their time is consistent with other findings and previous research that states that there are significant gender differences on all measures of eating attitudes, body image, and esteem (Ata et al., 2007). Also, the findings that more women in a dating relationship than not worry about their body too much is supported by previous research shows that while college-aged women are expected to look beautiful, men are often expected to have a high sexual prowess (Hoyt & Kogan, 2001). Since the majority of participants who worry about their body too much are women in dating relationships, findings suggest that the increased societal pressure for women to be physically attractive may negatively impact their body image and dating relationships.

Lastly, Q7_22 exclaimed: "If I start to feel fat, I try to think about something else." An overwhelmingly significant amount of the participants who agreed with this statement were women. In addition, the majority of respondents who agreed with this statement were also from the South. These results indicate that women from the South are more likely to have thoughts and feelings about being "fat." Previous research supports these findings by showing that as individuals, girls and women in particular, are socialized growing up, and are taught to subjectively perceive themselves as "fat" or "overweight" regardless of their actual body size (Webb & Hardin, 2016). Findings reveal that, especially in the South, girls and young women may be more susceptible to thoughts supporting a negative body image, regardless of their weight or true health status.

Parental and Peer Influences

Sophomores were the highest percentage of undergraduate classes to "Strongly Agree" with the statement that dieting attempts by one's close friends has made him or her so worried about his or her weight that they have gone on a diet (Q7 30). Nearly half of all male participants strongly disagreed with the statement regarding dieting attempts by close friends increasing their likelihood to engage in dieting behavior ($Q7_30$). Of the participants that agreed with the statement, the majority of these respondents were women. These finding can also be supported by a previous study's findings in which individual girl's dieting and EWLB use could be predicted from her friends' respective dieting and EWLB scores, showing the significance of the peer environment in body image and eating problems (Hutchinson & Rapee, 2007). These findings indicate that women are more likely to be influenced by their friends' dieting behaviors than men are. Moreover, these results can be supported by another study in which females reported higher peer support, teasing from family about weight, pressure from family and friends to lose weight, and media pressure than males (Ata et al., 2007). The present study's findings suggest that dieting attempts by close friends have a large impact on Sophomore women's weight and therefore eating habits/dieting. Female undergraduate sophomores seem to be the most susceptible to be influenced by their friends' dieting behaviors

possibly due to their significant time spent in college and development of a more consistent peer/friend group.

In addition, the majority of participants that agreed that their relationships would be better if their body weight and/or shape did not bother them were single individuals from the South (Q7_15). These findings suggest that participants may be more content with their relationship status if they are also happier with their body weight and/or shape. Southern individuals may be more likely to be raised with an emphasis on the value and significance of physical appearance and marriage. Findings that Southern, single individuals are most likely to believe their relationships would be better if their body weight and/or shape did not bother them are possibly due to cultural pressures of physical appearance leading to valued intimate relationships/marriage. However, previous research states that self-compassion is linked to more adaptive and less maladaptive forms of body image and eating (Kelly & Stephen, 2016).

Regarding the question that asks if participants have ever gone on a diet because one or more of their friends were dieting, the majority of men answered "Strongly Disagree," whereas only one third of women chose "Strongly Disagree" (Q7_31). These results suggest that women are more greatly influenced by their friends' dieting and/or eating behaviors. Also, the majority of participants who are in dating relationships either disagreed or strongly disagreed with the thought that they needed to start dieting because one or more of their friends was dieting. Previous research's findings support the present study's findings by stating that females who were most dissatisfied with their dating relationships were also most dissatisfied with the overall body image (Hoyt & Kogan, 2001). Participants in a fulfilling dating relationship are less likely to be influenced by their friends dieting and/or eating behaviors. Findings suggest that women who are not in a dating relationship seem to be the most likely to be influenced by their friends dieting and/or eating behaviors because they are lacking fulfillment or support in their dating lives. Surprisingly, parental feeding practices during childhood did not seem to be significant in the results of this study.

