HOW MOTHER'S ATTITUDES AND COMMUNICATION AFFECT BODY IMAGE SATISFACTION STATUS OF DAUGHTERS

A Dissertation

by

SHANNON LEAH CLARK

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Chair of Committee,	Cynthia Riccio
Committee Members,	Krystal Simmons
	Wen Luo
	Sherecce Fields
Head of Department,	Fuhui Tong

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ABSTRACT

Research indicates that body image dissatisfaction is the best-known predictor of an eating disorder and the prevalence of eating disorders in the United States is continuing to increase. Body image dissatisfaction is most prevalent in adolescents, typically evident during the transition between middle and high school. Adolescents spend much of their time with family and many times families can unknowingly put pressure on their children to look a certain way. Parents may comment on the child's body shape and the child's eating patterns or may model weight concerns and disturbed eating. This is especially common among mothers and daughters.

The purpose of this study was to better understand how the communication of the mother to the daughter about herself, her daughter, and others affects the outcomes of body satisfaction status in the daughter. Further, through a sociocultural lens, this study examined the relationships between the mothers' feelings and thoughts about both her own and her daughter's eating behaviors and weight concerns by examining the relationships between these variables and the outcome of the daughter's body satisfaction status. Finally, the current study examined whether there was a disconnect in what the mother believes she is telling her daughter and what the daughter is actually perceiving the message to be.

Results suggest that body-related communication and mother's concerns about her body does affect the body image status of their daughters in a variety of ways. Moreover, it was found that the more positive messages that are being exchanged by the

mother to the daughter result in more overall positive body image status in the daughters. The results suggest that the communication between mothers and daughters can significantly affect the way they feel about their bodies. Interestingly, when there are discrepancies in what the mothers report they are saying and what the daughter hears, it can significantly predict the daughter's body satisfaction status.

DEDICATION

To my beloved husband, Ryan Clark

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NOMENCLATURE

BMI	Body Mass Index
SES	Sociocultural Economic Status
CDRS	Contour Drawing Rating Scale
CFRS	Children's Figure Rating Scale
BESAA	Body Esteem Scale for Adolescents and Adults
VCOPAS	Verbal Commentary of Physical Appearance Scale
CFQ	Child Feeding Questionnaire
KFCQ	Kid's Child Feed Questionnaire
WCS	Weight Concerns Scale
PSQ	Parenting Style Questionnaire

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CHAPTER I

INTRODUCTION

Body Image Dissatisfaction

Body image was a concept first developed in the 1920s out of the idea of understanding one's perception of their body after individuals who had lost a body part still had the feeling that it was there and felt pain, which was later referred to as phantom limb pain (Thompson, Heinberg, Altabe & Tantleff-Dunn, 1999). A few decades later, in the 1950s, Schilder came up with a definition of body image that included how one pictured themselves in their mind (Thompson et al., 1999). It was not until the 1970s and 1980s that negative body image, or body dissatisfaction, became a concern due to the increase in eating and weight related disorders (Thompson et al., 1999).

There have been a number of different theoretical perspectives that came about to understand the causes of body dissatisfaction, with the most popular theory being the sociocultural model (Tiggemann, 2011). This model implies that various aspects of one's society and culture become internalized to create one's body image (Grogan, 2017). This internalization and how it is perceived will determine where on the body image continuum one fall (Thompson et al., 1999). Of particular concern is when individuals fall at the negative end of this continuum and experience body image dissatisfaction.

Why Body Image Dissatisfaction is Important

Prevalence, Incidence of Body Dissatisfaction

Body image dissatisfaction is most prevalent in adolescents, typically evident during the transition between middle and high school (Bucchianeri, Arikian, Hannan,

Eisenberg, & Neumark-Sztainer, 2013). Body dissatisfaction affects between 24% to 84% of adolescent girls, 12% to 80% of adolescent boys, 13.4% to 33% of adult women, and 9% to 15% of adult men (Dion et al., 2015; Fallon, Harris & Johnson, 2014; Latiff, Muhamad & Rahman, 2018; McLean & Paxton, 2019; Paxton, Eisenberg & Neumark-Sztainer, 2006; Ricciardelli & McCabe, 2001). Further, body dissatisfaction is the best-known predictor of an eating disorder (Stice, Gau, Rohde & Shaw, 2017) and the prevalence of eating disorders in the United States is continuing to increase. Bohon and Stice (2012) reported that between 0.9% and 4.6% of females and 0.1% and 0.5% of males will develop anorexia nervosa or bulimia nervosa in their lifetime.

Outcomes

There are a number of negative outcomes associated with body dissatisfaction. Negative affect such as low self-esteem (Ata, Ludden & Lally, 2007; Davison & McCabe, 2006; Shroff & Thompson, 2006; Stice & Bearman, 2001), depression (Bearman & Stice, 2008; Cash & Hicks, 1990; Mars et al., 2019; Stice & Bearman, 2001), and anxiety (Vannucci & Ohannessian, 2018; Abdollahi, Abu Talib, Reza Vakili Mobarakeh, Momtaz & Kavian Mobarake, 2016), as well as eating disorders (Alfoukha, Hamdan-Mansour & Banihani, 2019; Delinsky, 2011; Mitchison, 2017; Stice & Shaw, 2002; Stice, et al., 2017) are the most prevalent.

Factors

A number of intra-individual and extra-individual factors that have been strongly associated with body dissatisfaction. An individual's sex (Ata et al., 2007; Carlson Jones, 2004; Jones, 2001; Presnell, Bearman, & Stice, 2004), sexuality (Alvy, 2013; Morrison, Morrison & Sager, 2004; VanKim, Porta, Eisenberg, Neumark-Sztainer &

Laska, 2016) as well as body mass index (BMI) (Bearman, Presnell, Martinez & Stice, 2006; Cash & Hicks, 1990; Dunkley, Wertheim & Paxton, 2001; Jones, 2001; Presnell, et al., 2004; Stice and Whitenton, 2002) may contribute to body dissatisfaction. Further, extra-individual factors such as thin idealization (Adams, Katz, Beauchamp, Cohen & Zavis, 1993; Bearman & Stice, 2008; McCarthy, 1990), media influences (Anschutz, Kanters, Van Strien, Vermulst, & Engels, 2009; Burnette, Kwitowski & Mazzeo, 2017; Grabe, Ward & Hyde, 2008; Karsay & Schmuck, 2019; Ryding & Kuss, 2020), peer influences (Ata et al., 2007; Barker & Galambos, 2003; Carlson Jones, 2004; Clark & Tiggemann, 2008; Lawler & Nixon, 2011; Menzel et al., 2010; Thompson et al., 2006), cultural influences (Franko & Roehrig, 2011; Kawamura, 2011; Lai et al., 2013; O'dea & Caputi, 2001; Omori, Yamazaki, Aizawa & Zoysa, 2017; Schooler & Lowry, 2011), and family influences (Anschutz, Kanters, Van Strien, Vermulst & Engels, 2009; Archibald, Graber & Brooks-Gunn, 1999; Barker & Galambos, 2003; Cooley, Toray, Wang & Valdez, 2008; de Vries & Vossen, 2019; Enten & Golan, 2009; Goossens, Van Durme, Naeye, Verbeken & Bosmans, 2019; Gross & Nelson, 2000; Pike & Rodin, 1991) are strongly associated with the development of body dissatisfaction.

Current Research Limitations

Although there have been a number of studies that have examined the role of parental influence on body satisfaction status among children and adolescents, there is limited research on how the way the mother communicates her beliefs about others to her daughter and how that communication affects the daughter's body satisfaction status. Further, there is virtually no literature that examines if there is a disconnect in the way the mother believes she is communicating her attitudes about herself, her daughter, and

others, and how the daughter is perceiving the mother's beliefs. Further, there is limited research that examines the way daughters perceive their mother's messages regarding body image and the effect on their body image status. Many studies examine self-reports of the beliefs of one's body satisfaction status, but it is important to look deeper and determine if the mother is sending subtle or overt messages to the daughter by examining the way the daughter perceives her mothers' messages regarding her body.

The Current Study

The purpose of the current study is to better understand how the communication of the mother to the daughter about herself, her daughter and others affects the outcomes of body satisfaction status in the daughter. Further, through a sociocultural lens, this study examines the relationships between the mothers' feelings and thoughts about both her own and her daughter's eating behaviors and weight concerns to examine the relationships between these variables and the outcome of the daughter's body satisfaction status. Finally, we examine if there is a disconnect in what the mother believes she is telling her daughter, and what the daughter is actually perceiving the message to be. The current study poses six questions:

Research Question 1. What is the level of association between the mothers' attitudes regarding her own body and the daughter's attitudes towards her own body? It is hypothesized that there will be a strong relationship between the mother's beliefs about her own body and the way the daughter perceives her own body.

Research Question 2. Does the mother's age, own weight concerns and satisfaction, as well as her eating and feeding attitudes, predict her daughter's weight

concerns? It is hypothesized that greater concerns with weight and diet by the mothers will predict daughters' weight concerns.

Research Question 3. Do mothers and daughters agree on what message is being received about body image? It is hypothesized that there will be a disconnect on what the mother believes she is saying to her daughter and the message the daughter is actually perceiving.

Research Question 4. Do mothers' parenting style (authoritative, authoritarian or permissive) further predict the discrepancy as measured in Research Question 3? It is hypothesized that mothers who have an authoritative parenting style will have smaller discrepancies scores seen in Research Question 3.

Research Question 5. Do mothers' and daughters' perceptions of weight and size as well as eating attitudes and behaviors, in combination with mothers' BMI and age, predict daughter's BMI? It is hypothesized that mothers' BMI will account for the most variance in daughters' BMI.

Research Question 6. Do themes that emerge from interviews with mothers and daughters reflect the broader themes of desired weight, body image importance, and influences on what they should like, as well as their relationship with food growing up, and are these themes seen by mothers and daughters consistent? It is hypothesized that there will be a history of these themes reported while growing up for the mothers, as well as for the daughters, who exhibit body dissatisfaction and that these themes would be relatively consistent across mothers and daughters exhibited messages were passed down from early experiences of the mothers.

Implications

Findings from the current study aim to shed light on the effects of the communication messages the mother is sending and the ways the daughter is perceiving them, and in turn to help mothers find the best ways to communicate to daughters in ways that increase her body satisfaction status. Children spend a significant amount of their life with their parents, and it is clear from past research, such as Bandura (1969), that children pick up on messages and learn behaviors by the ways their parents interact with them and model specific behaviors. Daughters, specifically, tend to model their mother's behaviors, and it is hopeful that this research will be able to examine these relationships in regard to body satisfaction. Further, it is important that we understand these relationships to create interventions and parent trainings to prevent negative body image and more importantly, the development of eating disorders in young women. This research will be able to guide treatment planning and prevention in the area of body image and eating disorders by understanding the transference of behaviors influenced by mothers that are ultimately learned by daughters.

CHAPTER II

LITERATURE REVIEW

The first known research of body image was conducted by Paul Schilder in the 1920s, with a focus on the connections between distorted body image and brain injuries (Grogan, 2017). During this time, he expanded on the ideas of body schema (Head, 1926, as cited by Thompson et al., 1999), which at the time was the first idea of body image. Head's term body schema referred to the cognitive processes regarding one's physical appearance (Thompson et al., 1999). Schilder (1950) went on to define body image as "The picture of our own body which we form in our mind, that is to say, the way in which the body appears to ourselves" (p. 11). Schilder was one of the first researchers to move body image from a neurological perspective to include psychological self-awareness and sociology (Thompson et al., 1999).

More recently, researchers have expanded Schilder's definition to focus and include a variety of factors such as weight, size, appearance, and body satisfaction, as well as body concern, body esteem and body acceptance (Grogan, 2017). Since the 1950s, researchers have explored more than just the perception of ones' body and have included interpersonal and sociocultural factors. This expanded perspective allowed researchers to explore the effects of body image on eating- and weight- related disorders. Specifically, the field of eating disorders peaked a specific interest in disturbed body image, dissatisfaction with appearance, and overestimation of body size (Thompson et al., 1999). Body dissatisfaction has been associated with low self-esteem (Ata et al., 2007; Davison & McCabe, 2006; Shroff & Thompson, 2006; Stice & Bearman, 2001), depression (Bearman & Stice, 2008; Cash & Hicks, 1990; Stice & Bearman, 2001), and

eating disorders (Alfoukha, Hamdan-Mansour & Banihani, 2019; Delinsky, 2011; Mitchison, 2017; Stice & Shaw, 2002; Stice et al., 2017) in adolescents.

Theoretical Perspectives

There have been a number of theoretical perspectives on the influences of body image and how it affects individuals. Some of the most widely known theories include sociocultural perspectives, biopsychosocial perspectives, cognitive-behavioral perspectives, objectification theory, and positive body image (Grogan, 2017). All of these theories attempt to understand the process by which individuals acquire body image, and most importantly negative perceptions of their own bodies. Further, these models often emphasize the importance placed for women's bodies to be slender, and men's bodies to be muscular.

Sociocultural Perspective

The sociocultural perspective proposes that one's body image is determined by internalizing various social factors such as media, family and peers, which often leads to body dissatisfaction (Tiggemann, 2011). Tiggemann (2011) stated:

"At its simplest, the sociocultural model holds that (1) there exist societal ideals of beauty (within a particular culture) that are (2) transmitted via a variety of sociocultural channels. These ideals are then (3) internalized by individuals, so that (4) satisfaction (or dissatisfaction) with appearance will be a function of the extent to which individuals do (or do not) meet the ideal prescription (p. 13)."

In essence, women are held to a standard of thinness, which is transmitted mostly through the media (i.e. internet, magazines, television), family, and peers. Due to these three factors having such a large impact on individuals from this perspective, the

sociocultural model is often known as the tripartite model (Tiggemann, 2011). This drive for thinness is often unachievable through healthy means, leading to problematic feelings and behaviors. In men, the process is very similar. There is an ideal that men should portray a mesomorphic and muscular V-shaped body, with broad shoulders and a narrow waist (Tiggemann, 2011). In the same way this perception affects women, men may develop negative body image leading to unhealthy means to obtain the perceived ideal.

Biopsychosocial Perspective

An expansion on the sociocultural model was examined by Rodgers, Paxton and McLean (2014) to include the sociocultural factors of negative body image, while also looking at the biological factor of body size (i.e., body mass index [BMI]) and the psychological factor of negative affect and the impact these additional factors have on the outcome of body image. Findings found that including negative affect and BMI in the sociocultural model were helpful in their predictions of body dissatisfaction and disordered eating among adolescent females. They also found that larger body size and associated BMI was a direct pathway to body dissatisfaction. Further, negative affect such as low self-esteem and high levels of depressive symptoms created more vulnerability to measuring their self-worth to societal standards, leading to higher levels of body dissatisfaction (Rodgers et al., 2014).

Cognitive-Behavioral Perspective

The cognitive-behavioral perspective was derived by Cash (2002), who explained that the development of body image comes from cognitive, behavioral and emotional importance. Cash (2011) explained that an individual will develop one's body

image via the interaction of environmental events with cognitive, affective, and physiological processes, and the way one's behaviors influence body image. Cash (2011) described two major factors that impact body image: historical factors which included past events and experiences, as well as proximal or concurrent factors that include current life events, current information processing and current internal dialogues. Historical events mainly include the socialization of body related messages during childhood, which often times are perceived through cultural standards or expectations about appearances. The proximal factors are in turn the way the individual currently experiences perceived standards, which may come from parenting, friends or even strangers (Cash, 2011). The interaction of these factors ultimately creates a loop where one's behavior is a result of external environmental events and intrapersonal factors.

Objectivation Theory

The Objectification Theory was developed by Fredrickson and Roberts (1997) who suggested the cultures women are in sexually objectify their bodies, which leads to developing body image on two levels. The first level is state self-objectification, meaning attention is put on women's bodies in certain contexts. The second level is trait self-objectification, which is when women develop body dissatisfaction over specific traits (Fredrickson & Roberts, 1997). The overarching idea of this theory is that the culture (or society) has led to objectifying women's bodies (Grogan, 2017). Fredrickson and Roberts (1997) explained that the idea of objectification does not equally affect all women; however, it can lead to negative consequences when women unconsciously internalize the culture's practices and in turn women begin to constantly monitor their

bodies. This can lead to feelings of shame, anxiety, as well as diminish the ability for women to recognize internal bodily states (Fredrickson & Roberts, 1997).

Positive Body Image Theory

In contrast from previous stated theories, positive body image is a perspective that has developed in the past 10 years and was developed out of positive psychology (Grogan, 2017). Although this research is relatively new, positive body image has been defined as loving and respecting one's body, which allows one to appreciate, accept, and be happy with their bodies, emphasize their body's assets, have a mindful connection with one's body, and have the ability to internalize positive messages and reject negative messages about one's body (Wood-Barcalow, 2010). In effect, it is the manifestation of positive body satisfaction, rather than dissatisfaction.

Is Body Image Satisfaction – Dissatisfaction a Continuum?

All of the theories focus on body image and each theory explained posits that one's body image is created from a variety of influences. Specific to this study, the sociocultural theory especially focuses on perceptions of body image from parental influences (i.e., mothers to daughters), peer influences, and how the media portrays appearance. Further, all of these theories of body image suggest that body image can be perceived as good or bad, leading to body image satisfaction or dissatisfaction. How one perceives their body, as well as their thoughts and feelings on how one looks, comprise the person's body image (Grogan, 2006). Negative body image, or body image dissatisfaction, occurs when an individual is dissatisfied with how they look (Presnell et al., 2004). In contrast, positive body image or body satisfaction, occurs when an individual is able to accept one's body and respect and love one's body (Wood-

Barcalow, 2010). Whether body image is positive or negative, how one sees oneself is connected to one's emotions and perceived attractiveness (Grogan, 2006; Presnell et al., 2004).

When examining and describing body image, Thompson et al. (1999) described it as a continuum. In particular, J.K. Thompson and Thompson (1986) discovered that body dissatisfaction also could exist without the presence of an eating disorder. Cash, Winstead, and Janda's (1986) findings through a nationwide survey showed only 7% of women exhibited little concern for their bodies. This research led to the concept of normative body discontent, which described the widespread discontent that many women feel toward their bodies (Rodin, Silberstein, & Striegel-Moore, 1985 as cited by Thompson et al., 1999).

More recent research indicates that Tylka and Wood-Barcalow (2015) believe body image is not either positive or negative. There are some who question the linear continuum from body dissatisfaction to body discontent to body satisfaction. In particular, Tylka and Wood-Barcalow (2015) posit that negative body image or body dissatisfaction is on a different continuum than positive body image for several reasons. They state that unlike negative body image, positive body image is distinctly different from negative body image, multifaceted, holistic, stable and malleable, protective, linked to self-perceived body acceptance by others, and shaped by social identities (Tylka & Wood-Barcalow, 2015). Unlike body discontent, body satisfaction and positive body image, body dissatisfaction is linked to many negative outcomes.

