Attachment Anxiety as a Moderator for the Relationship Between Maternal Influence and Body Image Dissatisfaction Among Women

by

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Abstract

Body image dissatisfaction (BID) is a significant concern for women in the United States. The current study (*N*=244) builds on previous BID research by exploring maternal appearance-focused influence in terms of modeling behaviors and commentary focused on the self and the child. Further, the role of attachment anxiety as a moderator in this relationship was explored. It was hypothesized that higher attachment anxiety, attachment avoidance, and maternal appearance-focused influence would all serve as unique predictors for greater BID. Further, it was hypothesized that attachment anxiety would significantly moderate the relationship between maternal appearance-focused influence and BID. Body image dissatisfaction was assessed using two outcomes: body surveillance and body shame. Two hierarchical linear regression analyses were used to analyze the data. In this sample, only the control variables of eating disorder history and body image ideals were significantly related to body surveillance. Predictors (except attachment avoidance) were significant in the analysis of body shame. Subsequent analysis of the moderation effect showed a significant positive relationship between maternal appearance-focused influence and body shame for individuals reporting low attachment anxiety. Results indicated a nonsignificant positive relationship for those reporting high attachment anxiety. The findings of this study could help advance research about body shame among young women. Results emphasize the importance of appearance-focused language and behaviors used around young women. Clinically, results could be used to support the incorporation of mothers and relational work into treatment planning for body image and eating concerns.

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CHAPTER I

Introduction

Background

Dissatisfaction with one's body image is an ongoing problem for women in the United States and frequently comes up throughout psychotherapy. Practitioners may be able to better understand one's struggle with negative body image if they look at how individuals develop their conceptualizations of body image, how messages they receive from others impact the development of their body image satisfaction, and what risk factors may exist for body image dissatisfaction (BID) and the negative associated consequences.

Research suggests that BID rates are continuing to increase in the United States (Sheldon, 2013). Meltzer and McNulty (2013) found that women's focus on their bodies—including evaluations of body size, attractiveness, sexuality, and desirability, among others—can lead to negative implications. Being unhappy with one's body image can lead to a variety of negative behaviors like unhealthy eating or exercising habits to rid the body of excess weight or to alter body shape. These compensatory behaviors, and others similar in nature, can result in the following significant consequences: chronic body dissatisfaction; concerns about shape, weight, and eating; obesity; body surveillance and comparison behaviors; weight cycling or significant weight gain or loss; and poor dieting habits such as food restriction, bingeing, and other forms of disordered eating (Jackson et al., 2000; Smolak et al., 1999). Many of these consequences are common presenting concerns for women seeking mental health treatment. In addition to physical concerns, individuals may present to treatment with the following psychological functioning concerns related to chronic BID: increased depression and anxiety, interpersonal relationship

concerns, reduced intimacy and satisfaction with a romantic partner, poor self-esteem, feelings of shame or embarrassment, and other mental health concerns throughout adulthood (Jackson et al., 2000; Meltzer & McNulty, 2013; Prabhu & D'Cunha, 2018). High BID is associated with increased risky behaviors among adolescents, including substance use, self-harm, and gambling (Bornioli et al., 2019). Body image concerns and dissatisfaction may present in a number of different ways, including engaging in appearance-related comparisons and checking behaviors, internalizing ideals that may be unattainable and/or unhealthy, and engaging in potentially dangerous compensatory behaviors, such as food restriction, purging, and over-exercising, among others (McLean & Paxton, 2019).

Experiencing dissatisfaction with body image is not specific to individuals of any age, race, social class, cultural identity, sexual orientation, or gender. There is research to suggest the increased pressures of achieving a hypermuscular body image among many young boys and men (Slack et al., 2019). In their review of eating disorder literature, Galmiche et al. (2019) suggest that the prevalence of men suffering from eating disorders or disordered eating is likely higher than what is currently represented in body image literature. However, most research related to BID and eating disorders is focused on women (Galmiche et al., 2019). Further, the literature suggests that negative effects of BID on overall wellbeing are especially prevalent among women in Western cultures (Prabhu & D'Cunha, 2018; Rodin et al., 1984). As such, the research presented in this review focused on the experiences of BID among women in Western cultures. It is important to consider how cultural factors may influence these results. In general, there is a lack of representation of women of color in body image literature because much of the previous literature covers the desire to have a thin body shape, known as the thin-ideal, which is quite common among White women. Exclusion of women of color in research can lead to the false

perception that women of color do not encounter challenges with BID (Hunter et al., 2017). Therefore, if body image concerns beyond the standards of thinness are ignored, numerous women experiencing consequences of appearance dissatisfaction may be overlooked. Inclusivity is crucial to gain a greater overall understanding of various cultural standards and to conduct research with greater generalizability. Therefore, this study utilized measures not limited to the thin-ideal in order to capture the experiences of women on a greater scale.

Given the prevalence of women experiencing BID as reflected in the current literature, together with the research on the potential consequences for mental health and overall wellbeing, it becomes crucial to understand how BID initially develops. There is strong support for the development of BID due to sociocultural factors, including family, media, and peers (Fitzsimmons-Craft et al., 2014; Kluck, 2008; Saunders & Eaton, 2018; Smolak, 2004; Smolak et al., 1999; Smolak & Levine, 2001). Each of these factors was explored, as they each serve an important purpose in the developmental process; however, the present review focused most heavily on examining the influences of family on body image. There is data to support several potential pathways of family influence on BID and there likely exists unique consequences in how each of these relational dynamics influence BID development. However, much empirical research suggests a particularly impactful pathway for the development of body image concerns from mothers to daughters specifically (Kluck, 2008; Smolak et al., 1999; Thelen & Cormier, 1995; etc.). As such, the present study focused on mother's influence on the BID of their daughters.

Mothers may influence their daughter’s BID through a number of methods. Some researchers have proposed a connection between commentary on weight, shape, size, attractiveness, and/or body image and BID development among some children (Clark &

Tiggemann, 2007). However, there is a need for more research exploring why some individuals who are exposed to parental messages experience a greater concern with BID compared to others. Attachment theory posits the importance of the bond between parent and child in that child's overall functioning and well-being (Bowlby, 1969). It has been suggested that attachment relationships may serve as a protective factor, or a risk factor, for the development of mental health and psychological functioning concerns, including depression, anxiety, dementia, aggression, social relationships, and self-esteem, among others (Bowlby, 1969; Dallaire & Weinraub, 2007; Miranda et al., 2012; Walsh et al., 2019). Therefore, the final component of this research was to examine if attachment style (in terms of attachment anxiety and attachment avoidance) may offer some explanation as to why some individuals who receive appearance-focused messages from their mothers are more vulnerable to developing BID than others are.

Present study

To date, there are several studies that examine the relationship between sociocultural factors and the implications on BID among young women. Building on the available literature related to parental influence and development of BID, the current study focused on appearance-related influences in terms of commentary and modeling behaviors within the relationship between mothers and daughters specifically. Additionally, much of the empirical research related to BID is focused on the thin-ideal. The current study utilized more global measures of parental influence and BID that are not limited to a single body image ideal to capture the experiences of women that may have otherwise been excluded in previous research (e.g., women who did not ascribe to the thin-ideal). Further, this study expanded on the available research by exploring the effects of attachment anxiety as a moderator for the relationship between maternal influence and BID.

During analysis, attachment anxiety and attachment avoidance were evaluated first, as attachment style develops within the early stages of life and tends to remain relatively stable. Maternal appearance-focused influence was examined following attachment anxiety and attachment avoidance. While children may be exposed to appearance-related influences from an early age, the impact of those comments or behaviors begins after attachment style has been established.

Significance to Counseling Psychology

Satisfaction with one's body is an integral part of life, and many individuals seek counseling due to BID and subsequent consequences. As outlined above, BID can impact one's physical and emotional wellbeing many ways. Researchers and practitioners need to be aware of the implications of BID and the factors that contribute to the development and severity. Further, this research could provide insight into appropriate treatment planning when working with patients experiencing BID.

Definitions

The following are definitions of key terms used throughout this text. Definitions are provided here to aid in the understanding of research questions and hypotheses.

1. Maternal appearance-focused influence: Maternal appearance-focused influence is defined as comments or modeling behaviors related to weight, shape, size, or general appearance. Maternal appearance-focused influence may include the following: criticism and teasing; encouragement to diet, exercise, and/or engage in alternative methods to alter one's body; dissatisfaction with weight or shape; and praise or compliments for approaching certain ideals (e.g., positive acknowledgment for losing weight in line with the thin-ideal or for greater muscular definition in line with the athletic-ideal). Influence

from mothers may be focused on the self or their child directly. Maternal appearance-focused influence was assessed using a combined measure derived from the *Family Experiences Related to Food Questionnaire- Mother* form (FEFRQ-M; Kluck, 2008) and the *Verbal Commentary on Physical Appearance Scale* (VCOPAS; Herbozo & Thompson, 2006).

2. Body image dissatisfaction (BID): Body image dissatisfaction is defined as one's dysfunctional negative thoughts and feelings about the size, shape, and weight of their body (Cash & Szymanki, 1995). BID was operationally defined through separate analyses of *Body Surveillance* and *Body Shame* subscale scores of the *Objectified Body Consciousness Scale* (OBCS; McKinley & Hyde, 1996).
3. Eating disorder: Eating disorders are defined as outlined by the Diagnostic and Statistical Manual of Mental Disorders-5th Edition (DSM-5; American Psychological Association, 2013). To assess for eating disorder history, participants were asked to indicate whether they had ever been diagnosed with an eating disorder by a medical or mental health professional and to identify their previous and/or current diagnosis (diagnoses) from a provided list of DSM-5 eating disorders.
4. Attachment anxiety: Attachment anxiety is defined as the fear of rejection or abandonment when distressed and an excessive need for closeness, acceptance, approval, or reassurance from one's attachment figure. For this study, the attachment figure of focus was the participant's mother or mother-like figure. Attachment anxiety was measured using the *Anxiety* subscale of the *Experiences in Close Relationship Scale-Short form* (ECR-S; Wei et al., 2007). The ECR-S Anxiety subscale wording was

modified slightly to assess the relationship with the mother specifically, as opposed to a romantic partner.

5. Attachment avoidance: Attachment avoidance is defined as an excessive need for independence, discomfort with intimacy or vulnerability, and difficulty trusting or sharing information with one's attachment figure. For this study, the attachment figure of focus was the participant's mother or mother-like figure. Attachment avoidance was measured using the *Avoidance* subscale of the *Experiences in Close Relationship Scale-Short form* (ECR-S; Wei et al., 2007). The ECR-S Avoidance subscale wording was modified slightly to assess the relationship with the mother specifically, as opposed to a romantic partner.

Research Questions and Hypotheses

RQ1: After accounting for demographic variables, will attachment anxiety and attachment avoidance predict BID?

Hypothesis 1: Yes, after accounting for demographic variables, both higher attachment anxiety and higher attachment avoidance will uniquely predict greater BID.

RQ2: After accounting for demographic variables, will maternal appearance-focused influence predict BID?

Hypothesis 2: Yes, after accounting for demographic variables, higher maternal appearance-focused influence will predict greater BID.

RQ3: After accounting for demographic variables and the above main effects, will the relationship between maternal appearance-focused influence and BID be moderated by attachment anxiety?

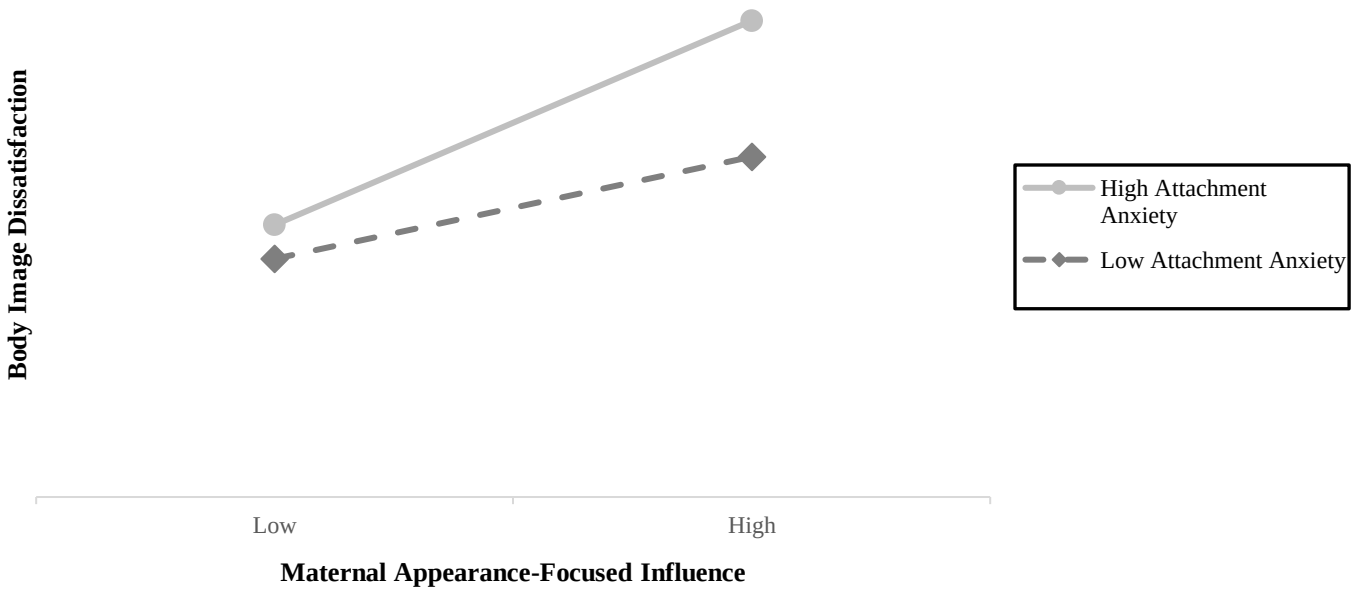
Hypothesis 3: Yes, after accounting for the above main effects, the relationship between maternal appearance-focused influence and BID will be moderated by attachment anxiety.

Hypothesis 3a: Among participants who report high attachment anxiety, there will be a significant moderate positive relationship between maternal appearance-focused influence and BID.

Hypothesis 3b: Among participants who report low attachment anxiety, there will be a small but significant positive relationship between maternal appearance-focused influence and BID.

Figure 1

Hypothesized Model of Attachment Anxiety as a Moderator Between Maternal Appearance-Focused Influence and Body Image Dissatisfaction.



CHAPTER II

Literature review

Body Image Dissatisfaction

Over the past few decades, the field of psychology has seen an increase in research related to women's body image ideals and the subsequent effects on perceptions of worth and overall satisfaction. Body image can be defined as one's thoughts and feelings about their body (Grogan, 2008). Body image dissatisfaction occurs when one has dysfunctional negative thoughts and feelings about the size, shape, and/or weight of their body (Cash & Szymanki, 1995). The negative evaluation of specific body areas and preoccupation with body shape and weight related to well-being are frequently involved.

The prevalence of BID among girls and women in the United States is incredibly high. Researchers estimate that between 46-51% of girls, even as young as 5-years-old, report experiencing BID (Clark & Tiggemann, 2007; Dohnt & Tiggemann, 2005). Some estimates have been even higher, suggesting that roughly 90% of White adolescent girls report BID of some type (Parker et al., 1995). Striegel-Moore et al. (1986) suggest that concerns around weight and body image are so common that it is considered normal for women to experience some degree of BID. This research suggests that our society conceptualizes, discusses, and promotes body image in such a way that normalcy is defined by dissatisfaction with the self and negative self-views, even among young children.