Limitations

Limitations of the present study should be noted. Participants were mostly female college students from the Southern region of the United States. The uniformity in these areas of the demographics of the sample limits the generalizability of the results from the current study to different populations. Also, the method of evaluation was a self-report method which allows for biases and untruthful responses to be more likely. Participants may have been reporting their perceptions of their eating behavior and other relationships in a way that may not be completely accurate or portray their actual behaviors. Furthermore, part of the survey required participants to make recollections about their childhood experiences and relationships. Participants' memories may not have been completely accurate or may have been skewed based on misconceptions they held about their parents and their parents' feeding practices. In addition, it is likely that sensitive questions inquiring about participants' levels of body appreciation and body image may have highlighted insecurities that could cause participants to answer questions based on their idealized relationship with his or her body instead of the participants actual relationship with his or her body.

Future Research

Future research should seek to further investigate the many aspects and relationships involved with food, intuitive eating, body appreciation, body image, and parental and peer influences. There are a few significant gaps in current research that need to be mentioned and addressed in future research. Firstly, there has been a large amount of research done concerning eating disorders, but it has been largely clinically focused. Past research has mainly focused on correlates and predictors of disordered rather than adaptive eating and has been mainly pathology-centered (Herbert et al., 2013). Secondly, there is an extremely limited amount of research done surrounding males and their relationships with food, body image, and eating disorders. Previous research on body image and eating disorders has focused primarily on female adolescents and less on males (Ata et al., 2007). In addition, there have been very few studies conducted to assess the impact of peers and friendship groups on an individual's eating habits, body image, and intuitive eating in particular. One study conducted in 2007 was the first known study to investigate whether friendship similarities exist in body image attitudes and eating behaviors in a large sample of girls entering adolescence (Hutchinson & Rapee, 2007). Overall, there is a large amount of growth needed to investigate intuitive eating and eating behaviors in general and their relationship to males' and females' relationship with food, body image, parents, and peers.

Conclusion

Overall, the results of this study indicate that individuals' negative relationships with food, body image, eating habits and low levels of intuitive eating characteristics correlate to their relationships with close friends and or partners or a lack of these relationships. The present findings seem to support the proposed hypothesis in an inverse manner, by revealing that lower levels of intuitive eating characteristics and/or higher levels of negative thoughts and attitudes towards food are predictors of negative feelings, thoughts, and attitudes towards one's body image and a presence or lack of intimate, close relationships with friends and partners.

BIBLIOGRAPHY

- Ata, R.N., Ludden, A.B. & Lally, M.M. (2007). The effects of gender and family, friend, and media influences on eating behaviors and body image during adolescence. *Journal of Youth and Adolescence, 36*, 1024–1037.
 https://doi.org/10.1007/s10964-006-9159-x
- Avalos, L., Tylka, T. L., & Wood-Barcalow, N. (2005). The Body Appreciation Scale: Development and psychometric evaluation. *Body Image*, 2(3), 285–297. https://doi.org/10.1016/j.bodyim.2005.06.002
- Bruce, L. J., & Ricciardelli, L. A. (2016). A systematic review of the psychosocial correlates of intuitive eating among adult women. *Appetite*, *96*, 454–472. https://doi.org/10.1016/j.appet.2015.10.012
- Carper, J. L., Orlet Fisher, J., & Birch, L. L. (2000). Young girls' emerging dietary restraint and disinhibition are related to parental control in child feeding. *Appetite*, 35(2), 121–129. <u>https://doi.org/10.1006/appe.2000.0343</u>
- Craike, M., Young, J. A., Symons, C. M., Pain, M. D., Harvey, J. T., Eime, R. M., & Payne, W. R. (2016). Trends in body image of adolescent females in metropolitan and non-metropolitan regions: A longitudinal study. *BMC Public Health*, *16*(1), 1143. https://doi.org/10.1186/s12889-016-3815-1
- Craven, M. P., & Fekete, E. M. (2019). Weight-related shame and guilt, intuitive eating, and binge eating in female college students. *Eating Behaviors*, 33, 44–48. https://doi.org/10.1016/j.eatbeh.2019.03.002
- Denny, K. N., Loth, K., Eisenberg, M. E., & Neumark-Sztainer, D. (2013). Intuitive eating in young adults. Who is doing it, and how is it related to disordered eating

behaviors? Appetite, 60, 13–19. https://doi.org/10.1016/j.appet.2012.09.029

Dyke, N. V., & Drinkwater, E. J. (2013). Review article relationships between intuitive eating and health indicators: Literature review. *Public Health Nutrition*, 17(8), 1757-1766. doi:10.1017/s1368980013002139