Williams, Cash, and Santos (2004) compared individuals who held three types of body image: positive, negative, and a normative discontent group. They found that the

normative body image discontent group had several similarities in body dissatisfaction as the body dissatisfaction group. These included higher body image emotional distress and more adverse impact of body image on quality of life. In comparison, the individuals who had positive body image reported a unique pattern of superior well-being that favorably influenced their quality of life. Another study by Tiggemann and McCourt (2013) examined the relationships between positive body image, body dissatisfaction and women's ages, and found that as women's age increased, their strength of inverse correlation between positive body image and body dissatisfaction decreased. This finding led Tiggemann and McCourt (2013) to conclude that positive and negative body image are not mirror images, as women are able to experience positive body image and some level of body dissatisfaction at the same time, especially as they age.

Outcomes of Body Dissatisfaction

Eating Disorders

Body dissatisfaction increases the risk for disordered eating due to the belief that dieting is an effective weight loss technique. Further, elevated dieting often increases the risk for eating pathology, such as anorexic and bulimic behaviors to develop (Stice & Shaw, 2002). Common eating disorders related to body image include anorexia nervosa and bulimia nervosa. Anorexia nervosa is characterized by emaciation, constant worry of becoming fat, dysfunctional perception of body shape and extremely low body weight (Diagnostic and Statistical Manual of Mental Disorders- Fifth Edition [DSM-5]; American Psychiatric Association [APA], 2013). Bulimia nervosa is characterized by uncontrollable binge eating followed by purging behaviors, such as vomiting or

excessive exercise to prevent weight gain, and self-evaluation influenced by body shape and weight (Diagnostic and Statistical Manual of Mental Disorders- Fifth Edition [DSM-5]; American Psychiatric Association [APA], 2013). Body image disturbance and dissatisfaction is the core diagnostic feature of anorexia nervosa and bulimia nervosa. Further, an individual who identifies by their weight and shape is much more likely to develop an eating disorder due to the desire to change their body to fit with society's thin ideal (Delinsky, 2011).

One study in particular conducted by Stice et al. (2017) examined a variety of risk factors that were predictive to the onset DSM-5 eating disorders over a three-year period. Interestingly, they found that body dissatisfaction was a predictor in the development of three out of four of the DSM-5 eating disorders (bulimia nervosa, binge eating disorder, and purging disorder). Another study (Mitchison et al., 2017) examined the associations of body image and eating pathology and found a positive correlation between body dissatisfaction and eating disorder behavior among adolescent girls and boys. Finally, a 2019 study found that 12% of girls in their study were at risk for an eating disorder and the most significant predictor was body dissatisfaction (Alfoukha, Hamdan-Mansour & Banihani, 2019). It is evident that body image is directly related to eating pathology, especially body dissatisfaction and preoccupation of body image and the development of an eating disorder (Alfoukha, Hamdan-Mansour & Banihani, 2019; Delinsky, 2011; Mitchison et al., 2017; Stice & Shaw, 2002; Stice et al., 2017).

Negative Affect

Depression. There are inconsistent findings on the relationship between body dissatisfaction and depression. An older study by McCarthy (1990) found that women

and adolescent girls became depressed when attempting to fulfill the thin-ideal and this also led to increased eating disorders. In contrast, Adams et al. (1993) looked at the relationship between thin-ideal and depression and found that across 5th, 8th, and 12th grade students, depression was not significantly connected to eating disorders as much as McCarthy (1990) posited.

More recent research has found that negative affect in boys may predict body dissatisfaction but not in girls (Presnell et al., 2004); however, other studies have found that negative affect such as depression may increase body dissatisfaction in girls (Stice & Whitenton, 2002). Bearman and Stice (2008) found that body dissatisfaction and dietary restraint was predictive of depression in girls but not boys. Moreover, a recent and shocking study by Mars et al. (2019) examined the predictors of thoughts of suicide versus attempting suicide and found that body dissatisfaction was a significant predictor of suicide attempts among participants in their study.

Anxiety. Vannucci and Ohannessian (2018) examined the associations between body image dissatisfaction and multiple types of anxiety among adolescent boys and girls. They found that there was a significant correlation with negative body image and a variety of anxiety disorders including generalized anxiety disorder, panic disorder, social anxiety disorder and significant school avoidance. Specifically, they found that during baseline measures, generalized anxiety and social anxiety were highly associated with negative body image. Interestingly, findings from growth curve models and correlational analyses found that the highest levels of negative body image are associated with strong decreases in social anxiety and increases in panic disorders, which was a novel finding (Vannucci and Ohannessian (2018). It is believed these findings

suggested that negative body image not only is associated with anxiety, but it also contributes to changes in social anxiety and worsening panic disorder symptoms during adolescence.

Another study that examined the link between anxiety and body dissatisfaction (Abdollahi et al., 2016) found that lower body esteem was a mediator for social anxiety. Specifically, Abdollahi et al. (2016) reported that they were able to predict social anxiety by looking at low self-esteem and low body-esteem, which accounted for 48% of the variance in their sample of female adolescents. They found that the reverse relationship was also true, where higher levels of body esteem was predictive of lower levels of social anxiety.

Decreased Self-Esteem. In addition to the relationships between body image, depression, and anxiety, there have also been several studies that have found links between negative body image and decreased self-esteem. One study in particular (van den Berg, Mon, Eisenberg, Ackard & Neumark-Sztrainer, 2010) examined the relationship between self-esteem and body-esteem among male and female adolescents. They reported that across gender, age, weight status, race/ethnicity and socioeconomic status (SES), body dissatisfaction and low self-esteem was strongly related. Specifically, van den Berg et al. (2010) found that the association between body dissatisfaction and low self-esteem did not differ between boys and girls. Interestingly, for girls, they did find a nonsignificant association with body dissatisfaction and low self-esteem for girls who were underweight, but a strong association for girls who were considered average weight (van den Berg et al., 2010).

Another more recent study that examined the association between self-esteem and body satisfaction was conducted by Nichols, Damiano, Gregg, Wertheim and Paxon (2018), who examined these factors in girls aged six to seven years old. They found multiple cross-sectional relationships between low self-esteem, high levels of perfectionism, and higher levels of internalization of appearance ideals with body dissatisfaction. Further, they reported in their findings that lower self-esteem and smaller perceptions of one's size at age six predicted higher levels of internalization of appearance ideals at age seven (Nichols et al., 2018).

Long-term Adult Outcomes

Much of the literature focuses on children, adolescents and young adults; however, there is growing research which examines how body image develops into adulthood (Grogan, 2011). Grogan (2011) suggests that there is more body dissatisfaction in women than men up until about 60 years old, and there is less of a difference in gender once individuals age greater than 60. Grogan (2011) also found that older women are at least as satisfied with their bodies as younger women, and women in their 80s tend to be more satisfied with their bodies than men. Currently, there are no studies that specifically examine long-term adult outcomes for individuals who experienced body dissatisfaction as adolescents.

One study by Neumark-Sztainer, Paxton, Hannan, Haines, and Story (2006) did examine the effects of body satisfaction over five years on a group of adolescents and the effects on health behaviors. They found that in females higher levels of body dissatisfaction was predictive of higher levels of unhealthy weight control behaviors, as well as binge eating, and lower levels of healthy exercise and fruit/vegetable intake. In

males, it was found that higher levels of body dissatisfaction were predictive of higher levels of behaviors such as binge eating, unhealthy weight management behaviors, smoking and lower levels of physical activity (Neumark-Sztainer et al., 2006).

Causal Factors and the Tripartite Influence Model

Specific to this study, the Tripartite Influence Model is followed, which is a model that was developed out of the sociocultural perspective of body image. The Tripartite Influence Model proposes that the media, peers and family are all major sociocultural factors for an individual's conceptualized body image, and further, these influences lead to social comparisons regarding appearance as well as internalization of societal ideals (Thompson et al., 1999). The model was then tested by van den Berg, Thompson, Obremski-Brandon, Coovert (2002) to examine the role of appearance comparison within this model to determine if it was a meditational link between family, peer and media influence, and its outcomes on eating disorders and body dissatisfaction. Through covariance structure modeling, they found that comparison did mediate the influence of both family and media on body dissatisfaction, with the strongest path between media and body dissatisfaction. In essence, these results indicate that social comparison is one of the largest mediators of body dissatisfaction, which can come from a variety of sources.

As societal standards of appearance portray thinness as desirable, young children, especially girls internalize the desire to be thin (Sands & Wardle, 2003). Social comparison can be defined as the cognitive comparisons that people make about themselves in comparison to others. Research has demonstrated that the more one

engages in social comparison related to appearance, the more likely the individual feels body dissatisfaction (Jones, 2001).

Developmental Perspective

Body dissatisfaction is already well-developed by age nine in girls. Further, studies have found that girls as young as five have a desire to be thinner (Clark & Tiggemann, 2006; Davison, Markey, & Birch, 2000; Lowes & Tiggemann, 2003). Longitudinal studies have found that not only does body dissatisfaction develop at a young age, boys and girls become progressively more dissatisfied with their bodies over time. Specifically, one study over a 10-year-period found that the largest increase happened between middle and high school and continued to increase during the transition into young adulthood (Bucchianeri et al., 2013). Although the development of body dissatisfaction significantly increases over time, it is important to note differences among boys and girls. Bucchianeri et al. (2013) found that even when male's body dissatisfaction levels were the highest, it was still lower than the lowest levels of body dissatisfaction among females.

Research shows that for girls, as age increases so does body dissatisfaction. Studies have shown that high school girls had higher levels of body dissatisfaction than middle school girls (Bearman, Presnell, Martinez & Stice, 2006; Carlson Jones, 2004). Bearman et al. (2006) found that 14-year-old girls had more body dissatisfaction than 13-year-old girls, and further, 15- and 16-year-old girls had even higher levels of body dissatisfaction when compared to their younger peers. Moreover, results from this same study indicated that boys are more dissatisfied with their bodies in early adolescence, whereas girls become increasingly displeased with one's body as they move into middle

and late adolescence. This is believed to be true due to females gaining weight and becoming more womanly figured during puberty, deviating further from the thin-ideal, whereas boys become more muscular and larger during puberty (Presnell et al., 2004; Richards, Boxer, Petersen & Albrecht, 1990).

International research, including the Netherlands, Australia, the UK and USA, has shown that during adolescence, body dissatisfaction occurs in about half of boys and a majority of girls, demonstrating that adolescence is a period of intensified worry about one's shape and size (de Castro & Goldstein, 1995; McCabe & Ricciardelli, 2005; Ter Bogt et al., 2006; Williams & Currie, 2000). Studies have also found that pressures from family members and friends (Ata et al., 2007; Field et al., 2001; Sands & Wardle, 2003), thin-ideal internalization (Stice & Bearman, 2001), and thin image media (Clark & Tiggemann, 2008; Groesz, Levine, & Murnen, 2002) contribute to negative body image. There are many factors other than age that may contribute to positive or negative body image.

Intraindividual Factors

Intraindividual factors are those factors that are within the individual. Those that contribute to body image include sex, sexuality and body mass index (BMI). These factors, in combination with extra-individual factors, can result in a variety of levels of body satisfaction. Each area is discussed in more detail with specific details relating to body dissatisfaction.

Sex

The research has predominately focused on females; however, more recently there has been an increase on body image studies with males. It was believed that

females were more affected by the outcomes of negative body image, making females the targeted population in past studies, because girls are more focused on appearance (Carlson Jones, 2004). Recent research has shown that males are not only affected by body image dissatisfaction, but that it also can lead to negative outcomes such as low self-esteem and the desire to use unhealthy means to increase muscle mass (Ata et al., 2007; Carlson Jones, 2004). Previous research has demonstrated that social comparison is used more regularly among girls than among boys (Jones, 2001). Interestingly, social comparison did not mediate body dissatisfaction in males, but having internalized ideas of muscularity was more of a factor in body dissatisfaction among boys (Carlson Jones, 2004). The pathways that lead to body dissatisfaction in girls tend to be more complex, as well as more prevalent. Sociocultural pressure to be thin may manifest directly, such as parents encouraging their daughter to diet, or indirectly, such as an advertisement extolling the virtues of weight loss (Presnell et al., 2004).

Sexuality

It is important to consider sexuality when examining levels of body satisfaction, as studies have shown that lesbian women tend to have higher body satisfaction levels and larger ideal body sizes than heterosexual women (Alvy, 2013). A meta-analysis by Morrison, Morrison and Sager (2004) found that there was no difference in body satisfaction levels among lesbian and heterosexual women, but when women of similar BMI's were compared, they did find that lesbian women had higher body satisfaction levels than heterosexual women. These findings were consistent from a 2016 study by VanKim et al. where higher levels of body dissatisfaction was found among heterosexual women in comparison to lesbian and bisexual women. In comparison, VanKim et al.

(2016) reported that when examining these same differences among gay and bisexual men, there were higher levels of body dissatisfaction among gay and bisexual men. It is important to note that research in the area of sexuality and body image is still new, and more research is needed to fully understand this intraindividual factor.

Body Mass Index

Research has consistently shown that BMI is predictive of body dissatisfaction in girls, but not boys (Presnell et al., 2004; Bearman et al., 2006; Stice and Whitenton, 2002). Higher levels of BMI are believed to predict higher levels of body dissatisfaction due to the larger deviation from the thin-ideal. Further, girls who are heavier are likely to receive more pressure from their environment (e.g., parents, media and peers) to conform with the thin-ideal (Dunkley, Wertheim & Paxton, 2001; Presnell et al., 2004). Interestingly, however, one study by Jones (2001) found that regardless of one's BMI, when individuals compare oneself to peers and models/celebrities, they demonstrate higher levels of body dissatisfaction. Another study found that adolescent females that had average BMI were still dissatisfied with their bodies, whereas males were only dissatisfied with their bodies if they were below or above the average BMI (Bearman & Stice, 2008). Other studies also have found that when BMI is held constant, many other influences affect one's body image (Bearman & Stice, 2008; Cash & Hicks, 1990). This implies that BMI cannot be a sole prediction of body dissatisfaction.

Extra-Individual Factors

Thin-Idealization

Females consistently show higher levels of the thin ideal across studies (Adams et al., 1993; Bearman & Stice, 2008). McCarthy (1990) proposed a model that implied

that society's standard of beauty was thinness, where women believed they must look like women did in fashion media, and this translated into what she called the "thin-ideal" (p. 205). She found that many negative outcomes were associated with the thin-ideal, including depression, disordered eating and negative body dissatisfaction. Further, she believed that the thin-ideal was responsible for a rise of depression in young females due to their bodies not upholding to the standards of the thin-ideal.

A group of researchers further explored McCarthy's thin-ideal findings and found that there was a significant difference in males and females on their acceptance to the thin-ideal; 64% of females versus 52% of males (Adams et al., 1993). It is believed that as girls mature, their bodies grow away from a thin, prepubertal look, causing them to feel overweight and dissatisfied with their bodies, whereas boys go through puberty, physically they become closer to a masculine ideal of attractiveness. They also found that there was a significant difference in body dissatisfaction across 5th, 8th, and 12th graders, where the 5th grade children were less dissatisfied with their bodies than the 8th and 12th grade children; however, in all three grades, females were more dissatisfied with their bodies than males. In regard to eating behaviors, across all grades, females had more disordered eating behaviors than males, and the 8th and 12th grade females had more disordered eating behaviors than the 5th grade females. Overall, in regard to thin-ideal, their findings were consistent with McCarthy's 1990 findings, where a significant relationship between thin-ideal and eating disorders was demonstrated in their sample.

Media Influences

Much of the media presents models and celebrities who are idealized for their thinness. This drives the social comparison of individuals leading to increased body dissatisfaction because of the discrepancy between the idealized image and the individual's perceptions of their attractiveness. The media has more of an impact on children as they grow into adolescence, whereas when they are younger, they are more susceptible to maternal factors since they are likely more exposed to their parents than the media during younger ages (Anschutz et al., 2009). A 2008 meta-analysis conducted by Grabe, Ward and Hyde found that 57% of studies that examined the relationship between thin-ideal media exposure and body dissatisfaction in women had a moderate negative relationship. There was also a moderate relationship between the exposure of thin-ideal media and unhealthy eating behaviors and increased appearance concern. In contrast, a study by Clark and Tiggemann (2006) examined the relationship between the media and body image among 9 to 12-year-old girls and found that there was not a direct relationship between media influence (TV and magazines) and body dissatisfaction, but there was an increased relationship between media influence and peer appearance conversations, which ultimately led to increased body dissatisfaction among the sample.

As social media (internet use) becomes more prominent among adolescents, a more recent study (Burnette et al., 2017) examined the role of social media on body dissatisfaction. Among the sample of adolescent girls this study used, 90% reported using social media daily, and 50% reported using social media multiple times a day. Moreover, it was found that there were a high number of comments about appearance concerns among the girls, as well as comments of social comparison (Burnette et al.,

2017). Similarly, a recent systematic review of the use of social networking sites on body image dissatisfaction and body dysmorphic disorder found that simply the use of social networking sites was a strong mediator of body image dissatisfaction (Ryding & Kuss, 2020).

When examining media through television, a 2019 study by Karsay and Schmuck examined the weight bias following exposure to a weight loss reality TV show. This study found that following exposure to video clips of a weight loss reality TV show the adolescents exhibited a significantly more negative attitude and fear towards obese individuals (Karsay & Schmuck, 2019). These findings suggest that these messages on TV, which are commonly being exposed to adolescents, may be internalized into body image dissatisfaction due to negative weight bias.

Peer Influences

Research has found that increased conversations among friends that focused on topics of appearance led to increased internalized appearance ideals in adolescent females (Clark & Tiggemann, 2008; Lawler & Nixon, 2011; Thompson et al., 2006). One study in particular found that as females engage in appearance conversations, their body dissatisfaction is mediated by social comparison. The more that girls pay attention to their appearance, it increases the psychological reliance on social comparison, resulting in greater body dissatisfaction (Carlson Jones, 2004). Another study found although friends may rely on each other for emotional support, these same friends many times discuss ways to obtain their desired body, increasing the adolescents negative body image (Ata et al., 2007). Additionally, research shows that teasing from one's peers about their appearance greatly leads to body dissatisfaction in both boys and girls;

however, girls showed significantly more body dissatisfaction than boys from teasing, as well as increased eating disorder behaviors (Barker & Galambos, 2003; Menzel et al., 2010).