Body Image and Eating Disorders

Current literature suggests a strong relationship between BID factors and specific eating disorders development among young women (Kluck, 2010; Lowe et al., 2019; McLean &

Paxton, 2019; Saunders & Eaton, 2018). To control for increased negative thoughts about their body image, some women choose to engage in healthy behaviors to control or maintain a more desirable body shape, size, or weight (Slack et al., 2019). Others, however, may turn to harmful behaviors that are characteristic of disordered eating, even if they don't progress to a clinically defined eating disorder (Slack et al., 2019). Conceptually, BID has been associated with disordered eating behaviors (Aparicio-Martinez et al., 2019). Moreover, BID is widely accepted as the "single strongest predictor" of developing an eating disorder as defined in the Diagnostic and Statistical Manual of Mental Disorders, fifth edition (DSM-5; American Psychiatric Association, 2013; Sheldon, 2013, p. 216). There is a distinction between the concepts in that every person who suffers from a clinically diagnosed eating disorder including Anorexia Nervosa, Bulimia Nervosa, Binge Eating Disorder, and other feeding or eating disorders, has some element of concern or dissatisfaction with their body image, however, not every person who struggles with BID develops a clinically diagnosed eating disorder or disordered eating patterns (Saunders & Eaton, 2018). Given that all women with eating disorders/disordered eating experience BID elements, research explicitly related to individuals with eating disorders is included in this review.

Concerns about weight and shape typically develop in childhood and eating disorder age-of-onset is varied but generally occurs during adolescence (Lowe et al., 2019). Disordered eating patterns are prevalent among middle and upper-class women, on college campuses, and in certain activities (e.g., athletics, dance, modeling, etc.; de Bruin & Oudejans, 2018; Striegel-Moore et al., 1986). Young women who engage in negative body evaluations and comparisons appear to be at a higher risk for developing eating disorders during adolescence, particularly if concerns begin before puberty (de Bruin & Oudejans, 2018; Lowe et al., 2019). Additionally,

many young women, far beyond the relatively small number who struggle from a clinical eating disorder, are impacted by the negative effects of BID (Lowe et al., 2019). This explanation is necessary because it illuminates the vast number of children and adolescents who struggle with body weight, shape, and size beyond what is currently represented in the literature related to eating disorders.

Body Ideals

Although it has sometimes changed, society has long provided an ideal body image for individuals to strive for. Body image dissatisfaction often stems from pressures to conform to appearance ideals and discrepancies between one's appraisal of their actual body and their ideal body (Cash & Szymanki, 1995; Lowe et al., 2019). Previous research has primarily focused on ideals derived from women desiring a thin body shape to reach their body image goals (Dalley et al., 2019). This goal, described as the "thin-ideal," can often be unrealistic and even unhealthy for women to pursue and may result in physical and mental health consequences (McCarthy, 1990, p. 205). In a study conducted by DeLeel et al. (2009), 9- and 10- year- old girls were asked to identify photos of women with figures that they considered to be ideal and to identify figures that were similar to their real figures. Over one-third of children in each age group chose women with figures much thinner than their own, suggesting a discrepancy in real and ideal body image beginning at a young age (DeLeel et al., 2009). Although a desire for thinness during childhood is not necessarily representative of a problem for young women, it can lead to consequences of disordered eating behaviors and chronic BID in the future (Clark & Tiggemann, 2007).

A significant amount of empirical literature focuses on BID primarily through the lens of the thin-ideal, which is commonly experienced among White girls and women. This research is crucial in understanding the impact of BID for women who wish to be thinner. However, a body

shape defined by thinness does not adequately represent body ideals held by all women. Body image ideals may differ based on individual identity factors like race, ethnicity, socioeconomic status, and health factors (Cash & Henry, 1995; DeLeel et al., 2009; Fujioka et al., 2009; O'Dea & Caputi, 2001). For example, some women may be focused more heavily on an athletic-ideal, characterized by a toned and muscular appearance (Betz & Ramsey, 2017). While there may be overlap between thinness and athleticism, there is a growing trend of women sharing media intended to encourage others to exercise, which has led many women to desire a more athletic build (Betz & Ramsey, 2017).

Additionally, cultural factors play an essential role in developing body image ideals and the behaviors that women engage in to achieve those ideals (Awad et al., 2015; Grabe & Hyde, 2006). For example, some research suggests that African American women tend to be more flexible regarding body ideals and experience less concern about weight loss and thinness than White women typically do (Hunter et al., 2017; Parker et al., 1995). Today, African American and Latina women may receive messages from parents or caregivers more in line with a curvy-ideal, characterized by a fuller and curvier body shape (Awad et al., 2015; Betz & Ramsey, 2017; Hunter et al., 2017). In a study in which participants were asked to select their preferred body images from provided examples, African American and Latina women repeatedly selected images of women who were curvier and thicker than White women selected (Gordon et al., 2010). Latina women have expressed frustration that historical examples and media representations of Latina women were often much thinner than what they found to be representative of actual Latina women (Rubin et al., 2003).

Further, African American women were found to select larger-bodied images as their cultural body image ideal than their Latina counterparts (Gordon et al., 2010). Interestingly,

when asked about mainstream ideals, all groups noted the thin-ideal, suggesting the significant impact that a desire for thinness has had on all cultural groups (Gordon et al., 2010). This research collectively confirms the pervasive influence and knowledge of the thin-ideal across many women. Additionally, it highlights the differing perspectives emerging in the literature based on ethnic or racial differences. As a result, research focused solely on the thin-ideal can lead to the invisibility of BID of women who do not ascribe to the thin-ideal, including many women of color.

Despite potential differences in ideals, some similarities exist among women in the sociocultural factors that influence body image satisfaction. Increased internalized cultural body ideals often result in assumptions that the body is an object to be manipulated to achieve certain standards. Carey et al. (2010) suggest that women's bodies are constantly being "objectified," "evaluated," and "appraised" by others which eventually leads women to view their bodies in a similar manner (p. 301). Research suggests that increased exposure to athletic and fitness-related messages lead to increasing internalization of the athletic-ideal and greater BID among athletes and non-athletes (Betz & Ramsey, 2017). Additionally, greater internalization often results in more significant attention bias, meaning that women will begin to take greater notice of others who meet their ideal and simultaneously pay less attention to those who do not fit within that ideal (Saunders & Eaton, 2018). For example, women who ascribe to the athletic-ideal may be more likely to recognize women around them who have the weight/shape they wish to have and ignore the other numerous women who fit into other body types—resulting in increased consciousness surrounding one’s body and comparisons to their ideal. Many women may experience dissatisfaction with weight, despite the actual health status of their weight (Striegel-Moore et al., 1986). Related to the thin-ideal, many girls who desire a thinner body are already

considered to be in the “normal” Body Mass Index (BMI) classification for their age and weight (Clark & Tiggemann, 2007, p. 76; World Health Organization, 2006). To understand this discrepancy, it is important to consider how BID first develops in young women.

Body Objectification and Consciousness

Higher body consciousness in women is thought to be related to greater experiences of BID (McKinley & Hyde, 1996). A key focus within body image literature has been examining constructs of body consciousness and BID. Two constructs of focus are body surveillance and body shame. Body surveillance involves paying a significant amount of focus to one's appearance based on internalized appearance-focused messages (Saunders & Eaton, 2018). Suggesting that if one has internalized messages that they must fit into the culturally accepted ideal body type in order to be viewed as attractive, they will pay particular attention to how much or how little they currently align with that ideal. Body surveillance is a tool for self-objectification as it allows women to evaluate if they are complying with their cultural body ideals and can, therefore, avoid judgment from others (Lowe et al., 2019; McKinley & Hyde, 1996; Saunders & Eaton, 2018). Increased body surveillance often leads to engaging in body-related comparisons that can negatively impact women overall, according to body consciousness theory (McKinley & Hyde, 1996).

Body-related comparisons occur daily and typically involve comparisons of body image between oneself and other women, including family, peers, and/or celebrities in magazines, television, and social media. The latter type of comparison is often known as upward body comparisons because it involves comparing oneself to another person who embodies the ideal that they are attempting to achieve. Upward related comparisons often fail to compare adequately and lead to increased negative outcomes (Bamford & Halliwell, 2009; de Bruin & Oudejans,

2018). Theory related to body objectification suggests that women who believe they do not meet their cultural ideals report greater feelings of shame and embarrassment related to their bodies (McKinley & Hyde, 1996). Shame is commonly experienced by women in response to their BID and may extend beyond perceptions of the body to include general negative feelings about the self (Bartky, 1988; McKinley & Hyde, 1996; Rodin et al., 1984). It has been suggested that the shame a woman feels related to her body image is associated with how deeply she has internalized body image standards (Bartky, 1988). To avoid shame related to BID, many women engage in compensatory behaviors (over-exercising, vomiting, inappropriate use of laxatives, etc.) or specific eating behaviors to alter their weight or shape in an attempt to move closer to their specific cultural body ideal (Saunders & Eaton, 2018).

Sociocultural Model

There seem to be both genetic and environmental factors associated with higher BID and/or disordered eating (O'Connor et al., 2017). Strong support exists for a sociocultural model to explain the development of BID that includes influences from everyday interactions with media, peers, and family (Clark & Tiggemann, 2007; Juarez & Pritchard, 2012; Stice, 1994; Saunders & Eaton, 2018; Rogers et al., 2019; Webb et al., 2018). The sociocultural model focuses explicitly on how eating disorders are developed as media, peers, and family deliver messages to children and adolescents about cultural norms (Stice, 1994). According to the sociocultural model, as messages are internalized, young people begin to strive for the standards that have been developed and normalized within their particular groups; dissatisfaction occurs when they perceive their body to not align with their cultural ideals (Stice, 1994).

The media has frequently been blamed for the significant number of women who experience BID. Carey et al. (2010) suggest that adolescents incorporate body ideals into their

own beliefs from images in the media, thus reinforcing body image concerns. Over the past few decades, young girls have used women in movies, on television, in magazines, and on social media platforms to develop their understanding of weight, beauty, and body ideals (Field et al., 1999; Rounsefell et al., 2020). Women portrayed in these types of media often represent unrealistic body image, weight, shape, and size standards and leads to appearance-comparisons that result in negative feelings about appearance and encourages potentially problematic eating or exercising behaviors (Clark & Tiggemann, 2007; Martin & Kenney, 1993; Rounsefell et al., 2020). In line with body objectification theory, research suggests that media intake associated with appearance-related comparisons and objectification of self and others (Dohnt & Tiggemann, 2006; Saunders & Eaton, 2018).

Also, following the sociocultural model, the concept of peer influence on BID development has been thoroughly studied (Carey et al., 2010; Clark & Tiggemann, 2007, Herbozo & Thompson, 2006). Carey et al. (2010) offer that young women today function within specific peer-based "appearance cultures" that emphasize standards of attractiveness and desirability in terms of one's ability to meet identified ideals (p. 299). For example, as part of their inclusion in appearance cultures of their peers and Western society as a whole, adolescent girls tend to engage in conversations about body image and weight monitoring behaviors with one another daily (Carey et al., 2010). By engaging in self-directed appearance-focused commentary and frequent dieting, adolescent girls can also demonstrate their commitment to fitting into societal standards (i.e., talking about dieting to show a desire to fit into thin-ideal; Carey et al., 2010). This research illustrates the common pattern of appearance-related commentary on the internalization of body image and overall appearance for young girls.

Family relationships also contribute to the development of BID for young women, as indicated through the sociocultural model, perhaps even more strongly than media and peer relationships (Stice, 1994; Saunders & Eaton, 2018). Clark and Tiggemann (2007) argue that for young women, engaging in weight and appearance-related conversations with others is more impactful on the development of appearance ideals and BID than is engaging in media comparison. Carey et al. (2010) suggest that media may initially introduces young girls to societally accepted ideals, but internalization of ideals begins through appearance-related conversation. Perhaps because while media can provide an area for social comparison between individual and model (or Instagram "influencer," actress, etc.), interpersonal conversations are more likely to be relevant to the specific concerns of the individual and therefore more likely to influence appearance self-perception. Some researchers suggests that the family represents a unique culture in which expectations about appearance, body shape, and weight are fostered primarily by observing behaviors and comments about appearance (Clark & Tiggemann, 2007; Kluck, 2010). Comments about appearance, appearance-related teasing, and modeling behaviors related to weight control have been linked with increased BID and a desire to alter one's body (Dohnt & Tiggemann, 2005; Kluck, 2008). According to Kluck (2008), the family system provides a distinct influence on appearance-ideals for children for and is crucial to understanding how specific body weight beliefs and behaviors are initially developed and later maintained by young women. In other words, families are critical in developing and maintaining thoughts and behaviors related to body image and eating (Dohnt & Tiggemann, 2005; Kluck, 2010). As such, influences within the family system could serve as an essential foundation for understanding the development of BID and potential moderators.

Maternal Appearance-Focused Influence

Under the tenants of sociocultural theory, Kluck (2008) discusses how familial behaviors can influence BID in children, including attitude toward appearance, parental modeling of BID, and specific commentary related to appearance, weight, shape, and/or size. The importance of modeling behaviors stems from social learning theory, which suggests that behavior is initially learned by observing the behaviors of others (Bandura, 1977). Per social learning theory, parental behavior related to body weight and shape influences children's behavior on the same topic (Smolak et al., 1999). Research suggests that parental behavioral modeling related to body image impacts the maladaptive behaviors of children, especially between mothers and daughters (Kichler & Crowther, 2001; Pike & Rodin, 1991). Kichler and Crowther (2001) examined the effects of modeling behaviors, including dieting, observed BID, and maladaptive eating. They found significant effects on daughters' eating beliefs that were further influenced by specific commentary (Kichler & Crowther, 2001). Therefore, to add to the current understating of parental influence, it becomes important to examine the relationship of modeling and commentary when exploring maternal appearance-focused influence on child BID outcomes.

Kluck (2010) found that being raised within an appearance-focused family increased levels of disordered eating among daughters. For example, Rogers et al. (2019) suggest that families who support the thin-ideal engage in conversations containing anti-fat attitudes and ultimately create beliefs that people who are considered fat or overweight are disliked are lazy. Children who receive these messages may internalize a fear of becoming fat and being perceived in that way (Rogers et al., 2019). Further, in line with the body objectification theory, if the recipient feels their actual body does not align with the internalized ideal promoted through these repeated messages, they often begin to engage in negative body-focused self-talk and experience feelings of shame and embarrassment about their bodies (Rogers et al., 2019). Clark and

Tiggemann (2007) found that engaging in conversation about appearance increases the likelihood that children will focus attention on their appearance and body image. Specifically, messages from mothers about the importance of weight and shape on the chances of being socially accepted are likely to heighten a child's focus on appearance (Clark & Tiggemann, 2007).

It is expected that if a mother ascribes to the curvy-ideal, her daughter will also likely strive for a curvier and more voluptuous body shape (i.e., mothers and daughters often share the same body image ideals). However, there may be cases in which mothers and daughters differ in their specific body image ideals. For example, Rubin et al. (2003) discuss African American women sharing experiences of their mothers encouraging them to work toward the dominant culture's distinct look (i.e., the thin-ideal) despite the daughter's interest in showing off her curves. Differing body ideals between mother and daughter were seemingly related to approval seeking within a society that viewed success in terms of fitting in with the dominant cultural ideals (Rubin et al., 2003). While elements of this discrepancy may remain today, there has been a recent push for women of color to embrace body weight, shape, and size outside of the dominant cultures focus on thinness (Rubin et al., 2003).

Similarly, given the current shifting in the United States popular culture toward women embracing a fuller body shape (more in line with the curvy-ideal) there may be some generational differences emerging in body ideals (Hunter et al., 2020). This emerging generational shift may result in young women today expressing a body image ideal that is not directly aligned with their mother's; however, ultimately, when the family is highly appearance-focused, it is more likely for children to become fixated on their appearance as well. This research could expand on existing literature by inquiring about the body image ideals of the

mother and daughter, which could allow for further exploration of similarities and differences within a single-family unit.