Eisenberg, M. E., & Neumark-Sztainer, D. (2010). Friends' dieting and disordered eating behaviors among adolescents five years later: Findings from Project EAT. *Journal of Adolescent Health*, 47(1), 67–73. https://doi.org/10.1016/j.jadohealth.2009.12.030

- Galloway, A. T., Farrow, C. V., & Martz, D. M. (2010). Retrospective reports of child feeding practices, current eating behaviors, and BMI in college students. *Obesity*, 18(7), 1330–1335. https://doi.org/10.1038/oby.2009.393
- 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. https://doi.org/10.1016/j.appet.2019.03.021
- Herbert, B. M., Blechert, J., Hautzinger, M., Matthias, E., & Herbert, C. (2013).
 Intuitive eating is associated with interoceptive sensitivity. Effects on body mass index. *Appetite*, 70, 22–30. https://doi.org/10.1016/j.appet.2013.06.082
- Hoyt, W. D., & Kogan, L. R. (2001). Satisfaction with body image and peer relationships for males and females in a college environment. *Sex Roles*, 45(3), 199–215. https://doi.org/10.1023/A:1013501827550
- Hutchinson, D. M., & Rapee, R. M. (2007). Do friends share similar body image and eating problems? The role of social networks and peer influences in early

adolescence. *Behaviour Research and Therapy*, *45*(7), 1557– 1577. https://doi.org/10.1016/j.brat.2006.11.007

Kelly, A. C., & Stephen, E. (2016). A daily diary study of self-compassion, body image, and eating behavior in female college students. *Body Image*, 17, 152–160. https://doi.org/10.1016/j.bodyim.2016.03.006

Loth, K. A., MacLehose, R. F., Fulkerson, J. A., Crow, S., & Neumark-Sztainer, D. (2013). Eat this, not that! Parental demographic correlates of food-related parenting practices. *Appetite*, 60, 140–147. https://doi.org/10.1016/j.appet.2012.09.019

- Monnery-Patris, S., Rigal, N., Peteuil, A., Chabanet, C., & Issanchou, S. (2019).
 Development of a new questionnaire to assess the links between children's self-regulation of eating and related parental feeding practices. *Appetite*, *138*, 174–183. https://doi.org/10.1016/j.appet.2019.03.029
- Moore, M., Masuda, A., Hill, M. L., & Goodnight, B. L. (2014). Body image flexibility moderates the association between disordered eating cognition and disordered eating behavior in a non-clinical sample of women: A cross-sectional investigation. *Eating Behaviors*, 15(4), 664–669.
 https://doi.org/10.1016/j.eatbeh.2014.08.021
- Moy, J., Petrie, T.A., Dockendorff, S., Greenleaf, C., & Martin, S. (2013). Dieting, exercise, and intuitive eating among early adolescents. *Eating Behaviors*, 14(4), 529-532. Doi: 10.1016/j.eatbeh.2013.06.014
- Sandoz, E. K., Wilson, K. G., Merwin, R. M., & Kate Kellum, K. (2013). Assessment of body image flexibility: The Body Image-Acceptance and Action Questionnaire.

Journal of Contextual Behavioral Science, 2(1), 39–48. https://doi.org/10.1016/j.jcbs.2013.03.002

- Schoenefeld, S.J., & Webb, J.B. (2013). Self-compassion and intuitive eating in college women: Examining the contributions of distress tolerance and body image acceptance and action. *Eating Behaviors*, 14(4), 493-496. Doi: doi.org/10.1016/j.eatbeh.2013.09.001
- Tylka, T. L., & Kroon Van Diest, A. M. (2013). The Intuitive Eating Scale-2: Item refinement and psychometric evaluation with college women and men. *Journal of Counseling Psychology*, 60(1), 137–153. https://doi.org/10.1037/a0030893
- Webb, J. B., & Hardin, A. S. (2016). An integrative affect regulation process model of internalized weight bias and intuitive eating in college women. *Appetite*, *102*, 60–69. https://doi.org/10.1016/j.appet.2016.02.024