Cultural Influences

Ethnicity. The research indicates that there are some variations among preferred body size, body image and different ethnic groups. It is suggested that the highest levels of body image dissatisfaction are among US and British white women, and less frequent among African American, Hispanic, and Asian women (Grogan, 2017).

A study by Franko and Roehrig (2011) reported that Black women tend to have larger bodies, as well as higher levels of positive body image when compared to other ethnicities of women. They reported that Black girls, boys, and men are found to have higher levels of self-esteem, are more comfortable with their bodies at higher weights, and define attractiveness in ways that go beyond body shape and size (Franko & Roehrig, 2011). Similar findings were reported by Schooler and Lowry (2011) when examining body image ideals among Hispanic/Latino women. They reported that Hispanic/Latina women tend to have image ideals that include more curvy bodies, larger hips and breasts, and a more round behind. Further, when comparing Latina girls and women to African American and Caucasian girls and women, they found the Latina girls and women reported higher levels of body satisfaction and less body preoccupation (Schooler & Lowry, 2011).

In contrast to the findings among Caucasian, African American and Hispanic/Latina populations, Kawamura (2011) examined body image among Asian American women. She reported interesting findings that may limit the accuracy of

Asian American body image knowledge. Specifically, Kawamura (2011) reported that many Asian Americans are culturally taught to preserve group harmony and promote modesty, therefore they may not express negative emotions that are consistent with body dissatisfaction. It was reported that many Asian American women seem to be neither extremely satisfied nor extremely dissatisfied, which many not be an accurate representation of their true body image beliefs (Kawamura, 2011). This being said, research indicates that although levels of body dissatisfaction and disordered eating in Asian populations is still lower than those of those adolescents in more Western cultures, there has been a significant rise (Lai et al., 2013; Omori et al., 2017).

Socioeconomic Status. There is limited research on the relationship between socioeconomic status (SES) and body image, as many researchers who study body image rarely even gather information regarding the participants SES (Grogan, 2017). A study by O'Dea and Caputi (2001) examined the association of SES and body image among 6- to 19-year-olds and found that children and adolescents who were in a lower SES were significantly more likely to be overweight, and interestingly, about 3% of the overweight boys indicated that they were underweight. Overall, the children and adolescents in the lower SES group reported high levels of body satisfaction. It is believed that a possibility for this may be due to not having received the dietary education or information that promotes thinness and in turn this acted as a protective factor for these individuals to body dissatisfaction (O'Dea & Caputi, 2001).

Family Influences

Another factor that has been found to influence adolescents' body image and eating behavior is parental influences. Adolescents spend the majority of their time with

family and many times families can unknowingly put pressure on their children to look a certain way. Parents may comment on the child's body shape and the child's eating patterns or may model weight concerns and disturbed eating, and this is especially common among mothers and daughters. One study in particular by Archibald et al. (1999) found that adolescent girls' perceptions of parent-adolescent relationships were associated with negative body image and increased dieting behaviors. Specifically, they found that less warm and more conflictual parental relationships predicted lower body image and increased dieting. In comparison, more positive ratings of parental relationships indicated more positive body image and healthier eating behaviors. A more recent study found that parenting styles, specifically father's authoritative parenting style, had an inverse relationship in a drive for thinness and body dissatisfaction in their daughters (Enten & Golan, 2009).

Much of the research, however, has shown that the mother has a greater influence on girls' body image and eating behaviors, especially when mothers model body dissatisfaction, dieting or encourage their children to be thin (Barker & Galambos, 2003; Cooley et al., 2008; Gross & Nelson, 2000; Pike & Rodin, 1991). One study found that mothers who made comments about wanting their child to be thin, regardless of the child's BMI, increased the child's restrained eating behaviors and body dissatisfaction (Anschutz et al., 2009). It was found that girls as young as five that have been exposed to mothers who were currently or recently dieting were more likely to have ideas, concepts and beliefs about dieting, which could lead to disordered eating behaviors (Abramovitz & Birch, 2000; Thelen & Cormier, 1995; Smolak, Levine & Schermer, 1999).

Another study that examined the influence of maternal modeling on body image concerns and eating disturbances in preadolescent girls was conducted by Handford, Rapee and Fardouly (2018). While viewing thin-ideal magazines with their 8-12-year-old daughters, the mothers were instructed to make negative comments about their own weight, shape, and diet or to make no appearance related comments. Results of this study found that girls whose mothers made self-critical comments about their own appearance and diet reported lower body esteem, low body satisfaction and more problematic eating attitudes (Handford, Rapee & Fardouly, 2018). This study outlines the importance of maternal modeling by commentary for daughters' body satisfaction status while growing up.

Another interesting study found that mother acceptance and father acceptance were significant predictors of body dissatisfaction; girls who perceived their mothers and fathers as more accepting were dissatisfied less with their bodies (Barker & Galambos, 2003). Moreover, children and adolescents with low self-esteem become more vulnerable, making these perceived pressures from their parents cause more distress, feel more negatively about themselves, diet and engage in negative eating behaviors such as bingeing and purging (Ata et al., 2007).

Studies have found that even as adolescents age, relationships with their parents still remain a powerful predictor in body dissatisfaction (Bearman et al., 2006). One study in particular (de Vries & Vossen, 2019) was interested in the attenuating role of parental relationships when examining social media and body dissatisfaction. They found that social media use was strongly related to body dissatisfaction, however, it was lower among those individuals who had a positive relationship with their mothers. This

gives us direct evidence that a positive maternal relationship for girls can lessen the negative effects of the media.

Parenting Style

There is very limited research on the relationship between parenting style and body image. Further, there has not been a strong association between the two. One study by Taylor, Wilson, Slater and Mohr (2012) attempted to examine the relationship between perceived parenting style, self-esteem and body dissatisfaction in young children and did not find a significant relationship. It was found that parental responsiveness was positively related to self-esteem but was not related to body dissatisfaction (Taylor et al., 2012). Further, they expanded on this idea and also found no association between child weight and parenting styles.

Although there has not been significant research on parenting styles and body image, there has been some research on parenting styles and eating pathology. One study in particular by Enten and Golan (2009) did find significant associations between perceived parenting style and body dissatisfaction. Specifically, they found negative correlations between a drive for thinness, body dissatisfaction and an authoritative father and did not find any significant correlations between mother's parenting style and body dissatisfaction (Enten & Golan, 2009).

A more recent study by Goossens et al. (2019) examined attachment styles and the effects on thin internalization and eating concerns in girls and found a significant interaction effect between attachment anxiety (an insecure attachment) and thin idealization, which explained girl's eating concerns. This study also found a significant interaction affect between attachment avoidance towards the mother when examining

thin idealization and eating concerns (Goossens et al., 2019). Although this study was not examining parenting styles specifically, it notes attachment styles also may have significant effects on girls' body image status and eating concerns.

Measuring Self-Perceptions of Appearance

It has been discussed that the measures to assess body dissatisfaction are geared towards girls. For example, many boys wish to gain weight, whereas girls hope to lose weight and these differences may not be taken into considerations when the questions are formed for certain measures (Presnell et al., 2004). Further, measures used to assess body dissatisfaction are solely measured using self-report assessments, which may lead to inconsistencies.

Some of the first measures that specifically focused on self-perceptions of appearance were developed by Burgess and Wallen (1944) and Secord and Journad (1953) (as cited in Thompson et al., 1999). Since then, there has been a number of different types of assessment tools used to measure one's body image. For example, there are figure rating scales, self-report questionnaires, interviews, body size estimation techniques, and behavioral indicators such as dieting, exercise and cosmetic surgery (Grogan, 2017). It is believed that the importance to examine body image and perceived attractiveness emerged when the field of eating disorders became an academic and popular interest (Thompson et al., 1999).

Some of the first researchers to examine eating disorders included Bruch (1962), Russell (1970), and Slade and Russell (1973), whose work specifically examined levels of body disturbance that caused individuals to have a fear of fatness and experience a state of body disturbance (as cited in Thompson et al., 1999). These researchers found

that individuals were overestimating the size of their emaciated bodies. During this time, these symptoms were added to the criteria for the diagnosis of anorexia nervosa in the Diagnostic and Statistical Manual of Mental Disorders- Third Edition (DSM-III; American Psychiatric Association [APA], 1980). Research from various researchers including Garner and Garfinkel (1982) led to another addition to the criteria for bulimia nervosa to include body disturbance in the revised DSM-III (DSM-III-R; American Psychiatric Association [APA], 1987), as well as the addition of body dysmorphic disorder in the DSM-III-R (Thompson et al., 1999). Anorexia nervosa, bulimia nervosa and body dysmorphic disorder are still included in the most recent update of the Diagnostic and Statistical Manual of Mental Disorders- Fifth Edition (DSM-5; American Psychiatric Association [APA], 2013), with criteria that includes having a preoccupation with appearance and/or the desire to change one's appearance by losing weight.

Limitations of Current Research

With a thorough review of the literature, the current research of body image heavily focuses on white females out of western cultures. Further, much of the research examines the effects of the parental influences, the media, and peers on body image, but there is not an abundance of literature that examines the relationship of how the mothers' views of body image in oneself and others affects the outcome of one's daughters body image. The studies that do examine this area rely solely on self-reported data from the mother and daughter, but do not compare the mother and daughter data to look for inconsistencies of how the mother is perceiving her ideals of body image and how the daughter perceives her mother's ideals of body image. There is virtually no literature that examines if there is a disconnect in what the mother thinks how she may be

portraying her behaviors and thoughts to her daughter and how the daughter may be perceiving her behaviors and comments. This is an important aspect of the mother-daughter relationship, as research in this area may lead to more information on how to prevent body image dissatisfaction in adolescent females and aid in prevention programs that may be implicated by parents.

CHAPTER III

METHOD

This study used a mixed-methods design (both quantitative and qualitative) to address the questions of interest. As such, participants completed a survey and were interviewed as well. Both approaches were used to gather information regarding the mother's and daughter's body image perceptions and ideals, body satisfactions status, concerns about one's weight and eating behaviors, and perceptions of messages given and received by each mother-daughter dyad. Correlation, t-tests, simple and multiple regression analysis was used to analyze the quantitative survey data. Further, themes found through interviews were identified. For a power of .80, effect size of .15 and alpha set at $p<.05$, the desired sample size for the survey was 100 mother-daughter dyads (or 200 total participants). The actual sample size was 50 mother-daughter dyads (100 participants total). The reduction in sample size was due to changes in the protocol as required by the Institutional Review Board (IRB) to ensure individual debriefing after the interview portion with each participant. Additional changes were required as a function of COVID-19 pandemic restrictions.

Participants

Participants for this study included only female children and adolescents (ages 12-17) and their mothers. The literature has found that body dissatisfaction is well-developed by 9 years old, and at twelve years of age it is believed that the child is able to complete self-report scales with validity. Participants who were experiencing any range of reported symptoms (e.g., eating disorders, depression, anxiety, low self-esteem,

behavioral problems), but were not in need of immediate medical care (e.g., needing residential or partial hospitalization care, experiencing a major depressive disorder episode, and so on) were included in the study sample. Further, if either participant was pregnant or had given birth within the past 6 months prior to the study, the dyad was not included in the study. Additional inclusion criteria required that the daughter was currently living with or seeing the mother on a regular basis, that the mother was one of the primary caregivers, and that both the mother and daughter identified as female. Both the mother and daughter were required to participate. These questions were asked by the graduate student when the parent contacted her to participate in the study as screener questions. If they did not meet inclusion criteria at that time, the first meeting was not scheduled.

Demographic information for the mothers, including race, marital status, education level, and employment status are shown in Table 1. Demographic characteristics for the daughters, including siblings, grade level and race are reported in Table 2.

Table 1. Demographic information and descriptive statistics of mothers (N=50)

Variable	Mean	Standard Deviation
Age	46.18	5.44
Number of children in the home	2.32	1.19
Demographics	**Frequency**	**Percent**
Race		
White non-Hispanic	35	70
Hispanic	7	14
Black or African American	4	8

American Indian or Alaska Native	1	2
Asian or Asian American	1	2
Other	2	4
Marital Status		
Married	39	78
Divorced	6	12
Separated	3	6
Never Married	2	4
Education		
4-year Degree	17	34
Professional Degree (i.e., Masters or similar)	16	32
Doctorate	11	22
2-year Degree	3	6
Some College	2	4
High School Graduate	1	2
Employment Status		
Employed Full Time	40	80
Employed Part Time	5	10
Unemployed	4	8
Student	1	2

Table 2. Demographic information and descriptive statistics of daughters (N = 50)

Variable	Mean	Standard Deviation
Age	14.78	1.59
Grade	9.4	1.83
Siblings	1.84	1.38
Demographics	Frequency	Percent
Race		
White non-Hispanic	35	70
Hispanic	4	8

Black or African American	3	6
American Indian or Alaska Native	1	2
Asian or Asian American	1	2
Other	3	6

Instruments

Demographic Information. Personal and demographic information were obtained through the first section of the self-report survey measure. The demographic portion included items related to a marital status, race, education level, employment status and so on. This was the first block of the survey, following consent.

Body Composition. The mother was asked to provide her and her daughter's height and weight to calculate each of their BMI, using the BMI equation. The equation is used to determine if they have a healthy, normal weight. According to the BMI equation, participants who are tall and weigh less will have a lower BMI and participants who are shorter and weigh more will have a higher BMI. The normal BMI range is from 18.5-24.9. A BMI under 18.5 is considered to be underweight, and a BMI over 24.9 is considered to be overweight. Both items for mother and daughter height/weight were on the mother survey only; only daughter height and weight were on the daughter survey.

Body Image. To measure perceived and ideal body image of participants, as well as the discrepancy between these, daughter participants received the Children's Figure Rating Scale (CFRS) developed by Tiggemann and Pennington (1990) and mother participants received the Contour Drawing Rating Scale (CDRS) developed by

Thompson and Gray (1995). Both scales use a nine-point Likert scale of figure drawings, and these figures range from underweight bodies (one on the Likert scale) to obese bodies (seven on the Likert scale), whereas the Children's Figure Rating Scale has more childlike figures. There are two items that measure perceived current size and ideal size, and a current—ideal discrepancy score was calculated using these two items. Further, the daughters received one additional item that asks to rate the size they believe their mother wants them to look. Discrepancy scores were calculated by subtracting the participant's own (and mother's) ideal body size from their perceived body size. A higher discrepancy score indicates that the participant views herself as heavier than what they or what they think her mother would like. Thompson and Gray (1995) found acceptable test-retest reliability for this scale ($r = 0.78$; $p = .005$). Further, another study found good test-retest reliability for the three areas of measurement at two weeks apart; the current—ideal discrepancy ($r = 0.82$; $p < 0.0005$), current ($r = 0.84$; $p < 0.0005$), and ideal ($r = 0.78$; $p < 0.0005$; Wertheim, Paxton & Tilgner, 2004).

Body Satisfaction Status. To measure body satisfaction status, the Body Esteem Scale for Adolescents and Adults (BESAA; Mendelson, Mendelson & White, 2001) was used. Questions from this 23-item scale include items such as "I like what I see in the mirror." Participants were asked to rate each item using a five-point Likert scale, one for 'Never' and five for 'Always.' The Body Esteem Scale for Children (BES-C; Mendelson & White, 1982) was the original body esteem scale created to measure body-esteem of children as young as 7 years old. In a subsequent 1996-1997 study by Mendelson et al., some items were removed from the BES-C and the remaining

items were administered to a large group of 8- to 15-year-olds. From a factor analysis, they found three factors: BE-Appearance (general feelings about appearance), BE-Weight (weight satisfaction), and BE-Attribution (evaluations attributed to others about one's body and appearance). In a 2001 study, Mendelson et al. created the BESAA to make it applicable for adolescents and adults, as well. The BESAA has good reliability for this study sample (Cronbach's α = 0.74 to 0.90) and internal consistency is suitable for all ages.

Body Talk and Perceived Pressures. To examine the type of commentary that is communicated from the mother to the daughter, an adapted version of the Verbal Commentary on Physical Appearance Scale (VCOPAS; Herbozo & Thompson, 2006) was used. The 21-item adaptation is where the directions asked the mother "Rate the items based on your use of the following comments towards your daughter within the past 2 YEARS" and the daughter, "Rate the items of how often you have heard your mother say the following statements within the past 2 YEARS." Items are rated using a five-point Likert scale, one for 'Never' and five for 'Always.' The responses from the daughters' and mothers' scales were compared to calculate the discrepancy. A factor analysis indicated there are three scales: Negative Weight and Shape, Positive Weight and Shape, and Positive General Appearance. For the use of this study, only the Positive Weight and Shape and Positive General Appearance subscales were used due to the IRB having concerns of asking questions framing the mother's in a negative light. The internal consistencies of the two scales were: 0.80 and 0.89. This indicates that the VCOPAS has acceptable to good reliability.

Eating and Feeding Attitudes. The Concerns about Child Overweight, Pressure to Eat and Restriction Subscales from the Child Feeding Questionnaire (CFQ; Birch et al., 2001) was used to obtain an understanding of the mothers' concerns about her daughter's eating habits, by assessing the mother's beliefs, attitudes, and practices about child feeding. The CFQ contains 15 items that have responses on a five-point Likert scale; one for 'Unconcerned' and five for 'Concerned' on the Concerns about Child Overweight subscale, and one for 'Disagree' and five for 'Agree' on the Pressure to Eat and Restriction subscales. Further, the daughters were given the Kids' Child Feeding Questionnaire (KCFQ; Carper, Fisher & Birch, 2000) to understand their perceptions of their mother's feeding behaviors. The KCFQ is made up of 14 items and responses are on a three-point Likert scale; one for 'No' and three for 'Yes.' The KCFQ contains age-appropriate questions that parallel the Restriction and Pressure to Eat scales of the parents' CFQ. The internal consistency for the CFQ and KCFQ was good; Cronbach's alpha of 0.76 and 0.72 for pressure-to-eat items and 0.85 and 0.70 for restriction items.

Concerns of Weight. In addition to obtaining information about the mothers' concerns of the daughter's eating, the Weights Concerns Scale (WCS; Killen et al., 1994) is a five-item scale that was used to assess the mothers' and daughters' concerns with her own weight. The WCS was created by Killen et al. to determine its ability to predict an eating disorder; however, the psychometrics have not been investigated. For the context of this study, the questions were added in the survey to address weight concerns. The internal consistency was conducted using Cronbach's Alpha and is added

in the results section. Additionally, the Concerns About Child Overweight subscale from the CFQ was used to obtain the mothers' concerns about her daughters' weight.