Through repeated appearance-focused commentary, parents can create a family environment heavily focused on body ideals (Smolak et al., 1999). Often, the resulting message is that to be perceived as likable by others, one must achieve the desired body type (e.g., the thin-ideal, curvy-ideal, athletic-ideal, etc.). Kluck (2008) found that family focus on food, eating behaviors, and appearance was associated with increased disordered eating despite the child's actual weight. Further, research suggests that families that focus highly on the appearance of others exhibit increased disordered eating patterns as compared to families that do not openly express these same ideals (Davis et al., 2004; Laliberte et al., 1999). Clark and Tiggemann (2007) suggest that the frequency of appearance-focused conversation is directly related to BID. Frequent conversations about others' appearance lead to greater BID for those engaged in the conversation (Jones & Crawford, 2006). Taken together, this information suggests that young girls who grow up in family environments that support commentary about the appearance of others are more likely to internalize negative aspects associated with not fitting into those ideals, which can result in increased BID regardless of their actual body weight, shape, or size.

Guided by influences from the sociocultural model and social learning theory, this review expanded on the current body image literature by exploring the influence of specific commentary and modeling behaviors by family members on BID development. This review examined appearance-focused influence through different types of maternal commentary and behaviors during early life, resulting in body-related consequences throughout adolescence and later adulthood (Saunders & Eaton, 2018; Stice, 1994). Exploration of influences is separated into maternal appearance-focused influence regarding the self and maternal appearance-focused

influence related to the child directly. It is important to note that different types of commentary often overlap quite a bit, meaning that in the same sentence, a parent could engage in more than one type of commentary. Consider the following example, "If you continue eating as you do, and you'll end up just like me - too fat to fit into any of my clothes." In this example, the mother directly commented to the child about their eating behaviors, expressed her BID through negative commentary about herself, and indicated that gaining weight is wrong and leaves one undesirable, which is in line with the thin-ideal.

Maternal Appearance-Focused Influence Related to the Self

Research suggests that through commentary about dissatisfaction with their bodies, parents provide messages to children about body image, eating expectations, weight-loss attempts, desires to alter their bodies, and other appearance-related goals and desires (Annus et al., 2007; Benedikt et al., 1998). Smolak et al. (1999) found that there was a common pattern of parents engaging in dieting and making comments about dissatisfaction with their body weight, size, and shape among children with BID, specifically for those with eating disorders. Further, Pike and Roden (1991) found that mothers of daughters with eating disorders were more likely to have body image concerns and a history of dieting and/or engaging in disordered eating patterns themselves. Through modeling of eating, exercising, and negative self-focused commentary, parents can heavily influence body image (Kichler & Crowther, 2001; Rogers et al., 2019).

Modeling. When examining maternal influence on body image through messages about the self, it is common for specific commentary to be accompanied by modeling behaviors. Modeling behaviors and social learning have long been studied to understand parental impact on children's thoughts, attitudes, and beliefs (Bandura & McDonald, 1963). There is some empirical evidence to suggest the association between the parental modeling of certain behaviors, like

restrictive eating or over-exercising, and greater BID among children (Benedikt et al., 1998; Rogers et al., 2019; Smolak et al., 1999). Benedikt et al. (1998) examined the impact of mother's modeling and encouragement on child behavior by studying mother's eating attitudes and weight-loss attempts and the subsequent impact on daughter's attitudes and behaviors. Results indicate that mothers who have a history of BID and engaging in these behaviors are more likely to have daughters who engage in extreme weight loss methods (e.g., excessive dieting, over-exercising, etc.; Benedikt et al., 1998). This study, and ones similar to it, demonstrate the significant and unique impact that appearance-related modeling behaviors can have on how children develop and practice thoughts, beliefs, and actions regarding their body image.

There is evidence that modeling behaviors are often accompanied by commentary reinforcing the messages. Much like it is common for overlap between different types of commentary, there is also great overlap between modeling behaviors and the presence of commentary. In their explanation of social learning theory, Bandura and McDonald (1963) note that children learn how to behave based on modeling behaviors and actions, including different types of commentary. While children might notice underlying messages of a parent choosing to eat an apple instead of the cupcake in front of them or going for a run after a heavy meal, these behaviors may often be combined with commentary; like a parent saying, "I'm going to have to go an extra 2 miles to work off all the junk I ate today" before leaving for a run. Similarly, if a daughter notices her mother examining herself in the mirror and also hears her mother say, “I’ve got to get back in the gym; I’m losing all my muscle definition,” it is likely to reinforce the importance of a toned and fit appearance.

Fat-talk. Research suggests that parental self-commentary appears to serve as a model for children as they learn to conceptualize their body image, find value in their bodies and learn

how to speak about bodies with others. Maternal appearance-focused commentary focused on the self can be more easily understood by examining what is known as fat-talk. This concept has become a common practice among many women in the United States. Fat-talk has a unique place in this literature because when considering negative appearance-related commentary, this type of conversation encourages comments about the self and others. However, because fat-talk originated as self-directed messages, it seems most relevant to include it within the self-focused appearance-commentary.

Fat-talk is critical, degrading, and negative commentary that takes place primarily between women about one's body, food intake, and weight related to perceived excess and/or undesired body fat (Corning & Bucchianeri, 2016; Engeln & Salk, 2016; Nichter, 2000). Examples of fat-talk include statements like the following: "I am so fat," "my arms are too fat to wear that shirt," "my thighs are huge!" etc. It has been linked to increased BID and other problematic concepts such as self-objectification, body surveillance, body shame, depressive symptoms, and disordered eating (Rogers et al., 2019). This type of self-deprecating conversation style may be used to share genuine complaints or concerns about one's body or to search for praise and/or compliments from others through denial (e.g., "no you are not"; Corning & Bucchianeri, 2016). Fat-talk may also be used to fit in with the social norms as it is common practice for many women (Nichter, 2000).

Salk and Engeln-Maddox (2011) found that women who engage in fat-talk report higher BID and guilt than those who do not engage in fat-talk with others. Simply hearing others engage in fat-talk may put women at an increased risk of engaging in fat-talk about themselves and therefore also at a heightened risk for guilt and dissatisfaction with their body weight, shape, and size (Salk & Engeln-Maddox, 2011). Further, research has suggested that engaging in fat-talk is

highly contagious and correlated with significant BID overall, especially when coming from a credible source (Corning & Bucchianeri, 2016; Salk & Engeln-Maddox, 2011). If fat-talk is contagious among adult women, then it is highly plausible that children would pick up on and engage in these patterns, especially when receiving these messages from their parents from whom they learn how to interact with themselves and others. Families that engage in group fat-talk and place significant attention on appearance-related goals, like weight change or having an ideal body type, tend to have children who show increased BID and disordered eating patterns (Kluck, 2008; Rogers et al., 2019). Rogers et al. (2019) explain that mother's fat-talk is quite impactful on children's body image and development of fat-talk patterns, even as they age into their college years. Through a mirror study of mothers and their 5-7-year-old daughters, Perez et al. (2018) found that children model negative body-focused self-talk that they hear from their mothers. Additionally, researchers were able to predict daughter's BID by examining mother's body-focused self-talk (Perez et al., 2018). Therefore, simply listening to others engage in this type of conversation puts individuals at an increased risk for dissatisfaction with their own body image. Taken together, this research suggests that fat-talk is highly contagious from mother to child. Additionally, fat-talk and other types of appearance-focused comments and behaviors related to the self are recognized as factors that can heavily influence children's self-perceptions and BID. By pointing out areas of the body that one does not like about themselves, fat-talk is rooted in body surveillance and is often accompanied by feelings of shame about one's body, both aspects of the BID measured in the current study.

Maternal Appearance-Focused Influence Related to and about the Child

Comments made directly to children are potent factors in developing BID and disordered eating patterns. In addition to social learning theory, which suggests that children are influenced

by thought and behavior patterns from their parents, self-perceptions can also influence how parents interact with their children and how children react in subsequent interactions. One can better understand this relationship by considering it in the context of basic concepts of operant conditioning, which suggest that children learn to engage in certain behaviors by interacting with their environment (Skinner, 1963). From this conceptualization, children learn about eating habits through their environment, including how their parents respond to the child's eating behaviors (Douglas, 2002). Therefore, when mothers make comments about a child's body or eating behaviors, the child may make adjustments to no longer receive such comments and therefore not be subjected to disappointment (or vice versa, receiving positive messages may reinforce the child's behaviors). Smolak et al. (1999) report that direct weight-related comments to a child are strongly related to concerns about weight or shape and increased weight-loss attempts by the child, thus supporting the relationship between maternal appearance-focused commentary and the development of BID. Herbozo et al. (2017) noted unique implications for African American women who reported stronger adverse reactions to both positive and negative messages than White and Latina participants reported. Stronger reactions resulted in a greater likelihood of engaging in disordered eating behaviors, suggesting that appearance-related commentary for African American women may be more impactful than previously understood (Herbozo et al., 2017). These findings support the detrimental effects of appearance-related commentary beyond what is commonly discussed in the current literature.

Encouragement. Parental appearance-related commentary can be both positive and negative. It may be surprising that even positive comments and appearance-focused encouragement can have negative implications for young women. Some maternal comments about child eating behaviors or appearance may be intended as positive and supportive, but

instead send messages that reinforce societal values that become internalized and may lead children to view their bodies negatively (Herbozo & Thompson, 2006; Rogers et al., 2019). Herbozo and Thompson (2006) suggest that positive appearance-related commentary can serve as helpful compliments for some but may also act to emphasize body ideals and play a unique role in facilitating shame, guilt, criticism, and/or disordered eating behaviors. Examples may include statements such as the following: “You have a nice body,” “You look so fit, have you been in the gym?” “I wish I had curves like yours!” etc. In examining the impact of weight/shape commentary, Herbozo et al. (2017) found that African American and Latina American women reported greater negative responses to positive appearance-focused comments than White women, emphasizing the importance of expanding literature beyond the tenants of the thin-ideal. Benedikt et al. (1998) found that weight-loss attempts and maternal BID were strongly associated with parental encouragement to lose weight. This suggests a connection between parental self-views and the impact of their views of their children in line with social learning and operant conditioning.

Further, research suggests that parents of girls with eating disorders are more likely to be critical of their daughter's appearance and encourage dieting and other weight-loss behaviors as compared to parents of girls who do not have eating disorders (Pike & Roden, 1991; Smolak et al., 1999). Parental judgments about a child's appearance often result in encouragement of the girls to make themselves more attractive by engaging in extreme weight-loss measures, altering food intake, or excessive exercise, based on their specific ideal body image (Pike & Roden, 1991; Smolak et al., 1999). Kluck (2010) notes that parental encouragement to control weight and size was among the strongest predictors of BID and disordered eating in daughters.

Teasing. While encouragement may unintentionally influence a child's self-perception and external control behaviors, some parents intentionally utilize direct comments to bring negative attention to a child's appearance. These comments are often referred to as "teasing" in the literature and might include comments about weight, shape, or size, general comments about appearance, and food or eating-related comments (Jackson et al., 2000). For example, saying "looks like someone has been skipping leg day" may reinforce a woman's internalization of the athletic-ideal and further contribute to dissatisfaction with her current appearance for not looking toned or defined. Parental teasing of a child's appearance has been related to increased BID and weight concerns in children (Fabian & Thompson, 1989; Jackson et al., 2000). This relationship can be quite powerful if children believe that the parents are concerned or disappointed about their weight (Smolak et al., 1999). Research suggests parental appearance-related teasing is common for girls with eating disorders (Levine et al., 1994; MacBrayer et al., 2001). According to Annus et al. (2007), an association exists between food-related teasing, modeling behaviors, body expectations, and disordered eating behaviors, primarily among women who identify with the thin-ideal. The effects of comments made directly to the child, including teasing about weight, eating habits, or appearance, can begin in childhood and have lasting effects on the individual's BID and associated compensatory behaviors, including over-exercising, restrictive eating, dieting, purging behaviors, etc. (Jackson et al., 2000; Thelen & Cormier, 1995).

It is important to recognize the long-lasting effects of these comments. Rogers et al. (2019) explore how comments made directly to children about their eating behaviors can result in internalized messages about appearance and continued fat-talk with others into college years and young adulthood. This relationship demonstrates that comments from parents impact children during their youth but that these messages continue to influence the child well into

adulthood. As noted earlier, BID can have many consequences on mental health and overall wellbeing. Therefore, it is crucial to work toward gaining a better understanding of the root of the relationship between maternal appearance-focused influence and the consequences of BID. Doing so allows for a greater understanding of potential risk factors and explanations as to why some daughters are more impacted by maternal appearance-focused commentary and modeling behaviors than others. One potential avenue to explore the relationship between maternal appearance-focused influence and BID is to examine the attachment relationships that individuals develop with their parents.

Attachment

Attachment theory began with ideas and principles formed by John Bowlby that were later tested empirically by Mary Ainsworth. Bowlby (1973) established attachment theory as a theoretical framework for understanding human relationships and emotion regulation. Ainsworth (1989) included a focus on the basic systems of behavior within the attachment relationships. Attachment theory explores different personality structures by focusing on traits established at birth and behavioral changes one learns to make in order to survive (Ainsworth & Bowlby, 1991). Attachment style development begins with infants repeatedly engaging in proximity-seeking behaviors with caregivers (Bowlby, 1969). Research suggests a connection between secure attachment and one's overall mental health and a number of other benefits (Bowlby, 1969; Karen, 1998; Raby et al., 2015; Schmitt & Jonason, 2015). Attachment style remains relatively stable across the lifetime and is most evident when an individual is distressed (Bowlby, 1973). Understanding that parental influences early in life can impact how children view their bodies and attempt to regulate BID could be beneficial to the overall understanding of these concepts. Perhaps by understanding the relationship between attachment style and the different

examples of maternal appearance-focused influence, we can begin to understand the interactions of these variables better and develop a framework for more appropriate treatment. Additionally, by looking at the influences of parents on their children, examining attachment style could explain why some children who are subjected to maternal appearance-focused influence develop BID more severely than others who experience similar influences.

Development of Attachment Style

Infants are entirely reliant on caregivers for the fulfillment of basic survival needs. Infants instinctually engage in proximity-seeking behaviors by asserting needs to a parent or caregiver who would be capable of fulfilling such needs (Bowlby, 1969). According to attachment theory, through repeated proximity-seeking exchanges (e.g., crying when hungry, wet, scared, etc.), infants develop ideas about themselves and others early in life (Bowlby, 1969). Essentially, this suggests that as they continue to signal their needs, infants learn how responsive their caregivers will be going forward (Ainsworth, 1989; Bowlby, 1969). As these patterns are repeated, children develop internal working models to make sense of themselves and the world around them, including learning how to interact with others and regulate their own emotions (Tasca & Balfour, 2014). Continued positive interactions with caregivers at this time typically foster a positive relationship and allows children to begin to gain confidence and establish trust in others to meet their needs (Bowlby, 1973). Later, children begin to develop autonomy and learn that they can manage challenges and difficult situations that arise on their own (Shaver & Mikulincer, 2002). Individuals who fall into this category of having their needs met by caregivers are considered to have a secure attachment style. Secure attachment results in flexibility, resilience, and the ability to handle stressful situations with autonomy while still being willing to seek support when necessary (Raby et al., 2015; Shaver & Mikulincer, 2002).

Bowlby (1969) argues that for a child to be mentally healthy, they must have repeated positive experiences with their caregiver in which they feel supported and connected. Many researchers provide support for the concept that having a secure attachment style serves as a protective factor against developing undesirable characteristics or outcomes for children (Dallaire & Weinraub, 2007; Forsén Mantilla et al., 2019; Gittleman et al., 1998; Li et al., 2016).