Appendix

Recruitment Script

To whom it may concern,

My name is Ann McQueen Whatley, and I am a senior majoring in Nutrition and Dietetics. As an Honors College student, I have been working to complete my honors thesis project with my thesis advisor Dr. Melinda Valliant. I have been completing research and creating a survey to further investigate: Parental and Peer Influences on College Students' Relationships with Food, Body Image, and Intuitive Eating Behaviors. I am seeking to understand the impact parental and peer relationships have on college students' relationships with food, body image, and intuitive eating behaviors. My research will help me gain a better understanding of the role of parents and peers in college students' relationship with their bodies.

In order to gather my own data, I am reaching out to college students at the University of Mississippi to take my 10-15 minute survey via Qualtrics. I would greatly appreciate your help in administering and/or completing my survey, so that I can reach a wide variety of students. If you would like to help me by administering and/or completing my survey, please use this link

(https://qfreeaccountssjc1.az1.qualtrics.com/jfe/form/SV_2mDfh47z8IUn3pA). Thank you in advanced for your help in aiding me in gathering data for my thesis project!

Sincerely,

Ann McQueen Whatley

Fill in the blank:

- 1. What is your age/undergraduate classification? (You must be 18 years of age or older to complete this survey.)
 - a. Freshman
 - b. Sophomore
 - c. Junior
 - d. Senior
- 2. What is your gender?
 - a. Woman
 - b. Man
 - c. Transgender
 - d. Non-binary/non-conforming, prefer not to respond)
- 3. What geographical region is your hometown located in?
 - a. North
 - b. East
 - c. South
 - d. West

- 4. What is your relationship status?
 - a. Single
 - b. Dating
 - c. Married
- 5. Who did you live with as a child?
 - a. Parent(s)
 - b. Grandparent(s)
 - c. Older relatives
 - d. Other
- 6. What is your current living arrangement?
 - a. Alone
 - b. With Others
 - c. Other

Answer the following questions using this scale:

Strongly disagree	Disagree	Neutral	Agree	Strongly agree
1	2	3	4	5

7. Before I can make any serious plans, I have to feel better about my body.

8. I will have better control over my life if I can control my negative thoughts about my body.

- 9. To control my life, I need to control my weight.
- 10. I respect my body.

11. I feel good about my body.

12. I feel that my body has at least some good qualities.

13. Worrying about my weight makes it difficult for me to live a life that I value.

14. I care too much about my weight and body shape.

15. I shut down when I feel bad about my body shape or weight.

16. My behavior reveals my positive attitude toward my body; for example, I walk holding my head high and smiling.

17. I am comfortable in my body.

18. I feel like I am beautiful even if I am different from media images of attractive people (e.g., models, actresses/actors).

19. Feeling fat causes problems in my life.

20. When I start thinking about the size and shape of my body, it's hard to do anything else.

21. My relationships would be better if my body weight and/or shape did not bother me.

22. I take a positive attitude towards my body.

23. I am attentive to my body's needs.

24. I feel love for my body.

25. I appreciate the different and unique characteristics of my body.

26. My thoughts and feelings about my body weight and shape must change before I can take important steps in my life.

27. Worrying about my body takes up too much of my time.

28. If I start to feel fat, I try to think about something else.

29. Did your parent keep track of the sweets (candy, ice cream, cake, pies, and pastries) that you ate?

30. Did your parent keep track of the snack foods (potato chips, Doritos, cheese pus) that you ate?

31. Have dieting attempts by your close friends ever made you feel that you ought to be dieting or watching your weight more?

32. Have your friends ever made comments about you which have made you feel as if you ought to diet?

33. Did your parents encourage you to "clean your plate" as a child?

34. Did your parents encourage you or discourage you to eat foods based on if the foods were "healthy" or "unhealthy"?

35. Do you still have a dislike for food you were pressured to eat as a child?

36. Have dieting attempts by your close friends ever made you feel so worried about your weight that you have actually gone on a diet?