Parenting Style. To obtain the mothers' parenting style, the Parenting Style Questionnaire (PSQ; Robinson, Mandleco, Olsen & Hart, 1995) was used. This scale provides additional information to allow us to determine if parenting style affects communication between the mother and daughter. The PSQ was created by Robinson et al., (1995) to identify parenting practices including authoritative, authoritarian and permissive styles. Within the parameters of this study, the PSQ has acceptable to good reliability, with a Cronbach's alpha ranging from of 0.60 to 0.90 across the three parenting style scales.

Interview. During the interview, mothers and daughters were each asked 18-open-ended questions regarding early memories, as well as current views, of body image, diet, weight concern, and parental influences regarding these areas. For example, questions asked about the mother's relationship with food and her body growing up and her earliest memories of thinking about her body in a negative or positive way. Responses were audio recorded, and themes were examined through a Q-sort technique (Mammen, Norton, Rhee & Butz, 2016).

Procedures

Following approval from the Texas A&M University (TAMU) Institutional Review Board (IRB), recruitment of mother-daughter dyads began. Participant dyads were sought out from various online survey distribution methods, such as social media and email. Information on how to contact the graduate student was provided through

distribution materials. At the time of contact, the graduate student screened the participants for exclusion/inclusion criteria. If the dyad met the inclusion criteria, consent was obtained and a meeting was scheduled to meet via Zoom, an online teleconferencing system. No participants met the exclusion criteria upon screening. During the data collection process, two dyads participants dropped out of the survey due to personal reasons. The survey was conducted through Qualtrics, an online questionnaire program. The mother was given a link with an assigned number prior to the Zoom meeting and she was able to complete her survey in advance. During the Zoom meeting, the mother interview was held first, followed with the daughter survey completion and daughter interview. This allowed the graduate student to answer any concerns the mother had prior to the daughter completing the survey and interview portion, as well as allowing the graduate student to be available to answer any questions from the daughter during her survey completion. This also aided in the prevention of bias from the mother while the daughter completed the survey, as well as allowing the daughter to ask the graduate student potential questions rather than her mother. The same assigned number that was given to the mothers was also assigned to the daughters to allow for connection between surveys. All participants who completed the survey and interview each received a $10.00 Amazon gift card upon the completion of the Zoom meeting.

Analysis

Prior to addressing the research questions, quantitative data collected was reviewed, BMI and discrepancy scores were calculated, factor scores for the BESAA,

VCOPAS, CFQ, KFCQ, WCS and PSQ measures were calculated, and missing data was identified. If more than 20% of items for a single measure, or 10% of total items were missing, results were considered invalid. Specific items that had to be answered included the daughters' age and mother and daughters' sex. If any of these items were not complete, the dyads were not included.

Prior to further analysis, descriptive analyses for all variables were conducted to determine that the results met the assumptions of normality. For any that did not, transformations were considered. Alternatively, nonparametric analyses such as Spearmans' Rho were used in these cases.

For factors of interest (e.g., CFQ – Pressure to Eat, CFQ- Restriction) internal consistency of the factor (Cronbach's alpha) were computed. Factors with *alpha* > .65 were considered acceptable. If factors did not meet the acceptable internal consistency score, an underlying factor structure was analyzed to determine the best fit.

For the interview questions, a Q-sort technique was used. The graduate student reviewed all the responses and extracted themes as perceived by them; this was done separately for the mothers and daughters. The themes were then sorted into groupings of larger themes. The Q-sort attempted to qualitatively reduce the data based on commonalities in the responses. Mammen et al. (2016) found this technique helpful in understanding the qualitative information gathered from parent-teen dyads, and this technique also allowed us to gather qualitative information in a more reliable way. A mixed methods analysis was used to examine the data collected to address the research questions as follows and is provided in Chapter IV.

CHAPTER IV

RESULTS

Using a mixed method design of survey data and interview data, the purpose of this study was to better understand how the communication of the mother to the daughter about herself, her daughter and others affects the outcomes of body satisfaction status in the daughter. The quantitative data analytic strategy consisted of correlational analysis, paired sample t-tests, as well as simple and multiple regressions using the statistical program STATA. Interviews and Q-sort techniques were also utilized to gather and analyze qualitative data. Descriptive statistics for survey variables, including means and standard deviations, are shown in Table 3.

Table 3. Descriptive statistics of survey variables (N=100)

Variable	Mean	Standard Deviation
Body Mass Index (BMI)		
Mother	29.41	7.41
Daughter	22.42	3.78
Body-Esteem Scale for Adolescents and Adults Scale		
Mother		
Appearance Index	23.24	6.91
Weight Index	9.42	5.19
Attribution Index	8.76	2.63
Overall	41.42	12.12
Daughter		
Appearance Index	23.80	8.15
Weight Index	13.24	5.50

Attribution Index	8.96	2.32
Overall	46.00	13.58
Contour Drawing Rating Scale		
Mother		
Current	6.92	1.60
Ideal	4.98	1.29
Current-Ideal Discrepancy	1.94	1.27
Daughter		
Current	4.31	1.33
Ideal	3.55	1.00
Current-Ideal Discrepancy	0.76	0.83
Mother Ideal of Daughter	4.14	1.30
Current- Mother Ideal of Daughter Discrepancy	0.17	1.07
Verbal Commentary on Physical Appearance Scale		
Mother		
Positive Weight and Shape Index	9.08	4.56
Positive General Appearance Index	19.48	4.90
Overall	28.56	7.97
Daughter		
Positive Weight and Shape Index	9.76	4.12
Positive General Appearance Index	18.34	5.63
Overall	28.10	8.22
Child Feeding Questionnaire/ Kids Child Feeding Questionnaire		
Mother		
Concern about Child Weight Index	1.34	1.51
Restriction Index	8.56	7.20
Pressure to Eat Index	3.20	3.65
Overall	13.10	8.80

Daughter		
Restriction Index	5.90	1.68
Pressure to Eat Index	4.28	3.15
Overall	10.18	3.41
Weight Concerns Scale		
Mother	1.22	0.77
Daughter	1.11	0.78
Parenting Style Questionnaire (Mother only)		
Authoritative Parenting Style Index	3.24	0.47
Authoritarian Parenting Style Index	1.04	0.55
Permissive Parenting Style Index	0.93	0.57

Tests of normality and homogeneity were measured across variables using Sharpiro-Wilk W tests, examining skewness and kurtosis, examining box plots, and Levene's tests. Further, for significant results found in the regression analyses, Kernel Density and normal probability plots were examined, as well as residual versus fits plots and Breusch-Pagan tests were run.

Finally, due to the reliability results that have not been examined for the Weight Concerns Scale, Cronbach's alpha was examined for the mother and daughter scales resulting with an alpha score of 0.58 and 0.65.

Research Question One

What is the level of association between the mothers' attitudes regarding her own body and the daughter's attitudes towards her own body?

Research question one examined the level of association between mother's positive attitudes regarding her own body and the daughter's attitudes towards her body. This was examined by running a correlational analysis between the CFRS/CDRS, the BESAA composite and subscale measures and Weight Concerns Scales to measure the association between current, ideal and discrepancy scores of current body image. Results indicate a few moderate correlations between mother and daughter's body attitudes when examining scores of mothers and daughters. Table 4 provides the correlations for the Contour Rating Drawing Scales

Table 4. Correlational Analysis Results of Contour Rating Drawing Scales (*N*=100)

	1	2	3	4	5	6	7	8
1. Mother current	1.00							
2. Mother ideal	**0.63**	1.00						
3. Mother current-ideal discrepancy	0.62	-0.21	1.00					
4. Daughter current	0.00	0.17	-0.17	1.00				
5. Daughter ideal	0.00	0.22	-0.21	**0.78**	1.00			
6. Daughter current-ideal discrepancy	-0.00	0.01	-0.01	0.66	0.04	1.00		
7. Daughter mother's ideal	0.16	0.37	-0.17	**0.67**	**0.65**	0.29	1.00	
8. Daughter current-mother's ideal discrepancy	-0.19	-0.24	.00	0.43	0.18	**0.47**	-0.38	1.00

Note. Bolded numbers indicate significance of $p>.05$

Some notable results were found when examining the correlations of the CDRS/CFRS. The mother's ideal and current body image is moderately related (r=0.63), and the daughter's ideal and current body image are strongly related (r=0.78). Further, the daughter's current body image and how she believes her mother would like her to look are also moderately related (r=0.67). The daughter's ideal body image

compared to how she thinks her mother would like her to look like is also moderately related (r=0.65). Finally, the discrepancy between the daughter's ideal body image and how the daughter thinks her mother wants her to look, compared to the daughter's ideal versus current body image discrepancy has a moderate relationship (r=0.47).

Table 5 provides the correlations for body self-esteem. When examining the BESAA scores across scales, there were no notable relations between the mother's body image status and the daughter's body image status, with all correlations less than 0.30. Correlations that were notable were observed when comparing subscales to the overall composite scores.

Table 5. Correlational Analysis Results of Body Esteem Scale for Adolescents and Adults (N=100)

	1	2	3	4	5	6	7	8
1. Mother- Appearance	1.00							
2. Mother-Weight	0.65	1.00						
3. Mother- Attribution	0.36	0.21	1.00					
4. Mother- Composite	0.93	0.84	0.51	1.00				
5. Daughter- Appearance	0.29	0.22	0.01	0.26	1.00			
6. Daughter- Weight	0.17	0.13	-0.18	0.11	0.67	1.00		
7. Daughter- Attribution	0.07	0.12	0.21	0.14	0.41	0.26	1.00	
8. Daughter- Composite	0.26	0.21	-0.03	0.23	0.94	0.85	0.53	1.00

Note. Bolded numbers indicate significance of p>.05

Further exploratory analysis using a paired t-test examining the mother and daughter BESAA scores indicates there was a significant difference in BESAA scores of the overall body esteem [mother- (M=41.42, SD=12.12) daughter- (M=46.00, SD=13.58); t(49)=-2.02, p=0.04] and weight satisfaction scales [mother-(M=9.42,

SD=5.19) daughter- (M=13.24, SD=5.50); $t(49)=-0.94$, $p=0.35$]. These results can be seen in Tables 6-9. Moreover, the biggest discrepancy of scores is between weight satisfaction subscales, indicating the daughters had higher weight satisfaction means in comparison to their mothers. There was not a significant difference in the attribution subscale scores for mothers and daughters.

Table 6. Paired Sample T-test results for BESAA Appearance Subscale (*N*=100)

Variable	M	SD	*t*	*p*	Df
Mother	23.24	6.90	-0.48	0.66	49
Daughter	23.80	8.15			

Note. BESAA = Body Esteem Scale for Adolescents and Adults; Bolded numbers = significance of $p>.05$

Table 7. Paired Sample T-test results for BESAA Weight Satisfaction Subscale (*N*=100)

Variable	M	SD	*t*	*p*	Df
Mother	9.42	5.19	-3.82	**.0004**	49
Daughter	13.24	5.50			

Note. BESAA = Body Esteem Scale for Adolescents and Adults; Bolded numbers = significance of $p>.05$

Table 8. Paired Sample T-test results for BESAA Attribution Subscale (*N*=100)

Variable	M	SD	*t*	*P*	Df
Mother	8.76	2.63	-0.45	0.65	49
Daughter	8.96	2.32			

Note. BESAA = Body Esteem Scale for Adolescents and Adults; Bolded numbers = significance of $p>.05$

Table 9. Paired Sample T-test results for BESAA Overall Positive (*N*=100)

Variable	M	SD	*t*	*P*	Df
Mother	41.42	12.12	-2.02	**0.048**	49
Daughter	46.00	13.58			

Note. BESAA = Body Esteem Scale for Adolescents and Adults; Bolded numbers = significance of $p>.05$

Finally, when examining the correlation between the mother's WCS and daughter's WCS, a low correlation was found ($r = 0.31$). Results indicate a low positive relationship between mother's weight concerns and daughter's weight concerns. It was hypothesized there would be a strong relationship between the mother's beliefs about her own body and the way the daughter perceives her own body. This hypothesis was not supported in that correlations found were not significant across all scales compared. Further, it was found that there were significant differences in body self-esteem when examining the exploratory analysis using the BESAA results.

Research Question Two

Does the mother's age, own weight concerns and satisfaction, as well as her eating and feeding attitudes, predict her daughter's weight concerns?

Research question two examined if daughter's weight concerns, as measured by the BESAA- weight satisfaction subscale and Weight Concerns Scale, could be predicted by the mother's age, own weight concerns, and eating and feeding attitudes. The mother's weight satisfaction status was measured by the BESAA- weight satisfaction scale and Weight Concerns Scale, and eating and feeding attitudes was measured by using the Child Feeding Questionnaire- Restriction and Concerns of Child's Weight scales. To test this, two multiple regressions were used with the daughter's weight satisfaction and weight concerns as outcomes. These results can be seen in Table 10 and 11.

Table 10. Multiple Regression Analysis Results for Daughter's Weight Satisfaction as Outcome Variable (*N*=50)

Predictors	*B*	*SE*	*B*	*t*	*p*	*F*	R^2	*Adjusted* R^2
Mother Age	-.212	.159	-.209	-1.33	.189	0.71	.07	-0.03
Mother BE-Weight	.027	.178	.025	0.15	.882			
Mother WCS	-1.11	1.20	-.157	-0.93	.357			
CFQ- Restriction	-.086	.310	-.113	-0.28	.782			
CFQ- Concerns	.084	.252	.134	0.33	.741			
Intercept	23.76	8.04		2.96	.005			

Note. BE-Weight = Body Esteem- Weight subscale; WCS = Weight Concerns Scale; CFQ- Restriction = Child Feeding Scale Restriction subscale; CFQ = Child Feeding Scale Concerns subscale; Bolded numbers = significance of $p>.05$

Table 11. Multiple Regression Analysis Results for Daughter's Weight Concerns as Outcome Variable (*N*=50)

Predictors	*B*	*SE*	*β*	*t*	*p*	*F*	R^2	*Adjusted* R^2
Mother Age	.010	.022	.071	0.47	.642	1.25	.125	.025
Mother BE-Weight	.007	.025	.045	0.28	.784			
Mother WCS	.342	.017	.338	2.07	**.045**			
CFQ- Restriction	-.001	.043	-.014	-0.03	.972			
CFQ- Concerns	-.012	.035	-.132	-0.34	.739			
Intercept	.322	1.11		0.29	.773			

Note. BE-Weight = Body Esteem- Weight subscale; WCS = Weight Concerns Scale; CFQ- Restriction = Child Feeding Scale Restriction subscale; CFQ = Child Feeding Scale Concerns subscale; Bolded numbers = significance of $p>.05$

The first regression analysis using the BESAA- weight satisfaction as the independent outcome variable revealed no significant predictions of daughter weight satisfaction by the mother's age, own weight concerns or eating and feeding attitudes. The second multiple regression analysis using the daughter's Weight Concerns Scale as the outcome variable did reveal one significant predictor of daughter weight concerns by the mother's own weight concerns as measured by the WCS. The regression model explained 12.5% of daughter weight concerns. The F-test shows that the amount of daughter's weight concerns explained is not statistically greater than zero [$F(4,45)=1.54$, $p=0.21$]. The adjusted R squared value was 0.025 indicating about 2.5% of the

daughter's weight concerns is accounted for by the mother's weight concerns. The slope of mother's weight concerns as measured by the WCS is 0.34, indicating that as mother's WCS increases by 1 point, daughter's WCS increase by 0.34 on average. The t-test shows that the slope of mother's weight concerns as measured by the WCS is statistically significant from zero [$t(44)=2.07$, $p=0.045$]. Normality of residuals were examined using Kernel Density and normal probability plots, as well as examining skewness, kurtosis and Shapiro Wilk scores which all indicated normality assumptions were met. Finally, residual versus fits plots and Breusch-Pagan tests were run, which indicated homoscedasticity was not violated.

It was hypothesized that greater concerns with weight and diet by the mothers will predict daughters' weight concerns. This hypothesis was supported. When examining the daughter's weight concerns using the WCS, it was found that the mother's weight and diet concerns as measured by WCS did predict the daughter's concerns, while controlling for mother's age, BE-weight satisfaction, CFQ restriction and concerns about weight subscales.

Research Question Three

Do mothers and daughters agree on what message is being received about body image?

Research question three examined if mothers and daughters agree on what messages are being received about body image, and if so, does this discrepancy predict daughters body image status. To do this, paired samples t-tests were run using the overall Verbal Commentary of Physical Appearance (VCOPAS) scores, the Positive Weight and Shape VCOPAS scores, and the General Physical appearance VCOPAS

subscales of both mother and daughters to see if there were significant differences. Results can be seen in Tables 12-14.

Table 12. Paired Sample T-test results for Verbal Commentary of Physical Appearance Positive Weight and Shape subscales (*N*=100)

Variable	M	SD	*t*	*p*	*Df*
Mother	9.08	4.56	-0.94	0.35	49
Daughter	9.76	4.12			

Note. Bolded numbers = significance of *p*>.05

Table 13. Paired Sample T-test results for Verbal Commentary of Physical- Positive General Appearance subscales (N=100)

Variable	M	SD	*t*	*p*	Df
Mother	19.48	4.90	1.18	0.24	49
Daughter	18.34	5.63			

Note. Bolded numbers = significance of *p*>.05

Table 14. Paired Sample T-test results for Verbal Commentary of Physical Appearance Overall (N=100)

Variable	M	SD	*t*	*p*	df
Mother	28.56	7.96	0.31	0.75	49
Daughter	28.10	8.22			

Note. Bolded numbers = significance of *p*>.05

There were no significant differences found between verbal commentary between mothers and daughters across scales. Further exploratory analysis was run to examine the correlation between the VCOPAS mother daughter scales to examine if they were highly correlated after seeing no significant differences. Although the VCOPAS scores were not significantly different, the correlational analyses were all .30 or lower when comparing mother daughter scales, indicating the scores were not significantly

correlated. This being said, although the messages sent and the messages received do not match, results of the correlations indicate messages were more different than alike between mothers and daughters. The results of the correlational analysis can be seen in Table 15.

Table 15. Results of Correlational Analysis of Verbal Commentary of Physical Appearance Scales (*N*=100)

	1	2	3	4	5	6
1. Mother- PWS	1.00					
2. Mother-PGA	0.42	1.00				
3. Mother- Overall	0.83	0.85	1.00			
4. Daughter- PSW	0.30	0.21	0.30	1.00		
5. Daughter- PGA	-0.04	0.17	0.08	0.41	1.00	
6. Daughter- Overall	0.13	0.22	0.21	0.78	0.89	1.00

Note. PWS = Positive Weight Scale; PGA = Positive General Appearance; Bolded numbers = significance of $p>.05$

Due to finding differences between the mother and daughter VCOPAS scores, discrepancies were calculated by subtracting the daughter's scores from the mother's scores the same across items. Further analysis was examined to explore if the discrepancies measured would be able to predict the daughter's body image satisfaction. To measure this, a simple regression was run using the BESAA overall daughter score as the outcome variable and the VCOPAS overall discrepancy score as the predictor. Results can be found in Table 16.