Insecure Attachment

Unfortunately, not all children have responsive caregivers who foster secure attachment. Children whose needs are not adequately met by caregivers early in life begin to expect that their needs will not be met in the future and may ultimately develop an insecure attachment style (Bowlby, 1969). Insecure attachment can be best understood through two separate dimensions that impact one's beliefs about themselves and others; attachment anxiety and attachment avoidance (Brennan et al., 1998).

Attachment anxiety is described as having a fear of being rejected or abandoned when asking for help, a preoccupation with a caregiver, and/or an intense desire for closeness, acceptance, and reassurance from one's caregiver (Shaver & Mikulincer, 2002; Mikulincer & Shaver, 2019). An anxiously attached child might notice patterns of unresponsiveness from a caretaker and, in turn, react with hyperactivation of proximity-seeking needs and behaviors in order to gain additional attention (Mikulincer & Shaver, 2019). Individuals with high attachment anxiety tend to engage in "hypervigilant attention," "heightened recall," "rumination," and experience significant negative emotions during distress (Mikulincer & Shaver, 2019, p. 7). They are often focused on pleasing their attachment figures and will ignore their own needs and desires to do what they believe will result in positive attention from their attachment figures. These qualities may make a child with an anxious attachment style more likely to internalize

comments from parents and engage in certain behaviors to compensate. Therefore, if mothers engage in frequent appearance-focused discussions in front of or with their child, the child may, in turn, be more likely to engage in behaviors that they think will garner affection, approval, or acceptance by their mother. These behaviors may include food increase or restriction, compensatory behaviors (purging food or over-exercising), engaging in body surveillance, initiating fat-talk themselves, and modeling specific behaviors learned from their mother to alter body weight/shape to fit their culturally appropriate ideal.

Attachment avoidance is best described as a sense of discomfort during times of need, including discomfort in sharing thoughts, feelings, vulnerability and/or closeness; extreme self-reliance and independence; and difficulty in trusting others (Mikulincer & Shaver, 2019; Shaver & Mikulincer, 2002). For example, if a young child learns that no one will come when they cry out for help, it may initially be adaptive for that child to develop autonomy and become self-reliant to take care of themselves (Cassidy & Kobak, 1988; Mikulincer & Shaver, 2019). Individuals high on attachment avoidance find it difficult to depend on others and minimize emotional vulnerability when distressed (Edelstein et al., 2004). Avoidantly attached individuals may be less likely to internalize such appearance-focused messages than anxiously attached individuals initially. However, due to the behavioral patterns common among these individuals, they may still experience some degree of heightened BID as a consequence of attempting to avoid or disengage from maternal appearance-focused commentary.

Developing internal working models of the world based on early experiences is beneficial early in life while children are reliant on caregivers. However, later in life these patterns of thinking and behaving are no longer adaptive and may instead become detrimental to one's relationships and general well-being (Mikulincer & Shaver, 2019). Maintaining anxious or

avoidant behaviors will begin to impact one's ability to properly regulate emotions and navigate relationships, affecting their overall mental health into adolescence and adulthood. Both attachment anxiety and attachment avoidance have been shown to serve as risk factors for developing psychopathology and difficulty in emotional understanding and regulation (Mikulincer & Shaver, 2019). Many researchers suggest that having an insecure attachment style may serve as a risk factor with the potential to exacerbate particular internalizing and externalizing concerns, including depression, anxiety, mood disorders, personality disorders, schizophrenia, and eating disorders (Dallaire & Weinraub, 2007; Dozier et al., 2008; Greenberg, 1999; Tasca et al., 2009).

Attachment Style and Body Image

While the specific dynamics of the relationship are still under debate, many agree that women with eating disorders and BID often also have insecure attachment styles (Forsén Mantilla et al., 2019; Ringer & Crittenden, 2007; Zachrisson & Skarderud, 2010). By applying the tenants of attachment style to one's thoughts and behaviors, patterns begin to emerge in the severity and expression of common concepts with the relationship between maternal appearance-focused influence and BID. Examining these patterns may aid in understanding how attachment anxiety and attachment avoidance exacerbate the impact of maternal appearance-focused influences on BID in distinct ways. For example, social learning theory states that children learn how to behave by observing and imitating the behavior of others (Bandura & McDonald, 1963). Suppose a child receives maternal messages that their eating or exercise behaviors are not accepted or approved of. In that case, that child will likely work to alter their behavior in order to reduce distress. In this example, given their propensity to please, an anxiously attached child

might engage in certain behaviors to demonstrate their dedication to fit the cultural ideal (e.g., skipping or adjusting meals to alter shape and gain approval).

Similarly, an avoidantly attached child might alter their behaviors to avoid such messages altogether (e.g., binge eating in private to avoid eating-related conversations). The concept of self-monitoring, discussed above, involves individuals monitoring and adjusting their words and/or behaviors to control how they are viewed by others (Fuglestad et al., 2020). Zachrisson and Skarderud (2010) discuss behaviors like induced vomiting and food restriction as children's attempts to gain control where they feel unregulated by their insecure attachment. Individuals high on self-monitoring reported heightened fears of being rejected or disliked (i.e., demonstrating higher attachment anxiety; Fuglestad et al., 2020). Self-monitoring is also related to higher reported discomfort in forming authentic relationships with parents (i.e., demonstrating higher attachment avoidance; Fuglestad et al., 2020). Bamford and Halliwell (2009) suggest that anxiously attached women are more likely to engage in social comparison, particularly in upward comparisons. When comparing oneself to an idealized version, these anxiously attached individuals often fall short and are more likely to experience BID and may therefore be at a higher risk for engaging in unhealthy coping styles or disordered eating patterns (Bamford & Halliwell, 2009).

Given the basic tenants of attachment theory that early repeated interactions with parents shape the way that individuals view themselves and others in the world (Bowlby, 1969), it is not surprising to think that children would also soak up comments and actions regarding appearance that they might hear or see from their parents. Suppose a child with attachment anxiety receives disapproving maternal appearance-related messages. In that case, they may monitor and alter their thinking and behavioral patterns in response to messages from their attachment figure. The

characteristics of heightened anxious attachment may make these individuals particularly susceptible to maternal modeling and commentary influences due to their dependence and need to prove their worth to others.

Additionally, anxiously attached children are more likely to engage in certain activities due to external motivation from attachment figures. Therefore, these individuals are behaviorally driven, in part, by the desire to act in such a way that will lead to approval and acceptance by their caregiver (Tasca et al., 2009). As a result, children with an anxious attachment style may be more likely to experience BID and/or fall into unhealthy coping behaviors due to the discomfort felt from appearance-related commentary. Moreover, through their tendency to exaggerate threats and attribute these events to their inadequacies, it may be more likely for individuals with an anxious attachment style to internalize messages of appearance-related disapproval by parents (Mikulincer & Shaver, 2016; Mikulincer & Shaver, 2019). This could hold true regardless of the child's actual weight, shape, or size and regardless of whether the maternal appearance-focused influence was directed at the self or the child.

Given this review and the previously explored characteristics of both attachment styles, the research suggests that anxiously and avoidantly attached individuals would be more likely to be impacted by maternal appearance-related influences, as opposed to their securely attached counterparts. There is less research overall to support a significant relationship between attachment avoidance and body image dissatisfaction, specifically. However, according to Cash et al. (2004), modest but significant correlations were found between attachment avoidance in romantic relationships and dysfunctional appearance overall in women. Additionally, in a study of bariatric surgery patients, avoidant attachment was a predictor of binge eating at follow-up, which could be attributed to non-adherence and a difficulty in regulating emotional distress

common among these individuals (Leung et al., 2019). Avoidantly attached individuals are more likely to disengage and detach in an attempt to suppress emotional distress. While avoidance may be a helpful tactic momentarily, it certainly does not mean that appearance-focused messages are not internalized or impactful in influencing how these individuals learn to see themselves.

Specifically of interest in the current study is the influence of anxious attachment as a risk factor to exacerbate the impact of maternal modeling and commentary on the BID of young women. Given their tendency to become hypervigilant for fear of rejection, anxiously attached individuals may be more likely to cling to appearance-focused messages from mothers, ruminate over the distress and internalize inadequacies in culturally defined body ideals and ultimately experiencing greater BID than less anxiously attached individuals who are exposed to similar messages.

Summary of Literature

The literature suggests the widespread presence of BID among American women in today's society. According to the sociocultural theory, several different variables influence body image, including media, peers, and family (Clark & Tiggemann, 2007; Rogers et al., 2019; Saunders & Eaton, 2018; Stice, 1994; Webb et al., 2018). It has also been demonstrated that there exists a relationship between BID and parental influence, specifically (Kluck, 2008; Rogers et al., 2019; Smolak et al., 1999). Researchers have looked into parental influence, though there has not been as much research specifically focused on the influences of maternal modeling and commentary about the self and the child directly. There also exists a relationship between BID and attachment style (Bowlby, 1973; Forsén Mantilla et al., 2019; Mikulincer & Shaver, 2019; Shaver & Mikulincer, 2002; Tasca & Balfour, 2014). More significant self-report attachment

anxiety and attachment avoidance have been linked to greater self-report mental health concerns (Mikulincer & Shaver, 2019). Notably, research has found that women with insecure attachment, specifically greater anxious attachment, tend to engage in behaviors associated with BID (e.g., fat-talk, body comparisons, etc.) and rely more heavily on internalized messages of appearance-related disapproval from their attachment figures (Mikulincer & Shaver, 2019; Rogers et al., 2019).

As attachment style has been shown to act as a moderator for the development of other mental health concerns, it seems entirely plausible that it could act as a risk factor, exacerbating the maternal appearance-focused influence on the development of BID (Bamford & Halliwell, 2009; Mikulincer & Shaver, 2019). Though elements of this review have been studied in the past, there is currently a gap in the literature explaining the connection in these relationships. The researcher came across one study that examined similar attachment variables, the tripartite influence (which includes parental influence), and BID through various interactions (Hardit & Hannum, 2012). Among their findings, researchers concluded that the specific interaction between mother criticism and anxious attachment was not predictive of BID on its own (Hardit & Hannum, 2012). This conclusion opposes the expectations outlined in this research. Despite similarities in variables, the current study differs from Hardit and Hannum's (2012) study in several ways, including mother criticism as the only form of maternal influence, a focus on the thin-ideal, and attachment anxiety only. First, the current study examines if perhaps there exists an impact on BID based on the mother's influence beyond criticism alone by exploring maternal influence in broader terms (i.e., the inclusion of maternal modeling and both positive and negative commentary). Second, the current study aims to be more inclusive by utilizing measures not restricted to the thin-ideal, which allows for a greater understanding of experiences that may

have been previously overlooked by using measures designed for a specific body ideal. Finally, while the current study predicts a more significant relationship based on attachment anxiety, attachment avoidance was also assessed. Thus, this review aims to expand on previous literature by examining how attachment anxiety may act as a moderator that influences the relationship between maternal appearance-focused influence and the development of BID for some, but not all, individuals who are exposed to such messages from their mothers.

CHAPTER III

Method

Participants

Participants were eligible to complete this study if they were between 18 and 26 years old, identified as a woman, could identify a mother (or mother-like figure) present during their childhood/adolescence, and were currently residing in the United States. Only participants who met the age, gender identification, and country of residence criteria (as assessed through participant account information) were presented with this study information through the Prolific Academic platform. Eligibility information was also assessed using the eligibility and demographics questionnaires (Appendices A and B).

A power analysis using G*Power software (Erdfelder et al.,1996) was used to determine the number of participants needed. It was determined that a sample needed to consist of at least 159 participants in order to demonstrate statistical significance ($p < 0.05$) with adequate power (.80). Initial data collection included data from 254 participants through the Prolific Academic research platform. Four participants failed one or more of the attention checks. An additional four participants missed 20% or more on any of the given scales. One participant did not fall within the specified age range, and one participant did not complete all demographic information. Therefore, 10 participants were removed from the data set, resulting in usable data from 244 participants.

All participants (N=244) identified as women between the ages of 18-26 (M= 22, SD = 2.48). Of the final sample, 37.7% (n=92) identified as Asian/Asian-American/Pacific Islander, 10.2% (n=25) identified as Black/African American, 9.8% (n=24) identified as Hispanic/Latina,

26.2% (*n*=64) identified as White, and 15.8% (*n*=39) selected more than one race and/or "Other." The majority (63.1%; *n*=154) of participants identified as heterosexual, 5.7% (*n*=14) identified as asexual, 18.4% (*n*=45) identified as bisexual, 6.6% (*n*=16) identified as lesbian, 2.9% (*n*=7) identified as queer, 0.8% (*n*=2) identified as pansexual, and 2.5% (*n*=6) indicated that they preferred not to respond. When asked if ever diagnosed with an eating disorder by a medical or mental health professional, the majority of participants (91.8%; *n*=224) reported with either "no" or "unsure," and 8.2% (*n*=20) reported "yes." Of those participants who indicated that they had been diagnosed with an eating disorder, the most common was Anorexia (*n*=8), followed by Binge Eating Disorder (*n*=6), Unspecified ED (*n*=4), Other Eating Disorder (*n*=3), and Bulimia (*n*=1). Additionally, 5 participants selected multiple options. When asked if ever diagnosed with Body Dysmorphic Disorder by a medical or mental health professional, the majority of participants (97.2%; *n*=237) reported with either "no" or "unsure," and 2.9% (*n*=7) reported "yes." Body Mass Index (BMI) of participants ranged from 12.75 to 51.58 (*M*= 23.97, *SD* = 6.21). Participants were also asked to identify their ideal body image; 25% (*n*=61) chose the athletic-ideal, 38.1% (*n*=93) chose the curvy-ideal, and 36.9% (*n*=90) chose the thin-ideal.

All participants were able to identify a mother, or mother-like figure, present during their childhood/adolescence. The majority of participants (90.6%; *n*=221) identified their biological mother; 2.5% (*n*=6) identified their adopted mother; 2.5% (*n*=6) identified their aunt; 2% (*n*=5) identified their grandmother; 0.8% (*n*=2) identified their stepmother, and the remaining 1.6% (*n*=4) selected other (specified: "both biological mother and stepmother," "cousin," "friend," and "bf's mother"). Their mothers, or mother-like figures, had a mean age of 52 (*SD*= 6.9). Finally, participants were asked to identify their mother's ideal body image from a provided list; 9.8%

(*n*=24) chose the athletic-ideal, 41.8% (*n*=102) chose the curvy-ideal, and 48.4% (*n*=118) chose the thin-ideal.

Measures

Maternal Appearance-Focused Influence

Maternal appearance-focused influence was measured by combining two existing measures; The Family Experiences Related to Food Questionnaire-Mother (FERFQ-M; Kluck, 2008) and the Verbal Commentary on Physical Appearance Scale (VCOPAS; Herbozo & Thompson, 2006). The FERFQ-M is a 9-item measure that assesses family experiences related to appearance on two short subscales; Negative Maternal Commentary (5 items; e.g., "teased you about your weight/size:" Kluck, 2006, p. 36) and Maternal Modeling (4 items; e.g., "was on a diet to lose weight;" Kluck, 2006, p. 36) of weight and shape. The instrument has response options ranging from 1 (*never/ not at all important*) to 5 (*all the time/ very important*), with higher scores indicating more negative family experiences. The FERFQ is comprised of separate forms to assess for the influence of mothers (or mother-like figure) and fathers (or father-like figure) separately; however only the mother form was utilized for this study. The measure demonstrates moderate internal consistency on both the Negative Maternal Commentary subscale (α= .82) and the Maternal Modeling subscale (α= .73; Kluck, 2006). Construct validity has been established via exploratory and confirmatory analyses (Kluck, 2006). Because the FERFQ-M focuses more heavily on the thin-ideal, the VCOPAS was utilized in conjunction with the FERFQ-M to gain a more global understanding of the impact of appearance-focused commentary. The VCOPAS contains 42 items. Twenty-one items require the participants to indicate how often they have received specific comments with response options ranging from 1 (*never*) to 5 (*always*; Herbozo & Thompson, 2006). These statements load onto three subscales:

Negative Weight and Shape (9 items, e.g., "You need to start watching what you eat;" Herbozo & Thompson, 2006, p. 340), Positive Weight and Shape (5 items; e.g., "I wish I had a body like yours;" Herbozo & Thompson, 2006, p. 340) and Positive General Appearance (7 items; e.g., "Your outfit looks great on you;" Herbozo & Thompson, 2006, p. 340). There are 21 corresponding items asking participants to rate the impact of these statements (e.g., "How did that comment make you feel"), with response options ranging from 1 (*very positive*) to 5 (*very negative*; Herbozo & Thompson, 2006). The VCOPAS has been shown to successfully predict body image disturbance (Herbozo & Thompson, 2006). The VCOPAS demonstrates acceptable internal consistency on the subscale scores of Negative Weight and Shape (α= .89), Positive Weight and Shape (α= .72), and Positive General Appearance (α= .78; Herbozo & Thompson, 2006). Test-retest reliability for subscales Negative Weight and Shape (α= .78), Positive Weight and Shape (α= .91), and Positive General Appearance (α= .87) were all acceptable (Herbozo & Thompson, 2006).