37. Have you ever gone on a diet, not because you really thought you needed to lose weight, but because one or more of your friends was dieting?

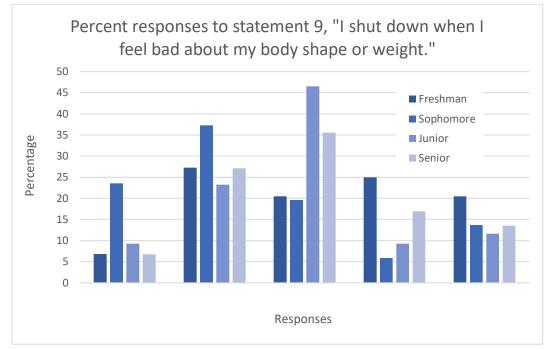
38. I try to avoid certain foods high in fat, carbohydrates, or calories.

39. I find myself eating when I'm feeling emotional (e.g., anxious, depressed, sad), even when I'm not physically hungry.

- 40. If I am craving a certain food, I allow myself to have it.
- 41. I get mad at myself for eating something unhealthy.
- 42. I find myself eating when I am lonely, even when I'm not physically hungry.
- 43. I trust my body to tell me when to eat.
- 44. I trust my body to tell me what to eat.
- 45. I trust my body to tell me how much to eat.
- 46. I have forbidden foods that I don't allow myself to eat.
- 47. I use food to help me soothe my negative emotions.
- 48. I find myself eating when I am stressed out, even when I'm not physically hungry.
- 49. I am able to cope with my negative emotions (e.g., anxiety, sadness) without turning to food for comfort.
- 50. When I am bored, I do NOT eat just for something to do.
- 51. When I am lonely, I do NOT turn to food for comfort.
- 52. I find other ways to cope with stress and anxiety than by eating.
- 53. I allow myself to eat what food I desire at the moment.
- 54. I do NOT follow eating rules or dieting plans that dictate what, when, and/or how much to eat.
- 55. Most of the time, I desire to eat nutritious foods.
- 56. I mostly eat foods that make my body perform efficiently (well).
- 57. I mostly eat foods that give my body energy and stamina.
- 58. I rely on my hunger signals to tell me when to eat.
- 59. I rely on my fullness (satiety) signals to tell me when to stop eating.
- 60. I trust my body to tell me when to stop eating.

Figure 1

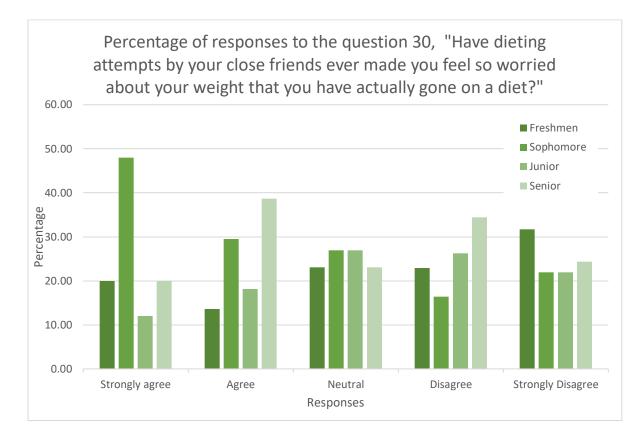
Percent Responses to Statement 9, "I shut down when I feel bad about my body shape or weight."



Note. Graph displays the response distribution of Freshmen, Sophomores, Juniors, and Seniors for the statement "I shut down when I feel bad about my body shape or weight." Majority of respondents who agreed are Sophomores.

Figure 2

Percentage of Responses to the Question 30, "Have attempts by your close friends ever made you feel so worried about your weight that you have actually gone on a diet?"



Note. Graph displays the response distribution of Freshmen, Sophomores, Juniors, and Seniors for the statement "Have dieting attempts by your close friends ever made you feel so worried about your weight that you have actually gone on a diet?" Majority of respondents who strongly agreed are Sophomores.