Table 16. Simple Regression Analysis Results for Daughter's Body Satisfaction as Outcome Variable (N=100)

Predictor	*B*	*SE*	*B*	*t*	*p*	*F*	R^2	*Adjusted* R^2
VCOPAS Discrepancies	-.632	.169	-.474	-3.73	**0.001**	13.91	0.225	0.208
Intercept	46.29	1.71		27.07	0.000			

Note. VCOPAS = Verbal Commentary of Physical Appearance Scale; Bolded numbers = significance of $p>.05$

It was found that the VCOPAS discrepancy was a predictor in the daughter's body image satisfaction. The regression model explained 22.5% of daughter body esteem. The F-test shows that the amount of variable explained is statistically greater than zero [$F(1,48)=13.91$, $p=0.001$]. The slope of VCOPAS discrepancy scores is -0.63, indicating that as VCOPAS discrepancy scores increases by one point, the expected body image status decreases by 0.63. The t-test shows that the slope of VCOPAS discrepancy scores is statistically significant from zero [$t(48)=-3.73$, $p=0.001$]. The adjusted R-squared value was 0.20 indicating about 20% of the daughter's body image status is accounted for by discrepancy of positive verbal commentary of physical appearance messages. Normality of residuals were examined using Kernel Density and normal probability plots, as well as examining skewness, kurtosis and Shapiro Wilk scores which all indicated normality assumptions were met. Finally, residual versus fits plots and Breusch-Pagan tests were run, which indicated homoscedasticity was not violated.

It was hypothesized that there would be a disconnect on what the mother believes she is saying to her daughter and the message the daughter is actually perceiving,

especially for those mothers who have negative body image and elevated scores on eating attitude and behavior scales. This hypothesis was not supported in that there were not notable significant differences in perceptions of verbal commentary as measured by the VCOPAS across scales. That being said, although there were no significant differences, through exploratory analysis, the discrepancies found were a significant predictor in the daughter's body image satisfaction.

Research Question Four

Does mothers' parenting style (authoritative, authoritarian or permissive) predict the discrepancy as measured in Research Question 3?

Research question four examined if mother's parenting styles had a significant impact on the discrepancies of positive verbal commentary on physical appearance between mother and daughter. Due to all but one parent endorsing an authoritative parenting style, this question could not be examined.

Research Question Five

Do mothers' and daughters' perceptions of weight and size as well as eating attitudes and behaviors, in combination with mothers' BMI and age, predict daughter's BMI?

Research question five examined whether the daughter's BMI could be predicted by mother's and daughter's perceptions of positive verbal commentary, specifically regarding the positive weight and shape subscales, eating and feeding attitudes and the child's perception of the mother's eating and feeding attitudes, as well as the mother's age and own BMI. To measure this, a multiple regression was conducted using daughters BMI as the independent outcome variable, and the mother's age, the mother's

BMI, the overall positive messages of the VCOPAS, and the pressure to eat and restriction subscales of the parent and child feeding and eating attitude scales (CFQ and KCFQ) as the predictors. Results can be found in Table 17.

Table 17. Regression Analysis Results for Daughter's Body Mass Index as Outcome Variable (N=100)

Predictors	*B*	*SE*	*β*	*t*	*p*	*F*	R^2	*Adjusted* R^2
Mother's Age	.079	.098	.115	0.81	.423	3.60	0.41	0.30
Mother's BMI	.197	.067	.387	2.93	**.006**			
Mother VCOPAS	.163	.065	.344	2.50	**.016**			
Daughter VCOPAS	-.025	.058	-.054	-0.43	.670			
CFQ- Restriction	.064	.069	.121	0.92	.361			
CFQ- Pressure to Eat	-.246	.157	-.238	-1.57	.124			
KCFQ- Restriction	-.108	.306	-.048	-0.35	.726			
KFCQ- Pressure to Eat	-.147	.182	-.122	-0.81	.425			
Intercept	10.51	4.43		2.37	.023			

Note. BMI = Body Mass Index; VCOPAS = Verbal Commentary of Physical Appearance Scale; CFQ-Restriction = Child Feeding Scale Restriction subscale; CFQ = Child Feeding Scale Concerns subscale; KCFQ- Restriction = Kid's Child Feeding Scale Restriction subscale; KCFQ = Kid's Child Feeding Scale Concerns subscale; Bolded numbers = significance of $p>.05$

Results indicated that the only two significant predictors among these scales of daughter's BMI were the mother's BMI, as well as the mother's reports of overall positive verbal commentary of physical appearance. The regression model explained 41.2% of daughter BMI. The F-test for the mother's BMI and the mother's perceptions of overall positive verbal commentary on physical appearance shows that the amount of variable explained is statistically greater than zero [$F(8,41)=3.60$, $p=0.003$]. The slope of the mother's perceptions of overall verbal commentary is 0.16, indicating that as VCOPASCm (the mother's positive verbal commentary overall score) scores increases

by 1 point, the expected daughter BMI increases by 0.16. The t-test shows that the slope of VCOPASCm scores is statistically significant from zero [$t(41)=2.50$, $p=0.016$]. The slope of the mother's BMI is 0.19, indicating that as the mother's BMI increases by 1 point, the expected daughter BMI increases by 0.19. The t-test shows that the slope of the mother's BMI is statistically significant from zero [$t(41)=2.93$, $p=0.006$]. The adjusted-R squared value was 0.30 indicating about 30% of the daughter's BMI is accounted for by all the predictors in this model. When examining the beta scores, it is seen the mother's BMI has a greater influence on the daughter's BMI score than the perception of mother's VCOPAS scores. Normality of residuals were examined using Kernel Density and normal probability plots, as well as examining skewness, kurtosis and Shapiro Wilk scores which all indicated normality assumptions were met. Finally, residual versus fits plots and Breusch-Pagan tests were run, which indicated homoscedasticity was not violated.

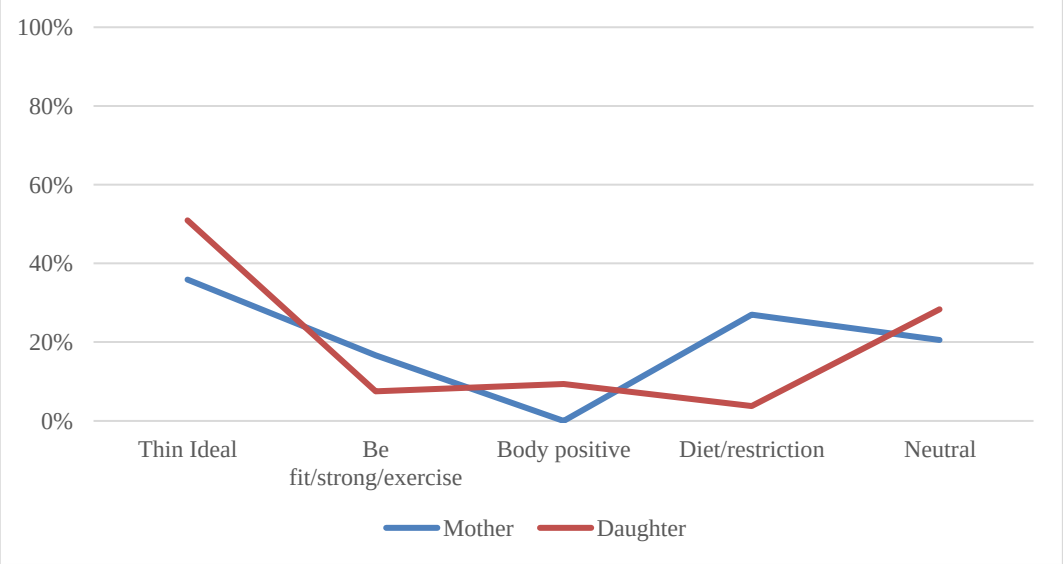
It was hypothesized that mothers' BMI will account for the most variance in daughters' BMI. This hypothesis was supported in that mothers' BMI was the greatest significant predictor of daughters' BMI in this model. Interestingly, the finding of mother's positive messages was also a significant predictor of daughters' BMI.

Research Question Six

Do themes that emerge from interviews with mothers and daughters reflect the broader themes of desired weight, body image importance, and influences on what they should like, as well as their relationship with food, growing up and are these themes seen by mothers and daughters consistent?

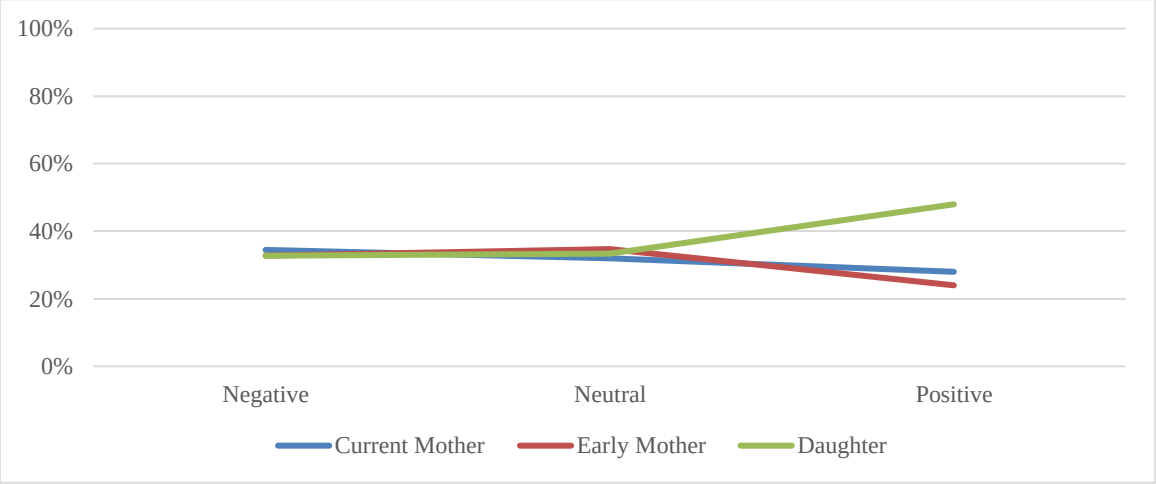
Research question six used interview data to determine if themes that emerge with the mothers and daughters reflect the boarder themes of desired weight, body image importance, and influences on what they should look like, as well as their relationship with their food growing up. Using a q-sort technique, the frequency of themes that emerged from the data were analyzed. Results indicated that many of the messages and themes found among parents aligned and were consistent with the daughter's reported overall messages and themes. When examining the early messages received about bodies, data suggest that most participants indicated themes that aligned with the thin ideal. Moreover, it was found that mothers more frequently received messages regarding diet and/or restriction, whereas daughters received more neutral messages and even messages of body positivity, which were not seen in the mother's responses at all. These results can be seen in Figure 1.

Figure 1. Overall Percentages of Themes of Early Messages regarding Bodies (*N*=100)



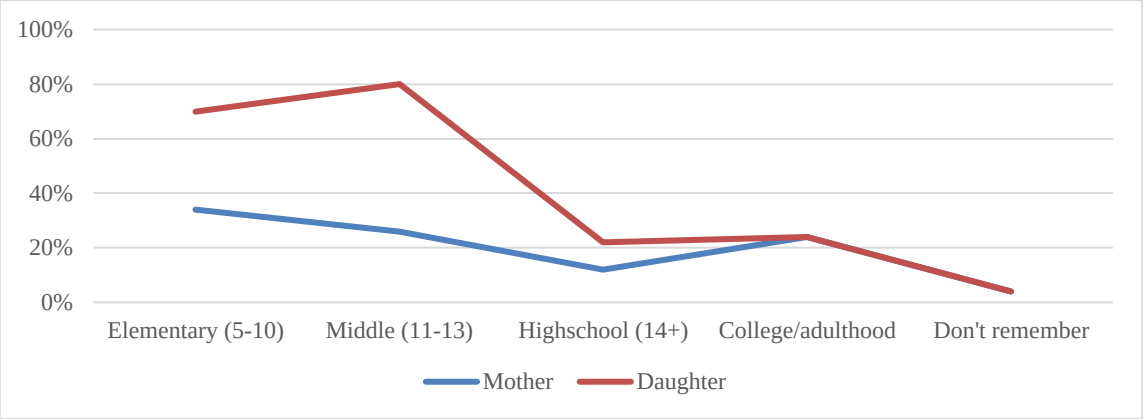
Another interesting finding notable to report was the consistency of body image found across mothers and daughters, as well as early body image beliefs of mothers. Results indicated that across participants, daughters were more likely to report positive body image; however, similar themes across participants were found with approximately 30-40% of participants either having negative or neutral body image beliefs. These results can be seen in Figure 2.

Figure 2. Overall Percentage of Body Image Status (*N*=100)



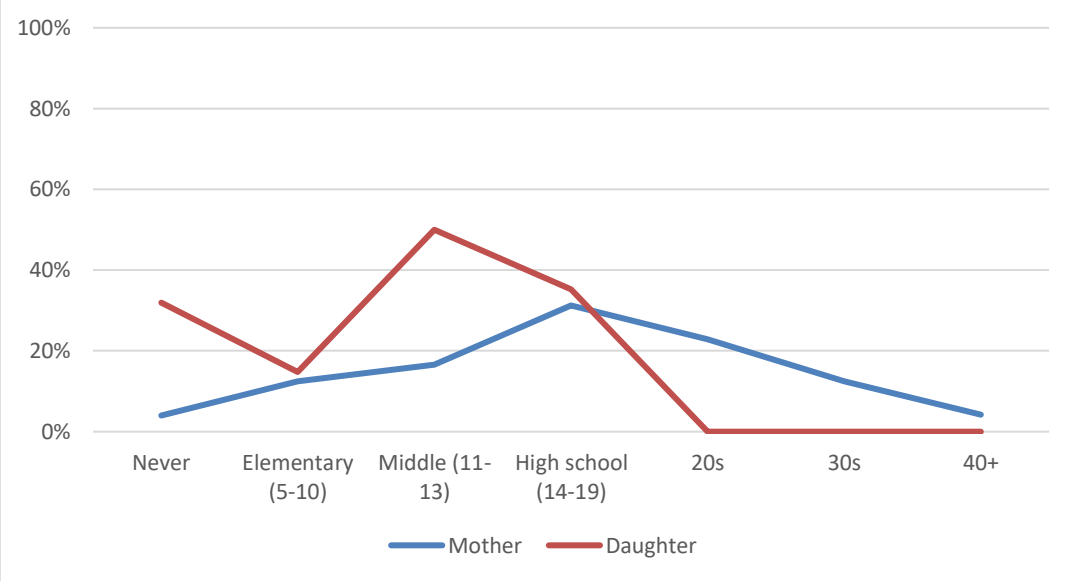
When examining the grades/ages of first thinking about body image, there were some discrepancies across mothers and daughters. It appears that daughters are thinking about their bodies earlier than their mothers did. In fact, results indicated as early as elementary school aged. Results can be seen in Figure 3.

Figure 3. First Thoughts of Body Image (*N*=100)



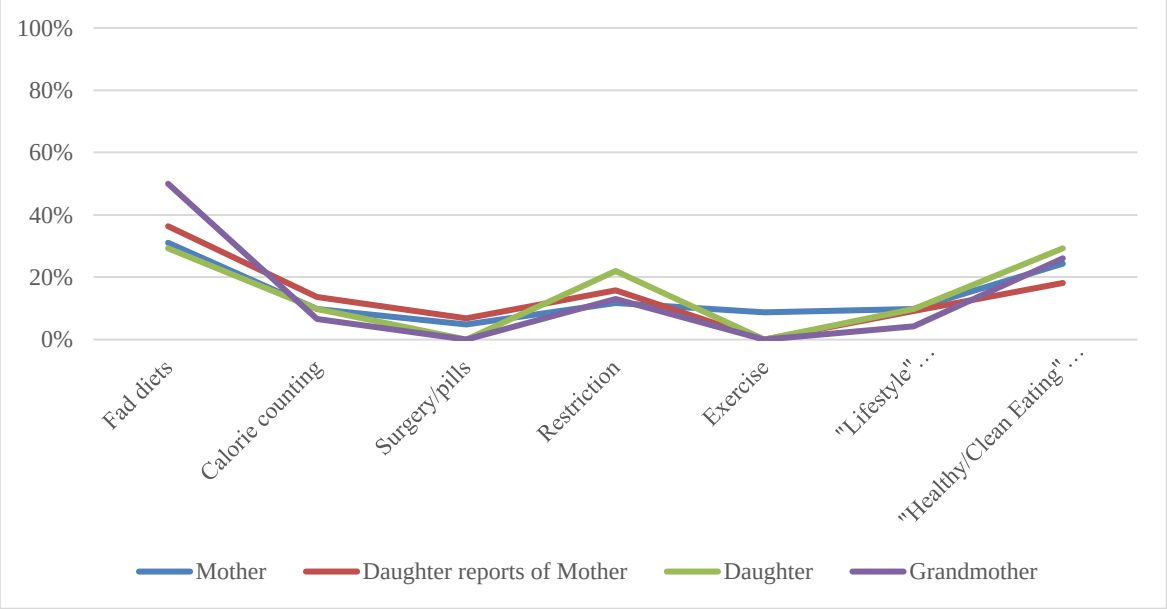
Similar findings were seen when examining the overall themes of first-time dieting. Findings suggest most daughters began dieting earlier than their mothers. Results can be seen in Figure 4.

Figure 4. First Time Dieting (*N*=100)



When examining the types of diets used, mothers and daughters reported types of dieting were very consistent across participants, with most participants reporting the use of Fad Diets, such as Weight Watchers. These results can be seen in Figure 5.