The two different measures were combined into a single 30-item measure of maternal appearance-focused influence with some slight modifications. Only the FERFQ-Mother form was used, which is not uncommon. Additionally, only the 21 initial items of the VCOPAS were used; the following 21 items assessing how the specific comments made participants feel were not used in the current study. Similar modifications to the VCOPAS have been made in the past and have maintained adequate internal consistencies for subscales, ranging from .78 to .94 (Carriere & Kluck, 2014). Both measures utilize similar formats for scoring and interpreting results as they are both scored on a 5-point Likert scale with higher scores indicating greater experiences of appearance-related commentary. The directions were modified slightly to ensure that all anchors utilized the same language and participants understood that they were to respond

to the measure in thinking about the person that fit the role of a mother during childhood/adolescence. Completion of this measure required participants to utilize retrospective recall of comments made beginning in childhood. Response options on the combined measure range from 1 (*never/ not at all important*) to 5 (*all the time/ very important*), with higher scores indicating greater experiences of maternal appearance-focused influence. The instrument is scored by creating a total sum score of all items, with possible scores ranging from 30-150. The reliability of the single measure was assessed during data analysis to determine if the measure's reliability was impacted by making modifications. The Cronbach's alpha for the combined measure of maternal appearance-focused influence was .89, which is considered a good measure of internal consistency.

Body Image Dissatisfaction

The Body Surveillance and Body Shame subscales of the Objectified Body Consciousness Scale (OBCS; McKinley & Hyde, 1996) were used to measure the construct of body image dissatisfaction. Participants were asked to identify the degree to which several items describe their attitudes and behaviors related to their body image. Participants were asked to respond on a 7-point Likert scale with response options ranging from 1 (*strongly disagree*) to 7 (*strongly agree*), with some items requiring reverse scoring (McKinley & Hyde, 1996). The Body Surveillance subscale measures how an individual views their body by defining how it looks (8 items; e.g., "I rarely think about how I look" [reverse scored]; McKinley & Hyde, 1996, p. 191). The Body Shame subscale measures feelings of shame experienced when an individual believes that their body does not meet the cultural standards (8 items; e.g., "I feel ashamed of myself when I haven't made an effort to look my best;" McKinley & Hyde, 1996, p. 191). The OBCS also contains a subscale of Body Control, but as it is not relevant for the current review,

only the subscales of Body Surveillance and Body Shame were utilized. Several other researchers decided to exclude the Body Control subscale in their research (Choukas- Bradley et al., 2020; Kashubeck-West et al., 2018; Moradi & Varnes, 2017). The total score is calculated by reverse scoring the appropriate items and finding the average score for each subscale. Averaged scores for each subscale range from 1-7, with higher scores suggesting greater body image dissatisfaction for the respective domain. The OBCS demonstrates acceptable test-retest reliability at 2-weeks for Body Surveillance and Body Shame of .79 for both (Moradi & Varnes, 2017). The subscale scores had significant positive correlations with one another and with the Internalization subscale of the Sociocultural Attitudes Towards Appearance Questionnaire – 3rd version, supporting the convergent validity of the measure (Moradi & Varnes, 2017). The measure demonstrated acceptable internal consistency for both the Body Surveillance subscale (α=.79) and Body Shame subscale (α=.84; McKinley & Hyde, 1996) in previous studies. In the current sample, the Cronbach's alphas for the Body Shame and Body Surveillance subscales of the OBCS were both considered in the good range at .85 and .86, respectively.

Adult Attachment

A modified version of the Experiences in Close Relationship Scale-Short form (ECR-S; Wei et al., 2007) was used to assess adult attachment style. The ECR-S is a short-form version of the 36-item Experiences in Close Relationships Scale (ECR; Brennan et al., 1998) that examines adult attachment through separate subscales of attachment anxiety and attachment avoidance. The ECR-S is a 12-item measure comprised of 6 items related to attachment anxiety and 6 items related to attachment avoidance. As the ECR-S was originally developed to examine attachment in romantic relationships, slight modifications in language were made to instructions and several items to assess for attachment relationships with mothers instead. Participants were asked to

respond with how much they agree or disagree with each of the statements related to their relationships with their mother based on a 7-point Likert scale with response options ranging from 1 (*strongly disagree)* to 7 (*strongly agree*; Wei et al., 2007). Some of the items required reverse scoring. See Wei et al. (2007) for original items. An example of a modified item on the Anxiety subscale is "I need a lot of reassurance that I am loved by my mother." An example of a modified item on the Avoidance subscale is "It helps to turn to my mother in times of need" (reverse scored). Wei et al. (2007) found that psychometric properties for the ECR-S were similar the original 36-item ECR. Construct validity for the ECR-S was supported in several ways; attachment anxiety was positively associated with emotional reactivity and excessive reassurance-seeking; attachment avoidance was significantly associated with emotional cutoff and fear of intimacy; and both attachment anxiety and avoidance were significantly positively correlated with mood concerns, interpersonal distress and loneliness (Wei et al., 2007). The Anxiety and Avoidance subscales on the ECR-S were correlated at .28, indicating that the subscales did assess two separate and unique dimensions of attachment (Wei et al., 2007). Additionally, the ECR-S demonstrates acceptable test-retest reliability over a 3-week period for Anxiety (r = .82) and Avoidance (r = .89; Wei et al., 2007). The measure demonstrated acceptable internal consistency on both subscales in previous studies, with coefficients ranging from .77 to .86 for Anxiety and .78 to .88 for Avoidance (Wei et al., 2007). In the current sample, the Cronbach's alpha for the Avoidance subscale of the ECR-S was .89, which is considered good. The Cronbach's alpha for the Anxiety subscale of the ECR-S in the current sample was .65, which is considered in the questionable range. Analysis of the Item Total Statistics within the Reliability Statistics showed that removing a single item (#10; "I get frustrated if my mother is not available when I need her") on the ECR-S Anxiety subscale

increased the Cronbach's alpha to a score of .69. Therefore, that item was removed to increase the internal consistency of the Anxiety subscale closer toward the acceptable range (.7). Scores on the Avoidance subscale ranged from 6 to 42, with higher scores indicating higher attachment avoidance. Scores on the modified Anxiety subscale ranged from 5 to 31, with higher scores indicating higher attachment anxiety.

Demographics Information

All participants completed a demographics questionnaire (Appendix B), which consisted of multiple-choice and text-box entry items. Participants were asked to indicate their age, racial or ethnic identity, sexual orientation, and relationship status. Participants were asked to identify their relationship with the person who fulfilled the role of mother, or mother-like figure, during their childhood from a provided list (adoptive mother, aunt, biological mother, foster mother, grandmother, or stepmother) with the opportunity to specify if their relationship was not listed. Participants were asked to provide their height (in feet and inches) and weight (in pounds) to measure BMI. Body Mass Index was calculated by creating a new variable in SPSS using the following formula: 703 * weight/height^2 (Kent State University Libraries, 2021). Participants were asked to identify their body image ideal, and their mother's from a provided list of ideals (athletic-ideal, curvy-ideal, and thin-ideal) and a brief description of each. Finally, to assess for a history of eating disorders, participants were asked about previous diagnoses of eating disorder(s) and Body Dysmorphic Disorder by a medical or mental health professional. If participants endorsed that they had been clinically diagnosed with an eating disorder, they were asked to identify their diagnosis ("If yes, please specify which eating disorder(s) you have been diagnosed with?") from a provided list of DSM-5 eating disorders (Anorexia Nervosa, Binge

Eating Disorder, Bulimia Nervosa, Other Specified Feeding or Eating Disorder, and Unspecified Feeding or Eating Disorder).

Procedure

This study was reviewed and designated Exempt by the Institutional Review Board before data collection. Participants were recruited through the Prolific Academic research platform, which allows users to see posting forms for a variety of studies they qualify for based on demographic information provided during account setup. First, eligible participants were presented with the Prolific Academic posting form (Appendix C), a description of the study, eligibility criteria, and a link to the study if interested. The entire survey was completed on Qualtrics. If interested in completing the survey, users selected the Qualtrics link and were directed to an information letter that further described the study, outlined any costs and rewards associated with participation, and explained that participation was voluntary, anonymous, and could end at any time (Appendix D). They were asked to read the information letter and indicate whether or not they consented to participate in the study. If a participant selected "I do not consent," they were redirected to a screen asking them to close their window. However, by selecting "I consent," participants indicated that they accepted the outlined terms and were able to progress to the remainder of the survey. All eligible participants were presented with the measures of maternal appearance-focused influence (combined FERFQ-M and VCOPAS measure), body image dissatisfaction (Body Surveillance and Body Shame subscales of the OBCS), and attachment anxiety and attachment avoidance (ECR-S). Measures were presented in random order to reduce ordering effects. Three attention checks (e.g., "For this item, please select 'Rarely / Mildly Important'") were embedded throughout the measures to ensure participants were actively engaged and to strengthen the validity of responses. Only participants

who provided correct responses to all three attention checks were included in the final sample. Finally, participants were presented with the demographics questionnaire (Appendix B). After completing all components of the survey, participants were provided with a referral form (Appendix E) that included a list of mental health resources. Participants were compensated with a monetary deposit ($1.74) into their Prolific Academic account upon completing and approving their study responses.

CHAPTER IV

Results

Bivariate Correlation Analysis

SPSS software was used in the data cleaning and statistical analysis processes. Estimates of reliability were examined for the subscales of all measures in this study as reported in the Measures section of Chapter 3. This was especially important given the combination of two existing measures into a single measure of maternal appearance-focused influence and the slight modifications to language (e.g., changing "partner" to "mother") made in the ECR-S (Wei et al., 2007). Pearson correlations were conducted to determine the relationships among study variables. All measures were found to be significantly and positively correlated with one another. Table 1 demonstrates the descriptive statistics and Pearson correlations for all measures used.

Table 1

Descriptive Statistics for Study Measures

Scale/Subscale	*M*	*SD*	1	2	3	4	5
1. Maternal Influence	69.4	18.5	--	.193**	.207**	.370**	.149*
2. Attachment Avoidance	20.6	9.6		--	.386**	.186**	.134*
3. Attachment Anxiety	15.2	6.1			--	.335**	.144*
4. Body Shame	3.8	1.2				--	.573**
5. Body Surveillance	4.7	1.0					--

**. Correlation is significant at the 0.01 level (2-tailed).

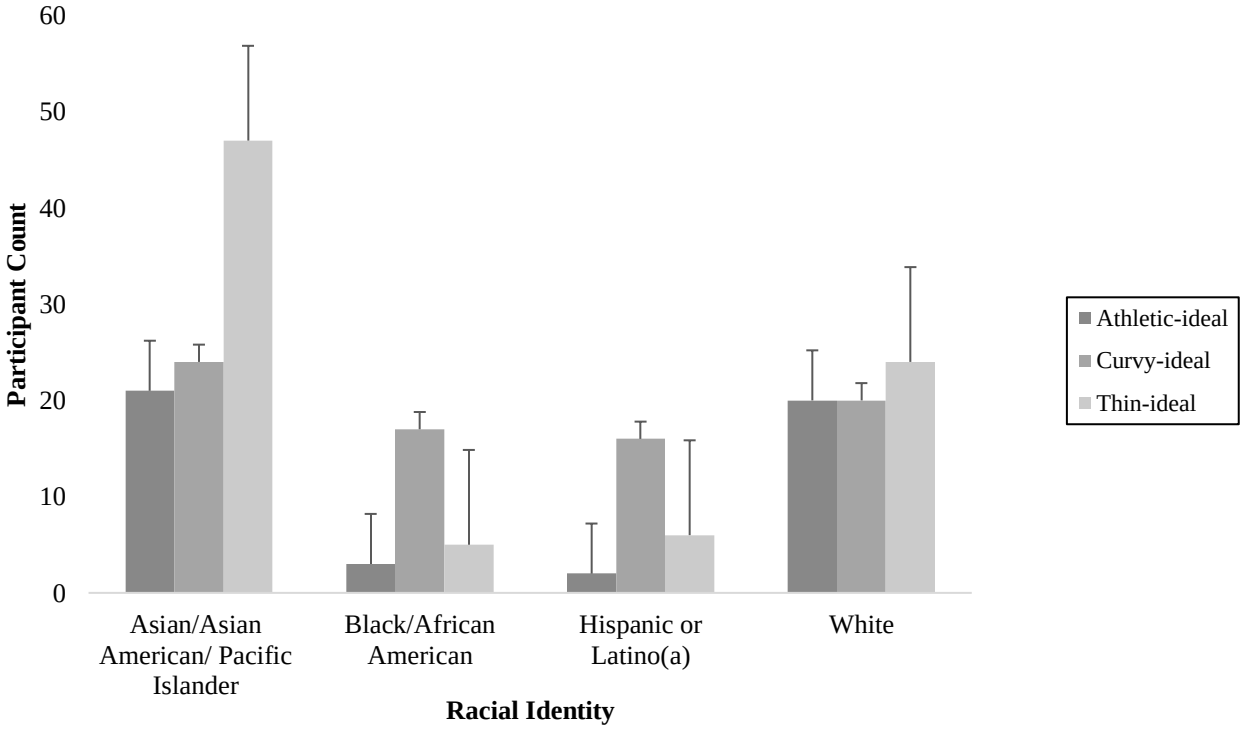
*. Correlation is significant at the 0.05 level (2-tailed).

Chi-Square Analyses

A chi-square analysis was conducted to assess if body image ideals differed based on the racial identity of participants. Results indicate a significant association between the two constructs (X^2 (6) = 27.82, p <.001). In other words, there appears to be a connection, that is not likely due to chance alone, between one's racial background and the body image ideal that they ascribe to. As the chi-square test demonstrated significance overall, the standardized residual (SR) level was examined to assess which level(s) contributed to the significance (+/-1.96 based on an alpha level of .05). Statistically significant relationships were found between identification with the curvy-ideal for Black/African American women (68%; SR= 2.5) and Hispanic or Latina women (66.7%; SR= 2.3) in this sample, which contributed to the significance seen in this relationship overall. Other patterns emerged but were not to the level of statistical significance. Among Asian/Asian American/Pacific Islander women, 22.8% (SR= .1) identified with the athletic-ideal, 26.1% (SR= -1.8) identified with the curvy-ideal, and 51.1% (SR= 1.7) identified with the thin-ideal. Among Black/African American women, 12% (SR= -1.1) identified with the athletic-ideal, and 20% (SR= -1.6) identified with the thin-ideal. Among Hispanic or Latina women 8.3% (SR= -1.5) identified with the athletic-ideal and 25% (SR= -1.2) identified with the thin-ideal. Finally, among White women, 31.3% (SR= 1.5) identified with the athletic-ideal, 31.3% (SR= -.8) identified with the curvy-ideal, and 37.5% (SR= -.3) identified with the thin-ideal. One participant identified her racial identity as "other" and was therefore removed from the dataset for this analysis. See Figure 2 below for a bar chart demonstrating the breakdown of body image ideal by racial identity.