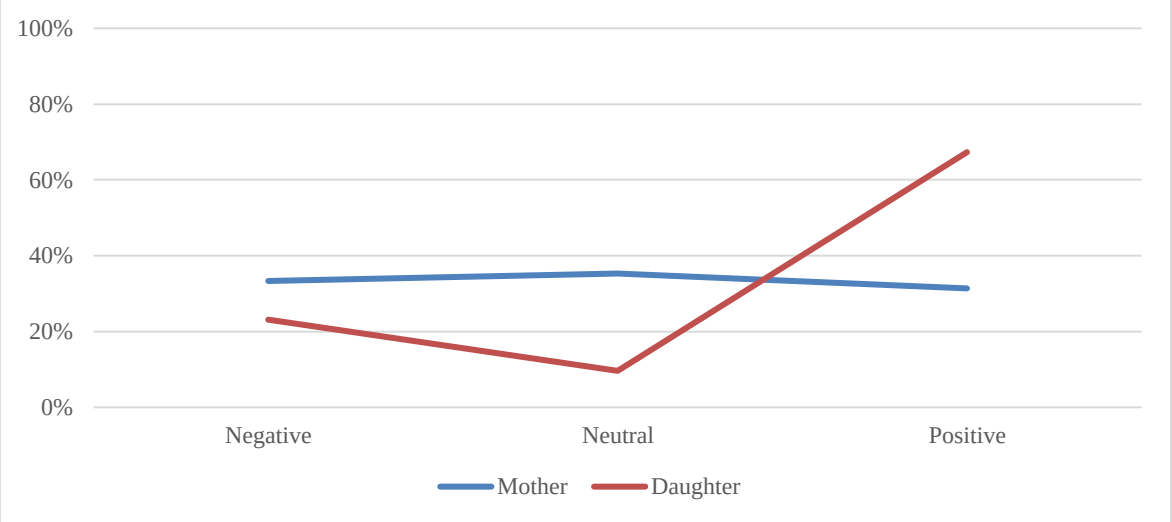
Figure 5. Types of Diets Used Across Participants (*N*=100)



When examining the themes of the perception of mother's beliefs of the daughter's appearance, as well as the mother's actual comments about the daughter's appearance and the perception of the importance of mother's appearance, there were some discrepancies. In regard to the perception of mother's beliefs of the daughter's appearance, the question asked was "What did/do you think your mother thinks about your appearance?". Results indicated that the daughter's in this study believe their mothers view them in a much more positive regard than the mother participants when

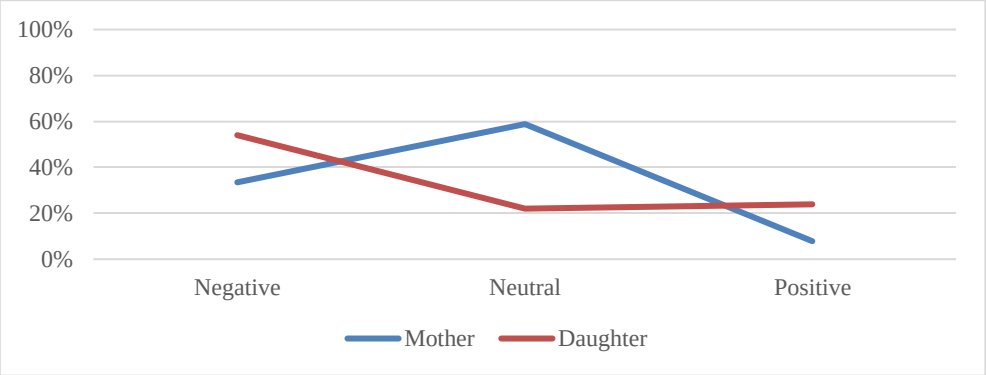
asking about their mothers. Further, the mothers in the current study had less variability of messages received by their mothers. These results can be seen in Figure 6.

Figure 6. Perception of Mother's Beliefs Towards Self (*N*=100)



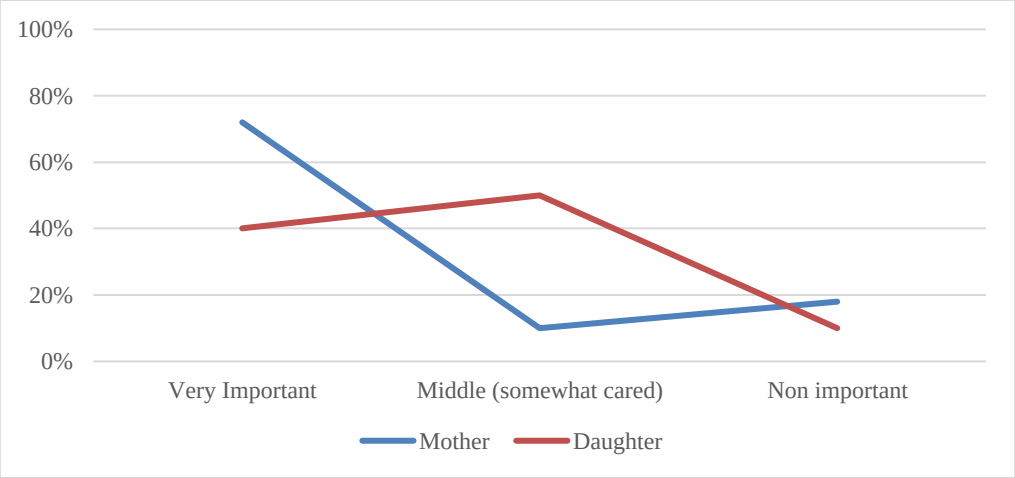
In examining the actual reported comments that the participants received from their mothers, there was also some discrepancies when comparing the mothers and daughters within this study. The question to examine this theme was "What types of things do you hear your mother saying to you about appearance?". Results indicate that the mother participants received more neutral messages from their mothers growing up about overall appearance, whereas the daughters in this study reported receiving more negative messages when hearing their mothers talk to them about appearance. These results can be seen in Figure 7.

Figure 7. Mother's Comments about Appearance (*N*=100)



Finally, when examining the participants beliefs of how important their mother's appearance is to their mother, mother participants reported that they believed their mothers appearance was mostly very important, whereas the daughter participants reported that their mother's appearance was more towards neutral or somewhat important. These results can be seen in Figure 8.

Figure 8. Perception of Importance of Mother's Appearance (*N*=100)



It was hypothesized that there would be a history of these themes reported while growing up for the mothers, as well as for the daughters, who exhibit body dissatisfaction and that these themes would be relatively consistent across mothers and daughters exhibited messages were passed down from early experiences of the mothers. This hypothesis was supported in that most themes found across participants were consistent and there were few notable significant discrepancies across messages.

CHAPTER V

DISCUSSION

This study focused on body image dissatisfaction, the best-known predictor of an eating disorder (Stice et al., 2017). The prevalence of eating disorders in the United States is on the rise, and emerges typically among adolescents during the transition between middle and high school (Bucchianeri et al., 2013). There are a number of factors that contribute to body image dissatisfaction. One of the major factors is parental pressures and parents may unknowingly put pressures on their children to look a certain way. It is common for parents to make comments about their children's bodies and eating behaviors, as well as model weight concerns and disturbed eating. These patterns are especially common between mothers and daughters. Existing research indicates that there is an association between the child's perception of maternal encouragement to be thin and the child body dissatisfaction as well as restrained eating (Anschutz et al., 2009).

Through a sociocultural lens, the purpose of this study was to explore the communication and messages between mothers and daughters about the mother, her daughter, and others to better understand the outcomes of body satisfaction status in the daughter. This study examined the relationships of feelings and thoughts about both mothers' and daughters' eating behaviors and weight concerns. To do this, the relationship between these variables and the outcomes of daughters' body satisfaction was examined. Finally, the current study explored differences between the messages the mother believes she is communicating to her daughter and what the daughter is actually perceiving the messages to be to determine if there is a disconnect in these messages.

In general, the current study found that body-related communication and mother's concerns about her body does affect the body image status of their daughters in a variety of ways. Moreover, it was found that the more positive messages that are being exchanged by the mother to the daughter result in more overall positive body image status in the daughters. The results suggest that the communication between mothers and daughters can significantly affect the way they feel about their bodies. Interestingly, when there are discrepancies in what the mothers report they are saying and what the daughter hears, it can significantly predict the daughters body satisfaction status.

Associations of Mother and Daughter Beliefs

This study did not find strong relationships between mothers' beliefs about her own body and the way the daughter feels about her own body. This study actually found significant differences in body image between mothers and daughters, whereas the daughters generally had more positive body image and body esteem than their mothers when referring to weight satisfaction. When examining the discrepancies between current and ideal bodies, mothers had larger discrepancies than their daughters; however, these discrepancies were not statistically significant suggesting that participants in this sample were mostly satisfied with their bodies. Further, the current study found that mothers and daughters weight concerns were not highly correlated and that the mothers were more concerned about losing weight than their daughters. These findings indicate it is possible that these mothers are being more careful about the messages they say to their daughters, which is believed to be a positive finding. This is inconsistent with previous research. For example, findings of Pike and Rodin (1991) found that daughters who had disordered eating and negative body image had mothers who also experienced negative body satisfaction. This discrepancy in findings may be due to the

increased body positivity movement that has been seen in the recent years and should be seen as a positive finding. This finding also suggests that maternal messages may not be as significant as a predictor as other variables such as the media and peer pressures. Further, it may be a function of the sample. Unlike the Pike and Rodin study, the participants in this study were not limited to daughters with disordered eating or negative body image.

Discrepancies between Daughters and Mothers Messages and Beliefs

When examining the reported messages regarding appearance that were said by mothers to daughters, it was found that there were differences and that they had low correlations when compared to one another. These findings are consistent with a previous study that examined parent reports versus child reports when examining child's attitudes and behaviors in regard to body image. Baker, Whisman and Brownell (2000) found that parent and child reports were unrelated, leading them to believe that children's reports and parental reports need to be interpreted with caution due to the differences that were found between the two reports. This suggests that there may be a significant disconnect between mothers' messages and how daughters interpret those messages and further results indicate that these differences in reports and messages may be a predictor of body image status for their daughters.

Results from this study indicated that daughters reported having overall more positive body image than their mothers, as well as more positive body image in comparison to when their mothers were young. Another finding of this study, which is also consistent with existing research, was that the daughters in this study are thinking about body image or noticing their bodies earlier than their mothers did. Specifically, Clark and Tiggemann (2006) indicated that girls are becoming concerned with their bodies as early as 5-years-old, which is more consistent with the results of the current study when examining the daughters' ages in comparison to the

mothers'. This suggests that the need to address body satisfaction and the need to incorporate positive body image discussion is earlier than when future generations would benefit from such interventions.

Predictors of Daughter Weight and Body Mass Index

Weight concerns of mothers was a significant predictor of daughters' weight concerns. This is consistent with previous research (Smolak, Levine & Schermer, 1999) who found that direct comments by parents about their children's weight and modeling of weight concerns had a significant impact on child body esteem, weight related concerns and weight loss attempts. A similar study was conducted on college females (Gross & Nelson, 2000). This college study found there was greater dissatisfaction with current weight when they perceived their mothers to have communicated negative verbal messages about eating and weight. Although the current study only examined positive messages, it is consistent in that the messages being perceived have a significant effect on the daughters' body image status.

The findings of the current study are also consistent with a more recent study. Rodgers, Wetheim, Damiano and Paxton (2020) examined the maternal influences on body image and eating concerns. Although they did find that daughters' weight concerns could be predicted by mothers' weight concerns, they also found that mothers' weight concerns did not predict daughters' eating behaviors. The finding of the current study also suggests that the more that mothers discuss their weight concerns with their daughters, the more likely their daughters are to have parallel weight concerns.

Similarly, it was found that mothers' self-reported BMI was a direct predictor of daughters' self-reported BMI. This is consistent with previous literature, where mothers' BMI was found to be a modest predictor of daughters' BMI (Birch & Fisher, 2000). Further, the self-

reports of the mothers' positive verbal commentary about appearance also emerged as a significant predictor of the daughters' BMI. In contrast, the daughters' reports of the mothers' positive verbal commentary about appearance were not found to be a significant predictor of daughters' BMI. Thus, there are differences in the way the daughter perceives the positive comments and the way the mother reports her positive commentary. Interestingly, though, in the current study, the effects of mother weight concerns only accounted for a small percentage of the daughter body image satisfaction. This may be due to the sample or to other factors contributing a higher effect on body image such as the media or peer influences.

Implications

Overall, the findings of this study indicate that having mothers be a part of body dissatisfaction prevention and more importantly, eating disorder prevention, would be beneficial and imperative. It was found that mother's communication around bodies is a significant predictor of body image, and further, that the discrepancies with daughters may be problematic. This indicates that prevention efforts focusing on effective communication, such as active listening skills and clear ways to advocate messages to one another may be beneficial in removing the mother-daughter factors to body dissatisfaction and eating disorders. Further, findings suggest that even though positive verbal commentary may be a predictor of daughters BMI, a stronger predictor is the mother's BMI, which may or may not be a topic of discussion for the dyad. This indicates another important factor to consider when examining the mother-daughter communication within prevention efforts, since mothers may or may not be contributing to their daughters' beliefs by the amount of conversation spent around the mothers' BMI or weight problems.

Finally, findings from the current study indicated that there were higher messages of positive commentary across dyads, as well as more participants who were satisfied with their bodies. It is important to note that the higher body satisfaction scores may be related to the mother's positive verbal messages, indicating it is imperative to continue to incorporate positive body image messages within the prevention efforts of eating disorders. In addition to the findings of higher body satisfaction status across participants, findings indicated that the participants were thinking about their bodies earlier than their mothers. These findings also suggest that the need to address body satisfaction and the need to incorporate positive body image discussion within mother and daughter communication is earlier than when future generations would benefit from such prevention efforts.

Study Limitations and Future Directions

The current study has several limitations. The sample size is smaller than initially proposed due to constraints placed by the Institutional Review Board (IRB) to require a verbal de-briefing to ensure participation did not result in negative effects on the daughters. Also, negatively framed questions were reframed to neutral or positive or eliminated; as such, effects of negative verbal messages could not be examined. Instead, the oft ignored effect of positive messages was explored. Further, the resulting sample of 50 dyads is limited in terms of demographic factors, including educational level, geographical region, socio-economic status, and racial/ethnic groups. This limitation of the educational level and socio-economic status, in particular, does not allow for generalization to the general population. Although effects of parenting style were a consideration, 49 out of the 50 mothers reported as having an authoritative parenting style. Efforts in future research should include a larger sample and diverse populations

across demographic variables to facilitate generalization and, hopefully, a range of parenting styles.

A final consideration in the sample, which was intentional, is that the daughters were not representative of girls currently experiencing negative body image or body dissatisfaction. Taken together with prior research, the results suggest the need to include positive, neutral, and negative item options when surveying mothers and daughters. Given the potential to predict future issues with a non-clinical sample in this study, it may be appropriate to consider both clinical and non-clinical samples, as well as other potential contributing factors to identify what differentiates the trajectory to negative outcomes and when intervention would be most effective.

Reliance on self-report measures of mothers and daughters, including BMI, may have affected the results. In general, the use of self-reported measures may be viewed with skepticism and tendencies to respond consistent with social acceptability. Although initially approved for interviews/debriefing to be done in person, with COVID-19 safety protocols, these were done via Zoom, precluding obtainment of any measurements and BMI data were based on self-reported height and weight. Further, although efforts were made to ensure the privacy for both the mothers' and daughters' interviews, either interviewee may have been concerned that the other interviewee could hear them or might ask them about the interview later, leading to potential response bias.

Future directions may want to explore areas that were not examined in the current study. The current study did not examine the eating behaviors of daughters in addition to body satisfaction status and this may yield additional significant predictors of body image. Another area of future research that should be examined is the amount of attention on BMI within the

dyad. For example, it would be helpful in the current research to know if mothers and daughters discuss the mother's BMI, or are the daughters simply observing their mothers in larger bodies.

Conclusion

The results of this study provide preliminary groundwork for continuing to research unexamined areas of the effects of the perception of body image related messages and the disconnect between mothers and daughters' communication regarding body image. This is important to examine due to the large amount of research that suggests that maternal modeling and messages regarding bodies is a large predictor of body image satisfaction status, as well as simply examining the amount of time daughters spend with their mothers throughout childhood. The effects and consideration of BMI and how this is communicated has not been explored, yet mothers' BMI was predictive of daughters BMI, as well as the mothers' reports positive verbal commentary. Better understanding the effects of BMI on relationships between mothers and daughters would be beneficial, as well as understanding the differences between mother and daughter communication as they report it. This study provided additional findings that when comparing mother and daughter messages, the messages have low correlations across dyads, suggesting that the commentary is not being received the same way it is being delivered. This study adds valuable information about the communication between mothers and daughters and the effects it has on body image satisfaction status. As this area of research continues to grow, it is important for researchers and practitioners alike to gain a clear and fuller understanding of the dynamics of mother-daughter relationships in respect to body image.

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APPENDIX A

INTERVIEW CONSENT FORM

Title of Research Study: How Mother's Attitudes and Communication Affect Body Image Satisfaction Status of Daughters

Investigator: Shannon L. Clark (szelikoff@tamu.edu) and Dr. Cynthia Riccio (criccio@tamu.edu)

Funded/Supported By: This research is funded/supported by Texas A&M University.

Why are you being invited to take part in a research study?

You are invited to participate in this study because we are trying to learn more about the messages that daughters are receiving from their mothers that impact the outcome of their body satisfaction status. You have a daughter between the ages of 9 and 15.

What should you know about a research study?

Someone will explain this research study to you.

Whether or not you take part is up to you.

You can choose not to take part.

You can agree to take part and later change your mind.

Your decision will not be held against you.

You can ask all the questions you want before you decide.

Who can I talk to?

If you have questions, concerns, or complaints, or think the research has hurt you, talk to the research team at szelikoff@tamu.edu or 832-928-7401.

This research has been reviewed and approved by the Texas A&M Institutional Review Board (IRB). You may talk to them at 1-979-458-4067, toll free at 1-855-795-8636, or by email at irb@tamu.edu., if

- You cannot reach the research team.
- Your questions, concerns, or complaints are not being answered by the research team.
- You want to talk to someone besides the research team.
- You have questions about your rights as a research participant.
- You want to get information or provide input about this research.

Why is this research being done?

The interview is designed to look at mother and daughter communication related to body satisfaction or how one feels about their body. Further, we hope to learn how past relationships affect current relationships and the ways mothers and daughters think about their body, dieting, relationship to food, and exercise.

How long will the research last?

We expect that you will be in this research study for about 30 minutes.

How many people will be studied?

We expect to enroll about 10-15 dyads (mothers and daughters) in this research study for the interview portion of this study.

What happens if I say "Yes, I want to be in this research"?

You and your daughter will participate in an interview with the graduate student. The interview will consist of 18 questions.

The interview should not take longer than 30 minutes but may vary across participants.

The graduate student conducting this research will be interviewing both the mother and daughter.

The research will take place at a local library (study room) or online via video conferencing. The interview will be scheduled with the parent to make two separate appointments; one appointment will be just the mother's interview and the second appointment will be to interview the daughter.

The interview will be audio recorded with your consent.

No identifying information from the interview participants will be kept on file after the interview has been scheduled. The participant will contact the graduate student if interested in the study, and the graduate student will not keep contact information after the interview is complete.

What happens if I do not want to be in this research?

You can leave the research at any time and it will not be held against you.

What happens if I say "Yes", but I change my mind later?

You can leave the research at any time and it will not be held against you.

If you decide to leave the research, contact the investigator so that the investigator can ensure that your information is deleted and taken out of the study. You can contact the graduate student at szelikoff@tamu.edu.

Is there any way being in this study could harm me?

There is a risk of discomfort, as some of the questions may be perceived as sensitive. You can skip any question you do not wish to answer or exit the survey at any point.

What happens to the information collected for the research?

All information will be kept on a password protected computer and is only accessible by the research team. The results of the research study may be published, in aggregate form, but no one will be able to identify you.

Can I be removed from the research without giving my OK?

The person in charge of the research study or the sponsor can remove you from the research study without your approval. Possible reasons for removal include not meeting the inclusion criteria which includes having a daughter between the ages of 9 and 15, not in need of immediate medical care (e.g., needing residential or partial hospitalization care, experiencing a major depressive disorder episode, and so on), if either participant is pregnant or has been given birth within the past 6, and that the daughter be currently living with or seeing the mother on a regular basis and that the mother is one of the primary caregivers

If you agree to take part in this research study, we will award both you and your daughter with a $10.00 Amazon gift card for your time and effort.

Optional Elements:

The following research activities are optional, meaning that you do not have to agree to them in order to participate in the research study. Please indicate your willingness to participate in these optional activities by placing your initials next to each activity.

I agree	I disagree	
_____	_____	The researcher may audio record me to aid with data analysis. The researcher will not share these recordings with anyone outside of the immediate study team or TAMU Compliance.

Signature Block for Capable Adult

Your signature documents your permission to take part in this research.

Signature of subject	Date
Printed name of subject	
Signature of person obtaining consent	Date
Printed name of person obtaining consent	

My signature below documents that the information in the consent document and any other written and information was accurately explained to, and apparently understood by, the participant, and that consent was freely given by the participant.

Signature of witness to consent process	Date
Printed name of person witnessing consent process	

Signature Block for Parent Permission to Enroll Child

Your signature documents your permission for the named child to take part in this research.

_____
Printed name of child

_____ _____
Printed name of parent [ ] or individual legally authorized [ ] to consent for the child to participate — Date

_____ _____
Signature of parent [ ] or individual legally authorized [ ] to consent for the child to participate — Date

Assent:

[ ] Obtained signature on separate assent document
[ ] Obtained verbally without a signature
[ ] Not obtained because the child is not capable of providing assent

_____ _____
Signature of person obtaining consent — Date

_____
Printed name of person obtaining consent

APPENDIX B

INTERVIEW ASSENT SCRIPT FOR DAUGHTER

My name is Shannon. I am trying to learn new things and test new ideas. I am asking you to join a research study. A research study is a science project that is trying to answer a question.

This research study is trying to learn about mother and daughter communication about how we feel about our bodies. To do this, I will ask you to answer some questions the best you can. I have a list of 18 questions I will ask you. **I will audio record your answers because I cannot write as fast as you can talk.**

You do not have to be in this research study. It is totally up to you. If you say yes now you can still change your mind later. No one will be upset if you change your mind. You can say you are done answering questions at any time.

I want you to ask any questions that you have. You can ask questions at any time. You can talk to your parents or you can ask me questions.

Do you understand what I am saying? Do you want to be in this research study?

End of verbal script.

To be completed by person obtaining verbal assent from the participant:

Child's/Participant's response**:** ☐Yes ☐No

Check which applies below:

☐The child/participant is capable of understanding the study

☐The child/participant is not capable of understanding the study

_____

Child's/Participant's Name (printed)

_____ _____

Name (printed) and Signature of Person Obtaining Assent Date

APPENDIX C

MOTHER SURVEY

Start of Block: Mother Consent and Permission

Q1 **Title of Research Study:** How Mother's Attitudes and Communication Affect Body Image Satisfaction Status of Daughters **Investigators:** Shannon L. Clark (szelikoff@tamu.edu) and Dr. Cynthia Riccio (criccio@tamu.edu)

Why am I being asked to take part in this research study? You are invited to participate in this study because we are trying to learn more about the messages that daughters are receiving from their mothers that impact the outcome of their body satisfaction status. You have a daughter between the ages of 12 and 17.

Why is this research being done? The survey is to look at mother and daughter communication related to body satisfaction or how you feel about your body.

How long will the research last? It will take about 20 minutes to complete the survey.

What happens if I say "Yes, I want to be in this research"? If you decide to participate, please do the following: Complete the following survey and ask your daughter, between the ages of 12 and 17, to complete the daughter survey using the link provided at the end of your survey.

What happens if I do not want to be in this research? Your participation in this study is voluntary. You can decide not to participate in this research. It will not be held against you. You can leave the study at any time.

Is there any way being in this study could harm me? Some of the questions may be hard to answer. You can skip any question you do not wish to answer, or exit the survey at any point.

What happens to the information collected for the research? You may view the survey host's confidentiality policy at: www.qualtrics.com/privacy-statement. The

collected information is kept private. There is no connection between your name and your responses.
Anonymity controls will be selected. There is an option to participate in an interview, however, there will be no connection between your names, survey or your daughter's and the interview. All information will be kept on a password protected computer and is only accessible by the research team, OHRP and IRB. The results of the research study may be published, in aggregate form, but no one will be able to identify you.
Who can I talk to? Please feel free to ask questions regarding this study. You may contact me later if you have additional questions or concerns at szelikoff@tamu.edu or 832-928-7401.

You may also contact the Human Research Protection Program at Texas A&M University (which is a group of people who review the research to protect your rights) by phone at 1-979-458-4067, toll free at 1-855-795-8636, or by email at irb@tamu.edu for:

- additional help with any questions about the research
- voicing concerns or complaints about the research
- obtaining answers to questions about your rights as a research participant
- concerns in the event the research staff could not be reached
- the desire to talk to someone other than the research staff

If you want a copy of this consent for your records, you can print it from the screen.
If you wish to participate, please click the “I Agree” button and you will be taken to the survey.

If you do not wish to participate in this study, please select “I Disagree” or select X in the corner of your browser.

- ○ I Agree (1)
- ○ I Disagree (2)

End of Block: Mother Consent and Permission

Start of Block: Section 1

Q39 Assigned number

_____

Q15 Age (years)

_____

Q16 Marital Status

- ○ Married (1)
- ○ Widowed (2)
- ○ Divorced (3)
- ○ Separated (4)
- ○ Never married (5)

Q17 Race/Ethnicity (select all that apply)

- [ ] White non-Hispanic (1)
- [ ] Hispanic (7)
- [ ] Black or African American (2)
- [ ] American Indian or Alaska Native (3)
- [ ] Asian or Asian American (4)
- [ ] Native Hawaiian or Pacific Islander (8)
- [ ] Other (6)

Q18 Biological Sex

- ○ Female (1)
- ○ Male (2)

Q20 Highest Education Level

- ○ Less than high school (1)
- ○ High school graduate (2)
- ○ Some college (3)
- ○ 2 year degree (4)
- ○ 4 year degree (5)
- ○ Professional degree (i.e. Masters or similar) (6)
- ○ Doctorate (7)

Q21 Employment Status

- ○ Employed full time (1)
- ○ Employed part time (2)
- ○ Unemployed looking for work (3)
- ○ Unemployed not looking for work (4)
- ○ Retired (5)
- ○ Student (6)

Q22 How many children are in the home?

Q23 What is the primary language in the home?

_____

Q25 What is your height?

_____

Q26 What is your weight?

_____

Q24 Age of the daughter you will include in the study?

_____

Q33 Height of the daughter you will include in the study?

_____

Q35 Weight of the daughter you will include in the study?

_____

End of Block: Section 1

Start of Block: Section 2

Q1 Please answer the following questions.

	Never (1)	Seldom (2)	Sometimes (3)	Often (4)	Always (5)
I like what I look like in pictures. (1)	○	○	○	○	○
Other people consider me good looking. (2)	○	○	○	○	○
I'm proud of my body. (3)	○	○	○	○	○
I do not think about trying to change my body weight. (4)	○	○	○	○	○
I am pleased with my life. (5)	○	○	○	○	○
I think my appearance would help me get a job. (6)	○	○	○	○	○
I like what I see when I look in the mirror. (7)	○	○	○	○	○
There are lots of things I'd change about my looks if I could. (8)	○	○	○	○	○
I am satisfied with my weight. (9)	○	○	○	○	○

I wish I looked better. (10)	○	○	○	○	○
I enjoy going to the movies. (11)	○	○	○	○	○
I really like what I weigh. (12)	○	○	○	○	○
I wish I looked like someone else. (13)	○	○	○	○	○
Pets are good company. (14)	○	○	○	○	○
Being a model would be exciting. (15)	○	○	○	○	○
People my own age like my looks. (16)	○	○	○	○	○
My looks upset me. (17)	○	○	○	○	○
I'm as nice looking as most people. (18)	○	○	○	○	○
I'm pretty happy about the way I look. (19)	○	○	○	○	○

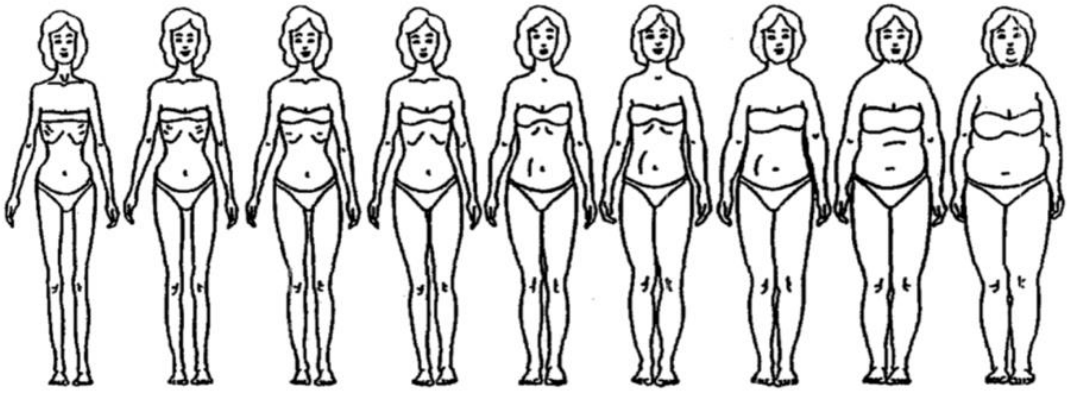
I exercise regularly. (20)	○	○	○	○	○
I feel I weigh the right amount for my height. (21)	○	○	○	○	○
I do not like how I look. (22)	○	○	○	○	○
I love to read. (26)	○	○	○	○	○
I am in good health. (27)	○	○	○	○	○
I worry about the way I look. (28)	○	○	○	○	○
I think I have a good body. (29)	○	○	○	○	○
I'm looking as nice as I'd like to. (30)	○	○	○	○	○
Music is soothing to me. (31)	○	○	○	○	○

End of Block: Section 2

Start of Block: Section 3

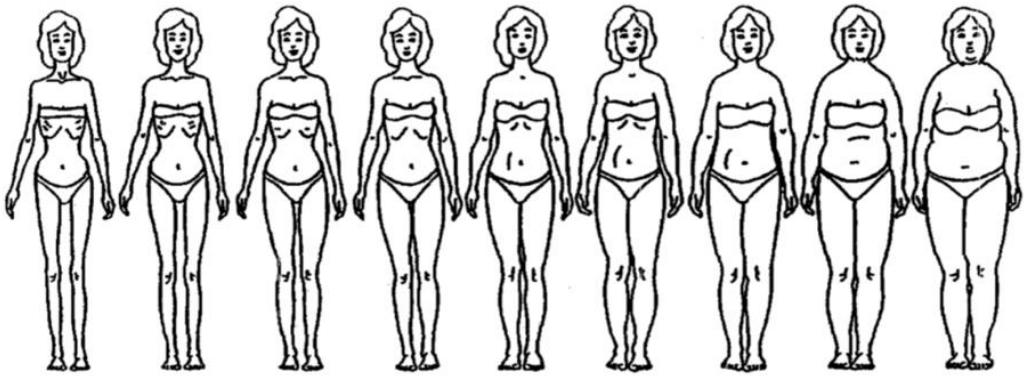
Q2 Which body looks most like you?

	Off (1)	On (2)
Click to write Region 1 (1)		
Click to write Region 2 (2)		
Region #1 (3)		
Region #1 (4)		
Region #1 (5)		
Region #1 (6)		
Region #1 (7)		
Region #1 (8)		
Region #1 (9)		
Region #1 (10)		
Region #1 (11)		



Q3 Which body shows the way you would like to look?

	Dislike (1)	Neutral (2)	Like (3)
Region #1 (1)			
Region #1 (2)			
Region #1 (3)			
Region #1 (4)			
Region #1 (5)			
Region #1 (6)			
Region #1 (7)			
Region #1 (8)			
Region #1 (9)			



End of Block: Section 3

Start of Block: Section 4

Q4 Rate these items on how often you have said the following comments to your ***daughter*** within the past ***2 YEARS*****.**

	Never (1)	Seldom (2)	Sometimes (3)	Often (4)	Always (5)
Your outfit looks great on you. (1)	○	○	○	○	○
You are pretty. (3)	○	○	○	○	○
I wish I had a body like yours. (4)	○	○	○	○	○
You are in great shape. (6)	○	○	○	○	○
You're looking kind of skinny. (8)	○	○	○	○	○
Your facial skin looks good. (9)	○	○	○	○	○
You shouldn't eat so late at night. (10)	○	○	○	○	○
You have pretty eyes. (11)	○	○	○	○	○
Yoga is good to help relieve stress. (12)	○	○	○	○	○
Exercise is good for you. (13)	○	○	○	○	○
You have nice abs (abdominals). (14)	○	○	○	○	○

You have a beautiful smile. (16)	○	○	○	○	○
Your outfit makes you look good. (17)	○	○	○	○	○
I really like how those jeans fit you. (18)	○	○	○	○	○
Your hair looks really good. (21)	○	○	○	○	○
You have a nice body. (22)	○	○	○	○	○

End of Block: Section 4

Start of Block: Section 5

Q5 Please rate your level of concern for the following questions.

	Unconcerned (1)	A Little Concerned (2)	Very Concerned (6)
How concerned are you about your daughter eating too much when you are not around? (1)	○	○	○
How concerned are you about your daughter having to diet to maintain a desirable weight? (2)	○	○	○
How concerned are you about your daughter becoming over weight? (3)	○	○	○

End of Block: Section 5

Start of Block: Section 6

Q6 Please answer the following questions.

	Disagree (1)	Slightly Disagree (2)	Neutral (3)	Slightly Agree (4)	Agree (5)
I have to be sure that my daughter does not eat too many sweets (candy, ice cream, cake or pastries). (1)	○	○	○	○	○
I have to be sure that my daughter does not eat too many high fat foods (2)	○	○	○	○	○
I encourage my daughter to get out and have fun. (3)	○	○	○	○	○
I have to be sure that my daughter does not eat too much of her favorite foods. (4)	○	○	○	○	○
I intentionally keep some foods out of my daughter's reach. (5)	○	○	○	○	○

I offer sweets (candy, ice cream, cake, pastries) to my daughter as a reward for good behavior. (6)	○	○	○	○	○
I offer my daughter her favorite foods in exchange for good behavior. (7)	○	○	○	○	○
If I did not guide or regulate my daughter's eating, she would eat too many junk foods. (8)	○	○	○	○	○
If I did not guide or regulate my daughter's eating, she would eat too much of her favorite foods. (9)	○	○	○	○	○
My daughter should always eat all of the food on her plate. (10)	○	○	○	○	○

I have to be especially careful to make sure my daughter eats enough. (11)	○	○	○	○	○
If my daughter says I am not hungry, I try to get her to eat anyway. (12)	○	○	○	○	○
If I did not guide or regulate my daughter's eating, she would eat much less than she should. (13)	○	○	○	○	○

End of Block: Section 6

Start of Block: Section 7

Q7 **How much <u>more or less</u> do you feel you worry about your weight and body shape than other women your age?**

- ○ I worry a lot less than other women. (1)
- ○ I worry a little less than other women. (2)
- ○ I worry about the same as other women. (3)
- ○ I worry a little more than other women. (4)
- ○ I worry a lot more than other women. (5)

Q8 **How afraid are you of gaining 3 pounds?**

- ○ Not afraid of gaining. (1)
- ○ Slightly afraid of gaining. (2)
- ○ Moderately afraid of gaining. (3)
- ○ Very afraid of gaining. (4)
- ○ Terrified of gaining. (5)

Q30 How afraid are you of losing 3 pounds?

- Not afraid of losing. (1)
- Slightly afraid of losing. (2)
- Moderately afraid of losing. (3)
- Very afraid of losing. (4)
- Terrified of losing. (5)

Q9 **About diets?**

- I've never been on a diet. (1)
- I was on a diet about one year ago. (2)
- I was on a diet about about 6 months ago. (3)
- I was on a diet about 3 months ago. (4)
- I was on a diet about 1 month ago. (5)
- I was on a diet less than 1 month ago. (6)
- I'm now on a diet. (7)

Q10 **Compared to other things in your life, how important is your weight to you?**

- ○ My weight is not important compared to other things in my life. (1)
- ○ My weight is a little more important than some other things. (2)
- ○ My weight is more important than most, but not all, things in my life. (3)
- ○ My weight is the most important thing in my life. (4)

End of Block: Section 7

Start of Block: Section 8

Q38
Please rate how often you engage in the different parenting practices with your daughter participating in the study.