Figure 2

Participant Body Image Ideal and Racial Identity



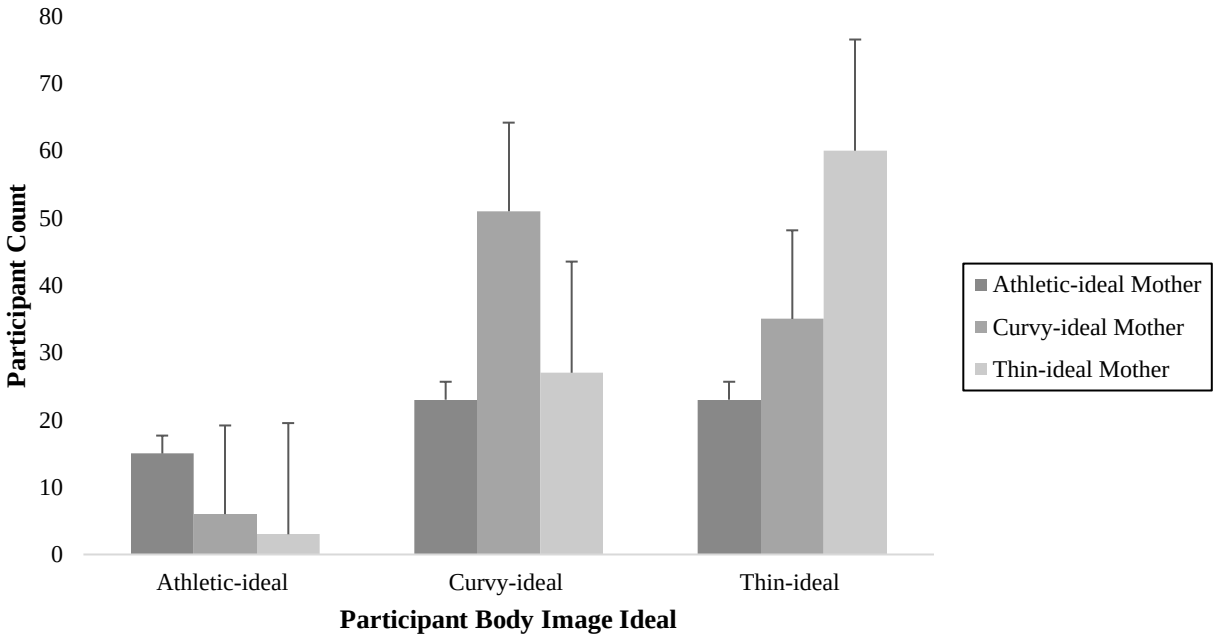
Note. Body image ideal is shown compared to participant's racial identity. Error bars show standard error.

A second chi-square analysis was conducted to assess if body image ideals of participants differed from what they perceived their mother's body image ideals to be. Results indicate a significant association between the two constructs that is not likely due to chance (X^2 (4) = 35.34, p <.001). In other words, there is a strong relationship between women's body image ideal and the ideal they believe their mothers ascribed to. As the chi-square test demonstrated significance overall, the standardized residual (SR) level was examined to assess which level(s) contributed to the significance (+/-1.96 based on an alpha level of .05). For participants who

identified with the athletic-ideal, there was a significant association with the athletic-ideal for mothers (62%; SR= 3.7). Similarly, for participants who identified with the curvy-ideal, there was a significant association with the curvy-ideal for mothers (50.5%; SR= 2.1). For participants who identified with the thin-ideal, there was a significant association with the thin-ideal for mothers (50.8%; SR= 2.5) and a significant association in the negative direction with the athletic-ideal for mothers (12.5%; SR= -2). Other relationships were all in the negative direction and were considered non-significant. The results are as follows: athletic-ideal participants identified 22.8% (SR= -.5) curvy-ideal for mothers and 19.5% (SR= -1.2) thin-ideal for mothers; curvy-ideal participants identified 25% (SR= -1.0) athletic-ideal for mothers and 29.7% (SR= -1.4) thin-ideal for mothers; and thin-ideal participants identified 26.7% (SR= -1.7) curvy-ideal for mothers. See Figure 3 below for a bar chart demonstrating the breakdown of participant's and mother's body image ideals.

Figure 3

Body Image Ideal of Participants and Mothers



Note. Participant's body image ideal is shown compared to mother's perceived body image ideal. Error bars show standard error.

Hierarchical Linear Regression Analyses

The purpose of this study was to determine the extent to which attachment anxiety serves as a moderator in the relationship between maternal appearance-focused influence and body image dissatisfaction in women. Two hierarchical linear regression analyses were conducted to address the hypotheses; one examining the outcome of body shame and one examining the outcome of body surveillance as two indices of body image dissatisfaction. Variables of attachment anxiety, attachment avoidance, and maternal appearance-focused influence were standardized using z-scores. The interaction variable (maternal appearance-focused influence x

attachment anxiety) was created using standardized main effect variables. The regression residuals for skewness and kurtosis were examined in SPSS to assess for normality, using an alpha level of $p = .001$ ($z = +/-3.29$), within the sample. The results were as follows: skewness of body shame ($z = 1.33$); kurtosis of body shame ($z = -.71$); skewness of body surveillance ($z = -1.76$); and kurtosis of body surveillance ($z = -.11$). This data suggests that the skewness and kurtosis for the distributions were not outside the range of normality. Therefore, no transformations of the data were necessary to conduct the regressions.

Three control variables (eating disorder history, Body Dysmorphic Disorder history, and body image ideal) were identified. Eating disorder and Body Dysmorphic Disorder history were dummy coded (0= no/unsure; 1= yes). Body image ideal contained 3 levels (athletic-ideal, curvy-ideal, thin-ideal) and could not be dummy coded. Effect coding was used to assess for coefficient estimates for body image ideal. Effect coding resulted in two new variables; one measuring the thin-ideal against a combined athletic-ideal and curvy-ideal (ThinVOther), and one measuring the curvy-ideal against a combined athletic-ideal and thin-ideal (CurvyVOther). Body image ideal was controlled for in this study, as opposed to participant racial identity, for several reasons. While there are patterns in body image ideals among members of the same racial background, there is certainly overlap between racial groups and body image ideal. For example, some African American women seek the thin-ideal and some White women wish to be curvier.

Additionally, there is a gap in the research related to the body image dissatisfaction and body image ideals of women of certain racial backgrounds (e.g., Asian-American women who made up a large portion of the current sample, as noted in Discussion below). Controlling for racial identity might have provided greater data about race-specific patterns; however, the interest of this study was less on those specific characteristics and instead of more global

evaluations of body satisfaction based on the body image ideals that exist in United States culture today. For these reasons, the researcher chose to focus on common body image ideals instead of racial identity.

One hierarchical linear regression analysis was used to examine the hypothesized predictors on the outcome of body surveillance. The control variables (eating disorder history, Body Dysmorphic Disorder history, Thin vs. other body image ideal, and Curvy vs. others body image ideal) were entered at Step 1, explaining 8.8% of the variance in the outcome of body surveillance (see Table 2 for results at each step). Having previously been diagnosed with an eating disorder predicted greater body surveillance (*B*= .53, *p* = .036). Having previously been diagnosed with Body Dysmorphic Disorder did not predict greater body surveillance (*B*= .73, *p* = .08). Identification with the Thin vs. other body image ideal predicted greater body surveillance (*B*=.25, *p* = .007). Alternatively, identification with the Curvy vs. other body image ideal predicted less body surveillance (*B* = -.29, *p* = .001) in this sample.

Attachment anxiety and attachment avoidance were entered at step 2 and did not significantly increase the variance explained in body surveillance, ΔR^2 = .022, *F* change (2, 237) = 2.89, *p* = .058. Maternal appearance-focused influence was entered at step 3 and did not significantly increase the variance explained in body surveillance, ΔR^2 = .007, *F* change (1, 236) = 1.75, *p* = .186. After entry of the interaction (maternal appearance-focused influence x attachment anxiety) at step 4, the total variance explained by the model as a whole was 12.4%. The interaction did not significantly increase variance explained in body surveillance, ΔR^2 = .008, *F* change (1, 235) = 2.03, *p* = .155. Thus, related to body surveillance, only the control variables were found to be significant.

Table 2

Summary of Hierarchical Linear Regression Analysis for Variables Predicting Body Surveillance (N=244)

Predictor	R^2	ΔR^2	*B*	*SE*	β	*t*
Step 1	.088**	.088**				
ED History			.53	.25	.13	2.10*
BDD History			.73	.41	.11	1.75
ThinVOther Ideal			.25	.09	.18	2.72*
CurvyVOther Ideal			-.29	.09	-.21	-3.23*
Step 2	.110	.022				
ED History			.52	.25	.13	2.07*
BDD History			.60	.42	.09	1.43
ThinVOther Ideal			.23	.09	.17	2.57*
CurvyVOther Ideal			-.31	.09	-.22	-3.40*
Attachment Anxiety			.09	.07	.09	1.36
Attachment Avoidance			.09	.07	.08	1.32
Step 3	.116	.007				
ED History			.48	.25	.12	1.89
BDD History			.52	.42	.08	1.22
ThinVOther Ideal			.24	.09	.17	2.63*
CurvyVOther Ideal			-.31	.09	-.22	-3.42*
Attachment Anxiety			.08	.07	.07	1.17
Attachment Avoidance			.08	.07	.07	1.17
Maternal Influence			.09	.06	.08	1.32
Step 4	.124	.008				
ED History			.51	.25	.13	2.01*
BDD History			.47	.42	.07	1.11
ThinVOther Ideal			.23	.09	.17	2.59*
CurvyVOther Ideal			-.30	.09	-.22	-3.35*
Attachment Anxiety			.07	.07	.07	1.03
Attachment Avoidance			.09	.07	.08	1.25
Maternal Influence			.09	.06	.09	1.41

Interaction (Maternal Influence x Attachment Anxiety)	-.09	.06	-.08	-1.42

Note: $N = 244$. $*p < .05$ $**p < .001$. ED = Eating Disorder. BDD = Body Dysmorphic Disorder.

A second hierarchical linear regression analysis was used to examine the hypothesized predictors on the body image dissatisfaction outcome of body shame. The control variables (eating disorder history, Body Dysmorphic Disorder history, Thin vs. other body image ideal, and Curvy vs. others body image ideal) were entered at step 1, explaining 6% of the variance in the outcome of body shame (see Table 3 for results at each step). Having previously been diagnosed with an eating disorder predicted greater body shame ($B = .79$, $p = .010$). Having previously been diagnosed with Body Dysmorphic Disorder did not predict greater body shame ($B = .72$, $p = .154$). Identification with body image ideal did not predict greater body shame; Thin vs. other ($B = .05$, $p = .594$), Curvy vs. other ($B = .10$, $p = .343$). Attachment anxiety and attachment avoidance were entered at step 2, explaining an additional 15.4% of the variance in body shame, $\Delta R^2 = .095$, F change (2, 237) = 13.28, $p < .001$. Attachment anxiety predicted greater body shame ($B = .36$, $p < .001$); however, attachment avoidance did not ($B = .07$, $p = .390$). Maternal appearance-focused influence was entered at step 3, explaining an additional 22.7% of variance in body shame, $\Delta R^2 = .073$, F change (1, 236) = 22.20, $p < .001$. Maternal appearance-focused influence remained a significant predictor ($B = .36$, $p < .001$). After entry of the interaction (maternal appearance-focused influence x attachment anxiety) at step 4, the total variance explained by the model as a whole was 24.2%. The interaction significantly increased variance explained in body shame, $\Delta R^2 = .015$, F change (1, 235) = 4.68, $p = .031$. Thus, after accounting for the control variables, all hypothesized predictors, except for attachment avoidance, were supported in this analysis.

Table 3

Summary of Hierarchical Linear Regression Analysis for Variables Predicting Body Shame (N=244)

Predictor	R^2	ΔR^2	*B*	*SE*	β	*t*
Step 1	.060*	.060*				
ED History			.79	.30	.17	2.61*
BDD History			.72	.50	.09	1.43
ThinVOther Ideal			.05	.11	.03	.53
CurvyVOther Ideal			.10	.11	.06	.94
Step 2	.154**	.095**				
ED History			.72	.29	.15	2.48*
BDD History			.49	.48	.06	1.02
ThinVOther Ideal			.02	.10	.01	.19
CurvyVOther Ideal			.07	.10	.04	.70
Attachment Anxiety			.36	.08	.28	4.39**
Attachment Avoidance			.07	.08	.05	.86
Step 3	.227**	.073**				
ED History			.56	.28	.12	1.99*
BDD History			.16	.47	.02	.35
ThinVOther Ideal			.03	.10	.02	.38
CurvyVOther Ideal			.06	.10	.04	.67
Attachment Anxiety			.31	.08	.24	3.91**
Attachment Avoidance			.03	.08	.02	.37
Maternal Influence			.36	.07	.28	4.71**
Step 4	.242*	.015*				
ED History			.61	.28	.13	2.17*
BDD History			.08	.46	.01	.18
ThinVOther Ideal			.03	.10	.02	.32
CurvyVOther Ideal			.08	.10	.04	.79
Attachment Anxiety			.29	.08	.23	3.71**
Attachment Avoidance			.04	.08	.03	.49
Maternal Influence			.37	.76	.29	4.87**

Interaction (Maternal Influence x Attachment Anxiety)	-.16	.07	-.12	-2.16*

Note: $N = 244$. $*p < .05$ $**p < .001$. ED = Eating Disorder. BDD = Body Dysmorphic Disorder.

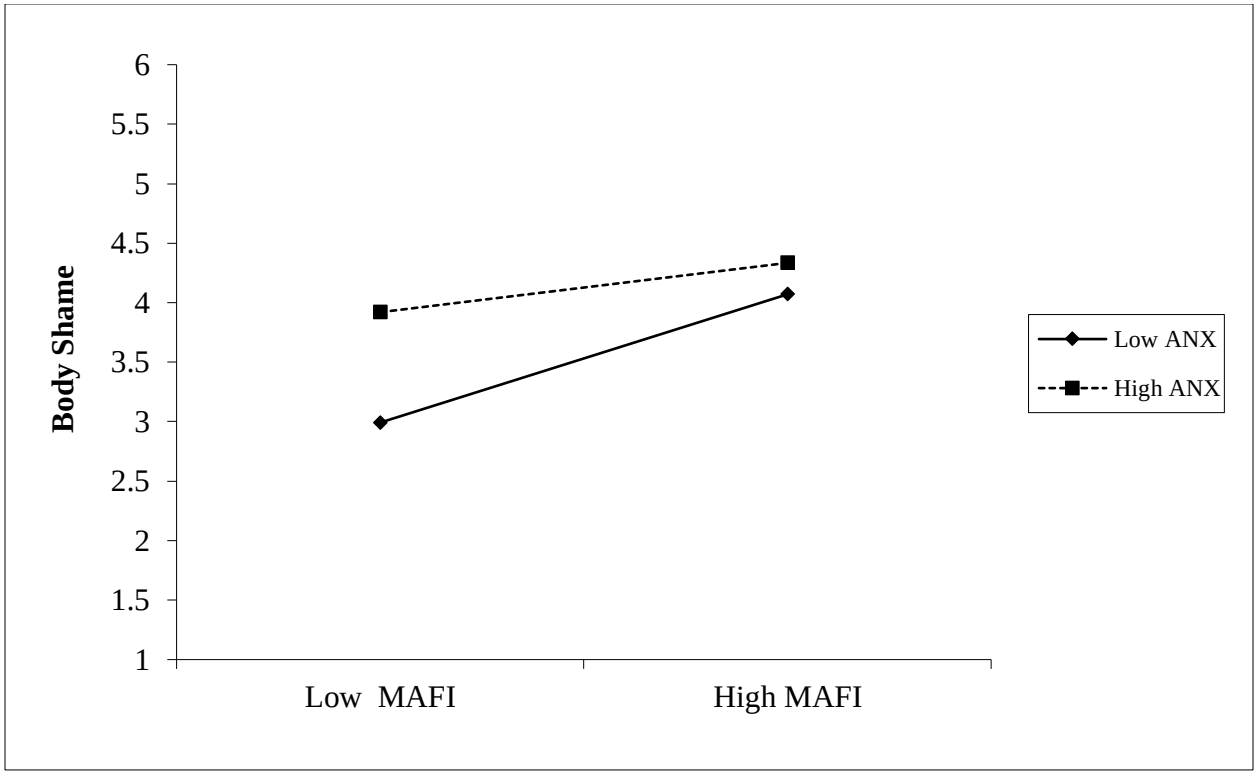
Simple Slope Analysis

As the two-way interaction (maternal appearance-focused influence x attachment anxiety) in the analysis of body shame was significant, I probed the interaction effect for simple slopes associated with hypothesis 3. Hypotheses 3a states that there will be a significant moderate positive relationship between maternal appearance-focused influence and BID among participants who report high attachment anxiety. The simple slope analysis of high reported attachment anxiety resulted in a gradient of .207, a *t*-value of 1.89, and a *p*-value of .060. Results indicate a positive slope that was not significant, therefore, hypothesis 3a was not supported. Hypothesis 3b states that there will be a small but significant positive relationship between maternal appearance-focused influence and BID among participants who report low attachment anxiety. The simple slope analysis of low reported attachment anxiety resulted in a gradient of .539, a *t*-value of 4.92, and a *p*-value of <.001. Results indicate a significant positive slope; however, the simple slope was inconsistent with the predictors, therefore, hypothesis 3b was not supported. The interaction effect between maternal appearance-focused influence and attachment anxiety was significant ($p = .031$) and accounted for 1.5% of the variance in the regression model. A test of the difference between slopes was conducted, demonstrating that the two lines were significantly different from one another (*p*-value < .000). See Figure 4 below for illustration. Multicollinearity was examined to assess for highly related variables in the regression. All variables were found to be within the appropriate range on the Variance Inflation Factor (VIF) and tolerance output, indicating that multicollinearity was not a concern in this

study. Results indicate that as maternal appearance-focused influence increases, so does the severity of body shame. Attachment anxiety served as a moderator in the relationship between maternal appearance-focused influence and body shame, such that the relationship is significant for those who report low attachment anxiety. Thus, it can be concluded that feelings of body shame for individuals who reported low attachment anxiety are exacerbated as maternal appearance-focused influence increases.

Figure 4

Interaction Between Maternal Appearance-Focused Influence and Attachment Anxiety on Body Shame



Note. ANX = Attachment anxiety. MAFI = Maternal appearance-focused influence.

CHAPTER V

Discussion

The purpose of the current study was twofold: first, to investigate the relationship between maternal appearance-focused influence and body image dissatisfaction among women; second, to explore attachment anxiety as a moderator for that relationship. Among young women in the United States, body image dissatisfaction and related consequences pose a serious and growing concern. Previous research shows the influence of family relationships through the sociocultural model on women's body image satisfaction (Stice, 1994; Saunders & Eaton, 2018). Maternal commentary and modeling behaviors related to appearance have been found to serve as strong contributing factors to body image dissatisfaction in young women (Clark & Tiggemann, 2007; Kluck, 2010). The relationship between attachment style and body image has also been explored in the previous literature (Zachrisson & Skarderud, 2010). However, few studies have examined all of these concepts together. The current study allows for greater exploration of these relationships and greater generalizability of findings given a more racially diverse sample and inclusion of several body image ideals. In the past, much body image literature has focused on dissatisfaction in terms of a goal of thinness, which is not inclusive of the body image ideals of all women (Betz & Ramsey, 2017; Gordon et al., 2010).

Further, many related measures (including the body image dissatisfaction and maternal appearance-focused influence measures utilized in the current study) were normed with samples of majority White women. This can lead to a valuable understanding of body image dissatisfaction related to a goal of being thin or the experiences of White women. However, there are many women, especially many women of color, whose experiences may be overlooked or

ignored as a result. The current study obtained a more racially diverse sample to understand the experiences of women with greater diversity in racial background and therefore increase the generalizability of findings.

When examining the proposed hypotheses, mixed results were found. The current study utilized two subscales to measure body image dissatisfaction: body shame and body surveillance. The only statistically significant finding related to body surveillance was the impact of the control variables. The presence of an eating disorder was statistically significant at almost every step, including the final step, for body shame and body surveillance. This finding is not surprising given the connection between eating disorders and body image dissatisfaction in previous literature (Lowe et al., 2019; Saunders & Eaton, 2018). Body Dysmorphic Disorder was not shown to be a significant contribution at any step of either regression, which may have resulted from so few (n=7) respondents endorsing a history of Body Dysmorphic Disorder in this sample.

Body image ideal was significant at every level of the body surveillance analyses, suggesting a connection between body image ideals and the tendency to engage in body surveillance. It is important to note that the impact appears to differ based on the type of ideal. Results indicate that identification with the thin-ideal (opposed to the combined athletic and curvy ideals) predicted greater body surveillance. These findings suggest that ascribing to a thin-ideal body image is a risk factor for engaging in body surveillance behaviors. This finding is in line with previous research explaining body surveillance as a tool for self-objectification, allowing women to view their bodies from an outsider's perspective and evaluate if they are complying with their internalized ideals (McKinley & Hyde, 1996; Saunders & Eaton, 2018). Alternatively, identification with the curvy-ideal (opposed to the combined athletic and thin

ideals) predicted less body surveillance in this sample. These findings suggest that ascribing to the curvy-ideal may serve as a buffer against engaging in body surveillance behaviors. This finding is also consistent with previous literature suggesting that African American and Latina women are more likely to ascribe to the curvy-ideal and tend to be more flexible, less concerned about weight, and less likely to engage in social comparisons (Grabe & Hyde, 2006; Hunter et al., 2017). These attributes may contribute to the curvy-ideal serving as a protective factor against paying significant amounts of attention to one's body and how much or how little they align with their body image ideal, as body surveillance does.

Attachment anxiety and attachment avoidance were examined as unique predictors of body image dissatisfaction associated with hypothesis 1. Attachment anxiety was not found to predict greater body surveillance. However, attachment anxiety was found to significantly predict body image dissatisfaction related to body shame. This finding is consistent with the literature, as body shame accompanies women's internalization body image ideals (Bartky, 1988). Additionally, individuals with higher attachment anxiety often report lower self-esteem and self-worth that is often dependent on the approval of others (Domingue & Mollen, 2009) and a tendency to engage in "hypervigilant attention," "heightened recall," "rumination," and experience heightened negative emotions during distress (Mikulincer & Shaver, 2019, p. 7). Together, these findings support that those with higher attachment anxiety, and therefore a greater need for approval and heightened reactions when distressed, experience greater internalization of body image standards. As a result, anxiously attached individuals experience greater feelings of shame when they believe they do not align with their identified body image ideal.

Attachment avoidance alone was not found to significantly predict greater body surveillance or body shame. Given that attachment avoidance has been shown to serve as a risk factor for psychopathology development and difficulty in emotion regulation (Mikulincer & Shaver, 2019), it was hypothesized that individuals high on attachment avoidance would also report elevated body image dissatisfaction. However, this was not supported by the current study. This finding could be understood as avoidantly attached children tend to crave self-reliance and find discomfort in emotional closeness and vulnerability with their parents (Mikulincer & Shaver, 2019). Therefore, they would be less likely to desire attention and/or approval. As a result, they may not internalize body image ideals to the same extent as their anxiously attached counterparts.

To explore hypothesis 2, maternal appearance-focused influence was examined. After considering the control variables, attachment anxiety, and attachment avoidance, the introduction of maternal appearance-focused influence was found to significantly predict body image dissatisfaction as assessed by body shame. An additional 7.3% of the variation in reported body shame was explained by introducing maternal appearance-focused influence. This significant increase is meaningful and suggests that maternal appearance-focused influence is an important factor to consider in this relationship. Women in this study who experienced greater instances of commentary or modeling behaviors related to weight, shape, size, or general appearance by their mothers were also more likely to report heightened negative feelings about their bodies. This finding is important because it suggests that maternal appearance-focused influence significantly impacts daughter's negative feelings about their bodies, even when using a slightly modified scale and a population with greater racial diversity than previously assessed. Of note, both original measures used to create the single maternal appearance-focused influence measure used

in this study were normed with majority White samples (Kluck, 2008; Herbozo & Thompson, 2006). Authors of the Verbal Commentary on Physical Appearance Scale noted the sample diversity as a limitation in their study and indicated that future assessment of the measure with a more racially diverse sample would be warranted (Herbozo & Thompson, 2006).

Maternal appearance-focused influence did not significantly predict greater body image dissatisfaction as assessed by body surveillance. In other words, heightened maternal commentary and modeling behaviors did not increase women's tendency to engage in self-monitoring, self-objectification, or body-related comparisons in this sample. This is inconsistent with the previous literature related to maternal modeling and the impact of self-critical and negative conversation styles (e.g., fat-talk) on the increase of body image dissatisfaction, disordered eating patterns, body objectification, and body surveillance behaviors in daughters (Kichler & Crowther, 2001; Rogers et al., 2019). One explanation could be that fat-talk and previous literature related to maternal modeling are more aligned with a goal of thinness alone. Therefore, these concepts may not be as relevant for women who ascribe to body image ideals other than the thin-ideal, which accounted for roughly 63% of the current sample.

Finally, the interaction between maternal appearance-focused influence and attachment anxiety was explored in association with hypotheses 3. Attachment anxiety was found to moderate the relationship between maternal appearance-focused influence and body image dissatisfaction, as measured through body shame only. Subsequent analysis of the moderation effect showed a significant positive relationship between maternal appearance-focused influence and body shame for individuals reporting low attachment anxiety. These findings suggest that the relationship between maternal appearance-focused influence and body shame depends on the participants' degree of attachment anxiety. A non-significant positive relationship between

maternal appearance-focused influence and body shame was found among participants who reported high attachment anxiety. Results also show that ultimately, high attachment anxiety is related to higher body shame overall. Perhaps the relationship between high attachment anxiety and body shame is so significant on its own that the increase of maternal appearance-focused influence does not hold as much additional power for some individuals. There could potentially be other physical or mental health implications of high attachment anxiety outside of maternal appearance-focused influence that were not accounted for in the current study and that contribute to higher feelings of body shame. Also, body shame was lowest for women who reported low levels of attachment anxiety and low levels of maternal appearance-focused influence. Perhaps young women need both low attachment anxiety and low maternal appearance-focused influence to buffer against feelings of body shame.

Surprisingly, attachment avoidance was not found to be a significant predictor in this sample. Association between avoidant attachment and body image is less clear than the relationship between attachment anxiety and body image. However, there is some previous research that offers insight into that dynamic. For example, a recent study found evidence to suggest that attachment avoidance may serve as a predictor for increased binge-eating following bariatric surgery (Leung et al., 2019). Additionally, modest but significant correlations have been found between attachment avoidance in romantic relationships and dysfunctional appearance among women (Cash et al., 2004). These studies may have lacked generalizability given the specificity of participant requirements. Alternatively, perhaps the make-up of attachment style in a romantic relationship differs too greatly from the dynamic of attachment style with mothers. Therefore, current results were found to be inconsistent with the suggestion in some previous research. Non-significant results in this study are not to suggest that women with higher

attachment avoidance do not experience dissatisfaction with their body image. Rather, the body image dissatisfaction they experience may be related to factors other than the ones of surveillance and shame, as explored in the current study. More clarity is needed on the unique role of attachment avoidance and the development and severity of body image dissatisfaction.

It is also curious that the hypotheses were not supported related to the outcome of body surveillance within this sample. This is inconsistent with the previous literature on the concept of body surveillance and self-monitoring behaviors as related to attachment style and sociocultural influences. Body surveillance is a tool for self-objectification as it allows women to assess if they are complying with their cultural body ideals (McKinley & Hyde, 1996; Saunders & Eaton, 2018). Along these lines, many of the items used to assess for body surveillance involve self-monitoring and exploring the external view of one's body. Results suggest that the hypothesized predictors of attachment anxiety, attachment avoidance, and maternal appearance-focused influence were better at predicting body shame than body surveillance in this sample.

As an interesting note on body image ideals, participants were asked to identify their body image ideal and what they perceive their mother's ideal to be. The chi-square analysis results indicate a strong connection between women's body image ideals and the ideal they perceive their mothers to ascribe to. Interestingly, those aligned with the thin-ideal also indicated a significant association in the negative direction if their mother's ascribed with the athletic-ideal, meaning that there were fewer mother athletic-ideal and participants thin-ideal participants pairings than expected. The results indicate significant generational alignment in body image ideals across all three ideals in this sample. Roughly 50% of participants in the curvy and thin-ideal categories and 62.5% in the athletic-ideal aligned with their mother's ideals. Emerging research focuses on the beginning of a shift in body image ideals in United States culture overall.

While there is not enough evidence in the current analysis to support this finding, it would be interesting to see if these trends change in the future.

Further, the relationship between racial identity and body image ideal in this sample was examined using a chi-square analysis and was found to be significant ($p < .001$). Findings suggest strong associations between one's racial identity and the body image ideal they ascribe to. Consistent with previous literature, Black/African American and Hispanic and Latina women were most likely to identify with the curvy-ideal (e.g., Awad et al., 2015; Hunter et al., 2017). Interestingly, White women reported a fairly even distribution across body image ideals in this sample. This is inconsistent with previous literature that posits endorsement of the thin-ideal among White women (e.g., Fujioka et al., 2009). It appears that Asian/Asian American/Pacific Islander women were more likely to endorse alignment with the thin-ideal, though it was not statistically significant in the current study. There are gaps in the literature about the experiences of body image dissatisfaction and body image ideals among certain racial and/or ethnic groups (i.e., Native American women, Asian/Asian-American/Pacific-Islander women, biracial women, and multiracial women). Interestingly, the current study had an unexpectedly large percentage of participants who identified as Asian/Asian American/Pacific Islander. These findings offer support that examining the results based on race may have left additional room for error in interpretation.

Implications

Findings from this study offer several important implications. Satisfaction with one's body has been shown in previous research to be a key part of one's physical and mental wellbeing. Many women seek mental health treatment for consequences related to body image dissatisfaction, making it a crucial area for both researchers and practitioners to be aware of. The

current study provides insight into factors contributing to the development and severity of body shame for women. Results from this study could be used in helping mothers of girls understand how to talk about their bodies and the bodies of others in healthier ways in an attempt to buffer against feelings of body shame among their daughters.

Additionally, this research provides insight into potential appropriate treatment planning when working with patients who are experiencing body image dissatisfaction. Clinically, incorporating conversations about shame and other feelings associated with body weight, shape, and size could be helpful in reducing body image-related distress among women. Understanding how comments and behaviors made by mothers (or mother-like figures) can significantly impact feelings of shame around one's body weight, shape, or size could be important in counseling women about healthy language and behaviors related to body image. This could be true in counseling adult women about their body image and how discussions about bodies can be modeled for young women.