	Never (1)	Seldom (2)	Sometimes (3)	Often (4)	Always (5)
I am responsive to my child's feelings and needs. (1)	○	○	○	○	○
I take my child's wishes into consideration before I ask her to do something. (2)	○	○	○	○	○
I explain to my child how I feel about her good/bad behavior. (3)	○	○	○	○	○
I encourage my child to talk about her feelings and problems. (4)	○	○	○	○	○
I encourage my child to freely "speak her mind", even if she disagrees with me. (5)	○	○	○	○	○
I explain the reasons behind my expectations. (6)	○	○	○	○	○

I provide comfort and understanding when my child is upset. (7)	○	○	○	○	○
I compliment my child. (8)	○	○	○	○	○
I consider my child's preferences when I make plans for the family (e.g., weekends away and holidays). (9)	○	○	○	○	○
I respect my child's opinion and encourage her to express them. (10)	○	○	○	○	○
I treat my child as an equal member of the family. (11)	○	○	○	○	○
I provide my child reasons for the expectations I have for her. (12)	○	○	○	○	○
I have warm and intimate times together with my child. (13)	○	○	○	○	○

When my child asks me why she has to do something I tell her it is because I said so, I am your parent, or because that is what I want. (14)	○	○	○	○	○
I punish my child by taking privileges away from her (e.g., TV, games, visiting friends). (15)	○	○	○	○	○
I yell when I disapprove of my child's behavior. (16)	○	○	○	○	○
I explode in anger towards my child. (17)	○	○	○	○	○
I spank my child when I don't like what she does or says. (18)	○	○	○	○	○
I use criticism to make my child improve her behavior. (19)	○	○	○	○	○

I use threats as a form of punishment with little or no justification. (20)	○	○	○	○	○
I punish my child by withholding emotional expressions (e.g., kisses and cuddles). (21)	○	○	○	○	○
I openly criticize my child when her behavior does not meet my expectations. (22)	○	○	○	○	○
I find myself struggling to try to change how my child thinks or feels about things. (23)	○	○	○	○	○
I feel the need to point out my child's past behavioral problems to make sure she will not do them again. (24)	○	○	○	○	○

I remind my child that I am her parent. (25)	○	○	○	○	○
I remind my child of all the things I am doing and I have done for her. (26)	○	○	○	○	○
I find it difficult to discipline my child. (27)	○	○	○	○	○
I give into my child when she causes a commotion about something. (28)	○	○	○	○	○
I spoil my child. (29)	○	○	○	○	○
I ignore my child's bad behavior. (30)	○	○	○	○	○

End of Block: Section 8

Start of Block: NEDA Information

Q31 If you are concerned about yourself or a loved one and need support for an eating disorder, you can contact the National Eating Disorder Association Hotline by calling (800) 931-2237.

This helpline offers support Monday–Thursday from 9 a.m.–9 p.m. EST, and Friday from 9 a.m.–5 p.m. EST. You can expect to receive support, information, referrals, and

guidance about treatment options for either you or your loved one. You can also contact this helpline through its online chat function, available on its website. Additionally, there is an option to send a text message if you are in crisis by texting NEDA to 741741; a trained volunteer from the Crisis Text Line will get in touch with you.

Thank you for your time, and remember to click the arrow button at the bottom of this page to submit your completed survey!

End of Block: NEDA Information

APPENDIX D

DAUGHTER SURVEY

Start of Block: Daughter Assent

Title of Research Study: How Mother's Attitudes and Communication Affect Body Image Satisfaction Status of Daughters
Investigators: Shannon L. Clark (email: szelikoff@tamu.edu) and Dr. Cynthia Riccio (email: criccio@tamu.edu)
Why am I being asked to take part in this research study? You are between the ages of 12 and 17.

Why is this research being done? The survey is to look at mother and daughter communication related to how you feel about your body.

How long will the research last? It will take about 15 minutes to complete the survey.

What happens if I say "Yes, I want to be in this research"? If you choose to participate, please do the following: Complete the following survey on your own.

What happens if I do not want to be in this research? You can decide not to participate in this research. It will not be held against you. You can leave the study at any time. You will not get in any trouble.

Is there any way being in this study could harm me? Some of the questions may be hard to answer. You can skip any question you do not wish to answer. You can exit the survey at any time.

What happens to the information collected for the research? It is collected and kept private. There is no connection between your name and your responses.

There will be no connection between your name, the survey and the interview. All information will be kept on a password protected computer and is only accessible by the research team. The results of the research study may be published, but no one will be able to know it is connected to you.

Who can I talk to? Please feel free to ask questions regarding this study. You may contact me later if you have additional questions or concerns at szelikoff@tamu.edu or 832-928-7401.

You may also contact the Human Research Protection Program at Texas A&M University (which is a group of people who review the research to protect your rights) by phone at 1-979-458-4067, toll free at 1-855-795-8636, or by email at irb@tamu.edu for:

- additional help with any questions about the research
- voicing concerns or complaints about the research
- obtaining answers to questions about your rights as a research participant
- concerns in the event the research staff could not be reached
- the desire to talk to someone other than the research staff

If you want a copy of this assent to keep, you can print it from the screen.

If you wish to participate, please click the “I Agree” button and you will be taken to the survey.

If you do not wish to participate in this study, please select “I Disagree” or select X in the corner of your browser

○ I Agree

○ I Disagree

Skip To: End of Survey If Title of Research Study: How Mother’s Attitudes and Communication Affect Body Image Satisfaction... = I Disagree

End of Block: Daughter Assent

Start of Block: Section 1

Assigned number

_____

Age (years)

_____

Race/Ethnicity (select all that apply)

- ☐ White non-Hispanic
- ☐ Hispanic
- ☐ Black or African American
- ☐ American Indian or Alaska Native
- ☐ Asian or Asian American
- ☐ Native Hawaiian or Pacific Islander
- ☐ Other

Biological Sex

- ○ Female
- ○ Male

What grade are you in?

_____

How many brothers and sisters do you have?

_____

What languages are spoken in your home?

_____

What is your height?

_____

What is your weight?

_____

End of Block: Section 1

Start of Block: Section 2

Please answer the following questions.

	Never	Seldom	Sometimes	Often	Always
I like what I look like in pictures.	○	○	○	○	○
Other people consider me good looking.	○	○	○	○	○
I'm proud of my body.	○	○	○	○	○
I do not think about trying to change my body weight.	○	○	○	○	○
I am pleased with my life.	○	○	○	○	○
I think my appearance would help me get a job.	○	○	○	○	○
I like what I see when I look in the mirror.	○	○	○	○	○
There are lots of things I'd change about my looks if I could.	○	○	○	○	○
I am satisfied with my weight.	○	○	○	○	○

I wish I looked better.	○	○	○	○	○
I enjoy going to the movies.	○	○	○	○	○
I really like what I weigh.	○	○	○	○	○
I wish I looked like someone else.	○	○	○	○	○
Pets are good company.	○	○	○	○	○
Being a model would be exciting.	○	○	○	○	○
People my own age like my looks.	○	○	○	○	○
My looks upset me.	○	○	○	○	○
I'm as nice looking as most people.	○	○	○	○	○
I'm pretty happy about the way I look.	○	○	○	○	○
I exercise regularly.	○	○	○	○	○

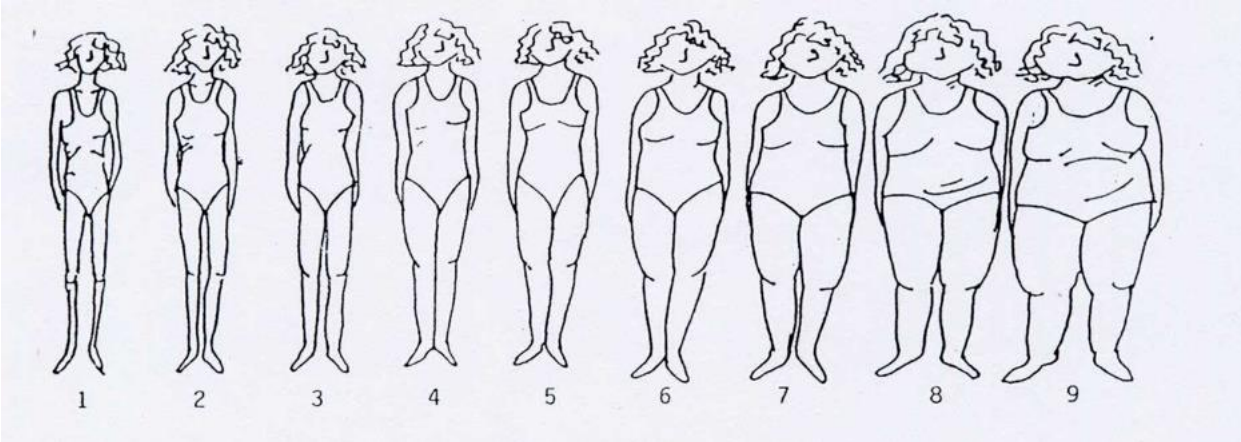
I feel I weigh the right amount for my height.	○	○	○	○	○
I do not like how I look.	○	○	○	○	○
I love to read.	○	○	○	○	○
I am in good health.	○	○	○	○	○
I worry about the way I look.	○	○	○	○	○
I think I have a good body.	○	○	○	○	○
I'm looking as nice as I'd like to.	○	○	○	○	○
Music is soothing to me.	○	○	○	○	○

End of Block: Section 2

Start of Block: Section 3

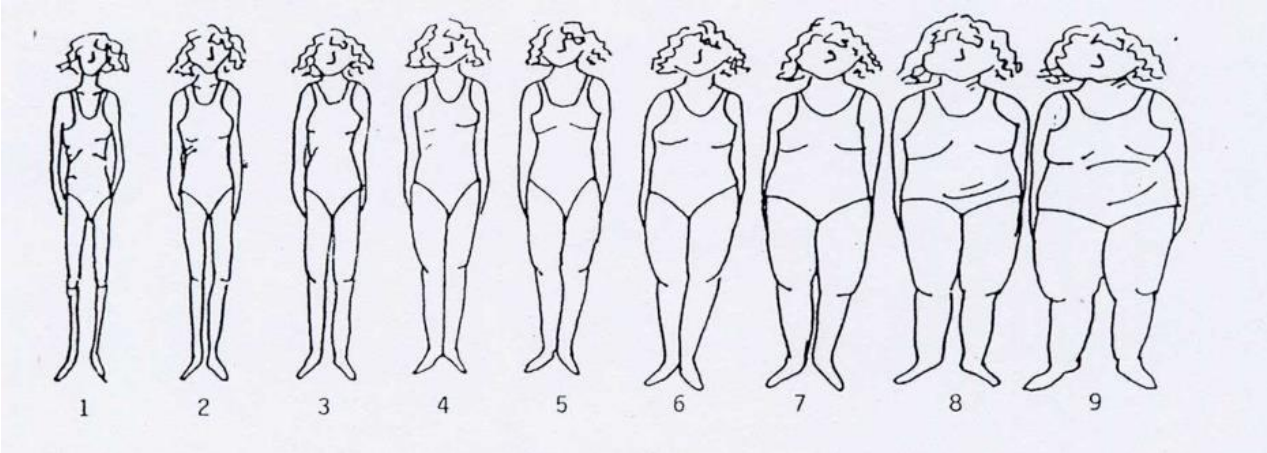
Which body looks most like you?

	Off	On
Click to write Region 1		
Click to write Region 2		
Region #1		
Region #1		
Region #1		
Region #1		
Region #1		
Region #1		
Region #1		
Region #1		
Region #1		



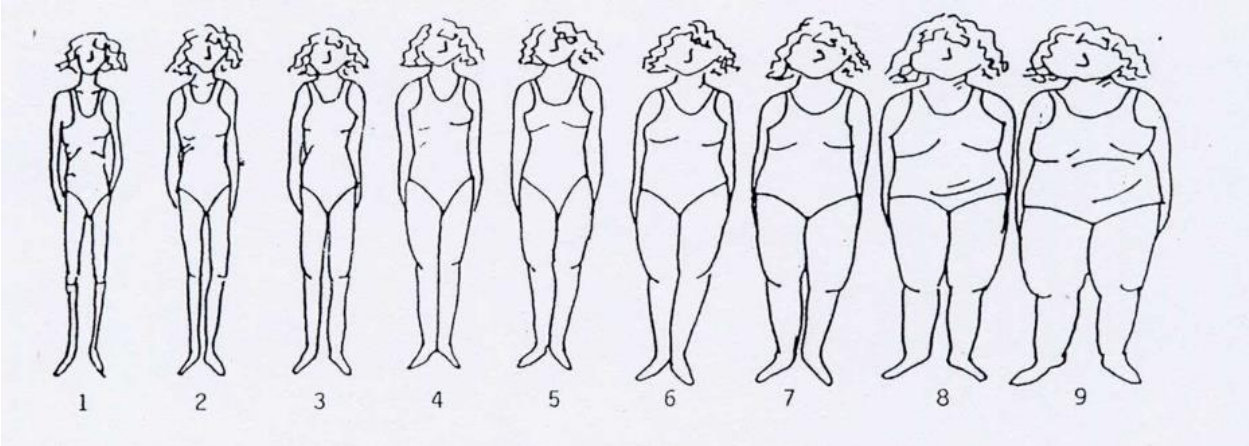
Which body shows the way that you would like to look?

	Off	On
Click to write Region 1		
Click to write Region 2		
Region #1		
Region #1		
Region #1		
Region #1		
Region #1		
Region #1		
Region #1		
Region #1		
Region #1		



Which body shows the way that your MOTHER would like you to look?

	Off	On
Click to write Region 1		
Click to write Region 2		
Region #1		
Region #1		
Region #1		
Region #1		
Region #1		
Region #1		
Region #1		
Region #1		
Region #1		



End of Block: Section 3

Start of Block: Section 4

Rate these items on how often you have heard the following comments from your ***mother*** within the past ***2 YEARS*****.**

	Never	Seldom	Sometimes	Often	Always
Your outfit looks great on you.	○	○	○	○	○
You are pretty.	○	○	○	○	○
I wish I had a body like yours.	○	○	○	○	○
You are in great shape.	○	○	○	○	○
You're looking kind of skinny.	○	○	○	○	○
Your facial skin looks good.	○	○	○	○	○
You have pretty eyes.	○	○	○	○	○
Yoga is good to help relieve stress.	○	○	○	○	○
Exercise is good for you.	○	○	○	○	○
You have nice abs (abdominals).	○	○	○	○	○
You have a beautiful smile.	○	○	○	○	○
Your outfit makes you look good.	○	○	○	○	○

I really like how those jeans fit you.	○	○	○	○	○
Your hair looks really good.	○	○	○	○	○
You have a nice body.	○	○	○	○	○

End of Block: Section 4

Start of Block: Section 5

Please rate the following on how often this happens.

	No	Sometimes	Yes
When you say, “I’m not hungry” at dinnertime, does your mom say, “You need to eat anyway”?	○	○	○
Does your mom make you eat all the food on your plate?	○	○	○
Does your mom say, “If you don’t eat all your food, you won’t get dessert?"	○	○	○
If there is something your mom wants you to eat, but you don’t eat it, does she ever make you sit at the table until you eat it?	○	○	○
Does your mom get upset when you play with your food?	○	○	○
Does your mom ever say things like, “I don’t think you’ve had enough to eat; you need to eat more”?	○	○	○
Does your mom let you have snacks?	○	○	○

If there is a food you don't like, does your mom ever say, "Eat it anyway, it's good for you"?	○	○	○
Does your mom buy candy for you when you ask for it?	○	○	○
If you're with your mom and you want something to eat, does she let you pick what you want to eat?	○	○	○
If you're with your mom and you want something to eat, does she let pick how much you eat?	○	○	○

End of Block: Section 5

Start of Block: Section 6

How much more or less do you feel you worry about your weight and body shape than other girls your age?

- ○ I worry a lot less than other girls.
- ○ I worry a little less than other girls.
- ○ I worry about the same as other girls.
- ○ I worry a little more than other girls.
- ○ I worry a lot more than other girls.

How afraid are you of gaining 3 pounds?

- ○ Not afraid of gaining.
- ○ Slightly afraid of gaining.
- ○ Moderately afraid of gaining.
- ○ Very afraid of gaining.
- ○ Terrified of gaining.

How afraid are you of losing 3 pounds?

- ○ Not afraid of losing.
- ○ Slightly afraid of losing.
- ○ Moderately afraid of losing.
- ○ Very afraid of losing.
- ○ Terrified of losing.

About diets?

- ○ I've never been on a diet.
- ○ I was on a diet about one year ago.
- ○ I was on a diet about about 6 months ago.
- ○ I was on a diet about 3 months ago.
- ○ I was on a diet about 1 month ago.
- ○ I was on a diet less than 1 month ago.
- ○ I'm now on a diet.

Compared to other things in your life, how important is your weight to you?

- ○ My weight is not important compared to other things in my life.
- ○ My weight is a little more important than some other things.
- ○ My weight is more important than most, but not all, things in my life.
- ○ My weight is the most important thing in my life.

End of Block: Section 6

Start of Block: Section 7

If you are concerned about yourself or a loved one and need support for an eating disorder, you can contact the **National Eating Disorder Association Hotline by calling (800) 931-2237.**

This helpline offers support Monday–Thursday from 9 a.m.–9 p.m. EST, and Friday from 9 a.m.–5 p.m. EST. You can expect to receive support, information, referrals, and guidance about treatment options for either you or your loved one. You can also contact this helpline through its online chat function, available on its website. Additionally, there is an option to send a text message if you are in crisis by **texting NEDA to 741741**; a trained volunteer from the Crisis Text Line will get in touch with you.

Please make sure to click the arrow button at the bottom of this page to submit your survey.

End of Block: Section 7

APPENDIX E

MOTHER INTERVIEW QUESTIONS

1. What do you like to do for fun?
2. What messages regarding your or other bodies did you receive growing up?
3. What was your relationship with your mother like growing up?
4. What was your relationship like with your body growing up?
5. What is your relationship with your body like now?
6. What was your relationship like with food growing up?
7. What was your relationship like with exercise/ physical activity growing up?
8. Who are your favorite actors? Singers?
9. Do you remember when you first had thoughts (good or bad) about your body?
10. How old were you when you first went on a diet? What diets have you tried? How often did you switch diets or try something new?
11. What types of 'New Year's resolutions' do you typically have for yourself?
12. What types of things did you hear your mother saying to you about appearance while growing up?
13. What types of comments did your mother make about food growing up?
14. Did you talk to your mother about appearance growing up? What about now?
15. How important do/did you think your mother's appearance is to her?
16. Does/did your mom diet? Can you remember the names of the diets?
17. What do you think your mother thought/thinks about your appearance?
18. Can you give an example of something that your mother had said about your appearance (positive or negative) growing up?

APPENDIX F

DAUGHTER INTERVIEW QUESTIONS

1. What do you like to do for fun?
2. What messages regarding your or other bodies do you receive from others?
3. What do you think about your body?
4. What is your relationship like with food?
5. What is your relationship like with exercise/ physical activity?
6. Who are your favorite actors? Singers?
7. What do you want to do when you grow up?
8. Around how old were you when you first had thoughts (good or bad) about your body?
9. About how old were you when you first thought about going on a diet?
10. Have you ever been on a diet? If yes, what diets have you tried and how often have you dieted?
11. What types of 'New Year's resolutions' do you typically have for yourself?
12. What types of things do you hear your mother saying to you about appearance?
13. What types of comments does your mother make about food?
14. Do you talk to your mother about appearance?
15. How important do you think your mother's appearance is to her?
16. Does your mom diet? Can you remember the names of the diets?
17. What do you think your mother thinks about your appearance?
18. Can you give an example of something that your mother has said about your appearance (positive or negative)?