This study also offers additional support that attachment anxiety plays an important role in women's internalization of messages received about their bodies and subsequent body image ideals. Findings could be beneficial when incorporated into preventative programming and treatment planning of body image concerns and eating disorders for women. Results indicate a significant positive relationship between attachment anxiety and body shame. Given the impact of maternal appearance-focused influence on body shame and the subsequent exacerbation of distress for those with low attachment anxiety, it might be possible that both low attachment anxiety and low maternal appearance-focused influences are required to buffer against feelings of body shame in women. In this case, incorporating family sessions into treatment planning for women expressing body image or eating concerns could be beneficial. There is currently support

in the United Kingdom for Family Therapy for Anorexia Nervosa (FTAN), in which all family members are involved in the treatment of Anorexia Nervosa in children and adolescents. The program centers heavily on behavioral modifications and includes addressing relational issues after the behavioral changes have occurred (Jewell et al., 2016). Treatment of Bulimia Nervosa currently has less support and typically involves less relational work between parents and the child during treatment (Jewell et al., 2016).

Similarly, in the United States, there is support for outpatient treatment of children and adolescents with Anorexia Nervosa called the Maudsley Approach, which provides parents the ability to be involved in their child's treatment and is also quite focused on behavioral modifications related to weight and eating (Le Grange & Lock, 2005). Previous research on the FTAN approach suggests that earlier incorporation of relational work and attachment-focused interventions may be beneficial in treating eating disorders and other body image concerns (Jewell et al., 2016). Results of the current study support this suggestion. Future research could continue to explore the efficacy of such interventions and perhaps expand beyond clinically diagnosed eating disorders to include general body image dissatisfaction. As noted, many current treatment modalities focus on a specific diagnosis (often Anorexia Nervosa) and include a strong behavioral component. Behavioral changes are important elements in treatment; however, the current research helps to emphasize the importance of the family relational dynamic. It is also important to remember that not all people who experience body image dissatisfaction, even severely, have received a clinical diagnosis of an eating disorder. Incorporating some of the elements in the above family therapy approaches to those girls and young women who are suffering from body image dissatisfaction that has not progressed to a clinically diagnosed eating disorder may be advantageous. Ultimately, the current study suggests that it could be beneficial

to incorporate family members (specifically mothers) and relational dynamics (specifically attachment-focused interventions) into treatment planning for young women experiencing heightened adverse emotions like shame around their body weight, shape, or size.

Limitations and Future Considerations

The researcher took steps to strengthen the study's design (e.g., randomizing the measures to reduce ordering effects, embedding attention checks to enhance validity, etc.). However, there are several limitations to the current study that should be examined while interpreting results. The sociocultural model elements of media and peers have been shown to influence body image dissatisfaction and the development of eating disorders (Stice, 1994) but were not explored in the current study as they are beyond the scope of interest in the specific relationship. The exclusion of such influences may contribute to the lack of significant results that would have otherwise been seen. For example, perhaps body surveillance is more closely aligned with influence from peers than that of mothers, or these influences may be interconnected, so patterns related to overall body image dissatisfaction may have gone unnoted when looking at influences from mothers alone in the current sample.

Additionally, body image satisfaction is related to self-esteem (O'Dea, 2012), aging (Hofmeier, 2017), and romantic relationships (Laus et al., 2018), among other factors. For many women of color, body image dissatisfaction may also be influenced by factors including skin color and hair (Awad et al., 2015; Rubin et al., 2003). While these factors may contribute to understanding the development and maintenance of body image dissatisfaction overall, they too are beyond the scope of the specific relationship dynamic explored in the current study but could be explored in future research as important influences. Similarly, while the research related to body image dissatisfaction is growing, current literature is focused primarily women's

experiences. We know that levels of disordered eating and body image dissatisfaction among men are higher than once believed. However, there is room for continued exploration of how men experience body image dissatisfaction and the various body image ideals that exist for men. It would be interesting to explore what factors typically influence the development of body image dissatisfaction in men in future research.

Another limitation to consider is that the measures utilized in this study required participants to answer questions about the current body image while also asking them to respond retrospectively about maternal appearance-focused influence during childhood. Retrospective recall in family experiences research may be subject to several problems, including memory failure, reconstruction, and social desirability (Bell & Bell, 2018). There is also the chance that participants misunderstood the instructions and answered all retrospectively or based on recent experiences, which could have influenced results. Research on attachment style shows that one's style tends to stay relatively stable throughout the lifetime (Bowlby, 1973). However, there is the chance that the participant's current relationship with their mother may have altered since their childhood, or examples may be less salient currently if they no longer live with their mother or have a different relationship than they did during childhood, which could potentially influence results for some. Understanding this topic may be benefitted by research with a younger sample. Future research might utilize similar measures with a sample of adolescent girls, responding to the measures with their present experiences rather than thinking retrospectively about them. Results may look different when examining how maternal commentary and behaviors influence girls' or young women's body image dissatisfaction when they are presently living with their mothers, responding based on their present attachment relationship, and having more frequent exposure to messages than women in their mothers the current sample.

The measures utilized to assess maternal appearance-focused influence should also be considered as a potential limitation of the current study. The specific measures chosen were developed and normed with a large portion (above 50%) of participants who identified as White (Kluck, 2008; Herbozo & Thompson, 2006). Herbozo and Thompson (2006) noted a future direction of their original work with the Verbal Commentary on Physical Appearance Scale (VCOPAS) was to explore the measure's utility with a more racially diverse sample. By including both measures, seeking a sample with greater diversity in racial background, asking about several body image ideals, and inquiring about the body image ideal of the participant's mother, the researcher attempted to explore the use of the selected measures with more diverse populations and enhance the generalizability of findings. However, there is a risk that the language utilized in the items was more aligned with the thin-ideal than with other ideals. As a result, findings may still not have fully captured the experiences of many women outside of the thin-ideal, including many women of color, as the study intended. Several body image dissatisfaction measures align with one type of body ideal (thin-ideal or curvy-ideal or athletic-ideal). However, there is a scarcity of available measures that address all ideals in an inclusive or generalizable manner.

Further investigation may provide information about the generalizability of available measures on sample populations with greater diversity or the creation of measures focused on various body image ideals and normed with more racially inclusive samples. It is also interesting to note a slight discrepancy in participants' reported body image ideal and what they perceived their mother's body image ideal to be. Of course, asking participants to speculate their mother's ideal body image creates room for error and should be assessed more overtly in future research.

The researcher intentionally sought to recruit a racially and ethnically diverse sample for this study. Of the final sample, the single largest ethnic group endorsed was Asian/Asian-American/Pacific Islander (*n*= 92; 37.7%). Little research has focused on the experiences of women of Asian background specifically. According to Grabe and Hyde (2006), Asian-American women have historically been underreported in body image research. Further, Asian-American representation in the literature has often focused on the body image dissatisfaction among women of Asian background compared to their White counterparts and has resulted in mixed conclusions (Grabe & Hyde, 2006). It is important to consider the lack of previous research related to this population while interpreting results. It is possible that there are cultural implications surrounding body image ideals, communication between mothers and daughters, and attachment styles that may be influencing results but were not acknowledged in the review. Additional research should be conducted on the experiences of women who identify with traditionally under-researched ethnic groups to foster a greater understanding of the differences in body image dissatisfaction of women across the United States. Perhaps this research would also allow for expansion of body image ideals or increased depth in understanding existing ideals.

The low reliability of the Attachment Anxiety subscale of the ECR-S should also be considered when examining the results. As mentioned in the Method section, the Cronbach's alpha for the Anxiety subscale of the ECR-S in the current sample was initially .65. An item was removed to increase the Cronbach's alpha to a score of .69, which is much closer to the acceptable range (.7) but still lower than was expected. The reliability of this subscale may have impacted study results, especially the ability of the model to detect an interaction effect. As this measure was created for use with romantic partners, some items may not have transferred as well

as anticipated for measuring attachment anxiety with one's mother. Future research would be needed on the use of the ECR-S with modifications for use with mothers specifically.

Conclusion

The current study examined the relationship between maternal appearance-focused influence and body image dissatisfaction in young women, and further, the role of attachment anxiety as a moderator in this relationship. Results did not support previous literature on the impact of attachment anxiety, attachment avoidance, or maternal appearance-focused influence on body image dissatisfaction in the form of body surveillance. Attachment avoidance was not supported as a predictive factor in either analysis. This study suggests that after controlling for history of eating disorder, history of Body Dysmorphic Disorder, and body image ideal, maternal appearance-focused influence significantly and positively predicted greater body image dissatisfaction, as assessed through body shame. The study further solidified previous research indicating a relationship between a mother's commentary and/or modeling behaviors and a daughter's body image dissatisfaction. This study also showed that women with high attachment anxiety are likely to experience greater shame and dissatisfaction related to their body image.

Further, attachment anxiety was found to significantly and positively moderate the relationship between maternal appearance-focused influence and body shame. This relationship was found to be significant for those with low attachment anxiety. In summary, findings suggest that severity of shame and other negative feelings about body image that result from feeling as if one does not align with the body image ideal they internalized through maternal messages may be exacerbated by how anxiously attached that individual is.

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Appendix A

Eligibility Criteria

Do you identify as a woman?
-Yes
-No

For this study, can you identify a person who fulfilled the role of mother, or a mother-like figure, during your childhood/adolescence?
-Yes
-No

What is your relationship with the person who fulfilled the role of mother, or mother-like figure, during your childhood/adolescence?
-Adoptive mother
-Aunt
-Biological mother
-Foster mother
-Grandmother
-Stepmother
-Other: please specify _____

Do you currently reside in the United States?
-Yes
-No

Appendix B

Demographics Questionnaire:

What is your age (in years)?: _____ [text entry]

What is your mother's/mother-like figure's age (in years)?: _____ [text entry}

What is your height (in feet and inches)? : _____[text entry]

What is your current weight (in pounds)?: _____ [text entry]

Which of the following best describes your race/ethnicity? (can select more than one)

a. Asian or Pacific Islander
b. Black or African American
c. Hispanic or Latino(a)
d. Native American or American Indian
e. White
f. Other- please specify: _____

Which of the following best describes the race/ethnicity of your mother/mother-like figure? (can select more than one)

a. Asian or Pacific Islander
b. Black or African American
c. Hispanic or Latino(a)
d. Native American or American Indian
e. White
f. Other- please specify: _____

Which of the following most accurately describes your ideal body?

a. Athletic-ideal: characterized by a toned and muscular appearance
b. Curvy-ideal: characterized by fuller and curvier body shape
c. Thin-ideal: characterized by a thin body shape

Which of the following most accurately describes your mother's/mother-like figure's ideal body during your childhood/adolescence?

a. Athletic-ideal: characterized by a toned and muscular appearance
b. Curvy-ideal: characterized by fuller and curvier body shape
c. Thin-ideal: characterized by a thin body shape

Which of the following best describes your sexual orientation?

a. Asexual
b. Bisexual
c. Gay
d. Heterosexual
e. Lesbian

f. Pansexual
g. Queer
h. Prefer not to respond
i. Other- please specify: _____

What is your current relationship status?
a. Single (not dating)
b. Dating
c. Exclusive Relationship
d. Married
e. Separated
f. Divorced
g. Widowed

If you do not currently live with your parent(s), what age were you when you last lived with your parent(s)? Please enter your age in years [text entry]

Who did you primarily live with during childhood/adolescence?
a. Biological mother and father
b. Biological mother
c. Biological father
d. Biological mother and her partner
e. Biological father and his partner
f. Adopted family
g. Foster family
h. Extended Family- please specify: _____
i. Other- please specify: _____

Have you ever been diagnosed with an eating disorder by a medical or mental health professional?
a. Yes
b. No
c. Unsure

→ If yes, please specify which eating disorder(s) you have been diagnosed with?
a. Anorexia Nervosa
b. Binge Eating Disorder
c. Bulimia Nervosa
d. Other Specified Feeding or Eating Disorder
e. Unspecified Feeding or Eating Disorder

Have you ever been diagnosed with Body Dysmorphic Disorder by a medical or mental health professional?
a. Yes
b. No
c. Unsure

Appendix C

Prolific Academic Posting Form

Family Relationships and Body Image Study

Hosted by *Christine Dyas*

$1.74 • 15 minutes • $6.96/hr • 250 places remaining

You will answer questions related to your family relationships and your body image. You will also answer basic demographic questions.

In order to participate, you must meet the following criteria;

1) be at least 18 years of age,

2) identify as a woman,

3) be able to identify a mother-like figure in your life,

4) currently reside in the United States.

If you meet these eligibility requirements and are interested in participating, you may click on the link below to participate.

Open study link in a new window

Appendix D
(NOTE: DO NOT AGREE TO PARTICIPATE UNLESS AN IRB APPROVAL CODE WITH CURRENT DATES HAS BEEN APPLIED TO THIS STUDY.)

INFORMATION LETTER
for a Research Study entitled
"Family Relationships and Body Image Study"
IRB APPROVAL CODE *#20-532 EX 2011*

You are invited to participate in a research study designed to explore family relationships and body image among women. This study is being conducted by Christine Dyas, M.A., under the direction of Marilyn Cornish, PhD, in the Auburn University Department of Special Education, Rehabilitation, and Counseling. **To participate, you must (1) be at least 18 years old, (2) identify as a woman, (3) be able to identify your mother or a mother-like figure during childhood/adolescence and (4) reside in the United States.** If you do not meet these requirements, you are not eligible to participate in this study.

What will be involved if you participate? If you decide to participate in this research study, you will complete an online questionnaire through Qualtrics. You will be asked to respond to questions related to your family relationships and your current body image satisfaction. You will then answer some demographic information about yourself. The survey will need to be completed at one time and is expected to take approximately 15 minutes to complete.

Are there any risks or discomforts? It is not anticipated that these procedures will cause you any harm. However, as some of these questions are asking you to think about personal experiences, it could plausibly elicit feelings of psychological or emotional discomfort. To minimize these risks, you may skip any question that you do not wish to answer or that makes you feel uncomfortable. You are encouraged to complete the study at a private location of your choice so that others do not accidentally view your responses on your screen. You are also free at any time to choose to end your participation; however, if you do so, you are forfeiting compensation. In addition, psychological help-seeking resources will be provided at the end of the questionnaire should you determine you want to seek counseling for any concerns identified in this study. There will be no identifiable information collected so your participation will remain anonymous.

Are there any benefits to yourself or others? If you decide to participate in this study, there will be no direct benefit to you, although you may learn about psychological research from a participant's perspective.

Will you receive compensation for participating? To thank you for your time, you will be offered $1.74 (U.S. dollars), credited to your Prolific Academic account after valid participation has been ensured. The researchers will evaluate your response to three attention check items to help in their determination of valid participation.

Are there any costs? There are no costs associated with participation in this study.

Your participation is completely voluntary. If you decide not to participate after reading this information letter, you will not be eligible for compensation. If you agree to participate after reading this document, you are still free to withdraw your participation at any time during the study. If you choose to withdraw, you are forfeiting compensation.

Your privacy will be protected. We will protect your privacy and data you provide by not collecting any identifiable information in the study questionnaire. Your name will not be connected in any way to the responses you provide in the study questionnaire. Information collected through your participation will be combined with all other participants' responses and may be published in a professional journal and/or presented at a professional meeting.

If you have questions about this study, please contact the Primary Investigator, Christine Dyas, M.A., at kcc0020@auburn.edu. You can also contact her faculty supervisor, Dr. Marilyn Cornish at mac0084@auburn.edu.

If you have questions about your rights as a research participant, you may contact the Auburn University Office of Research Compliance or the Institutional Review Board by phone (334)-844-5966 or e-mail at IRBadmin@auburn.edu or IRBChair@auburn.edu

HAVING READ THE INFORMATION PROVIDED, YOU MUST DECIDE IF YOU WANT TO PARTICIPATE IN THIS RESEARCH PROJECT. IF YOU DECIDE TO PARTICIPATE, THE DATA YOU PROVIDE WILL SERVE AS YOUR AGREEMENT TO DO SO. THIS LETTER IS YOURS TO KEEP.

Christine Dyas, M.A.
Investigator Date

The Auburn University Institutional Review Board has approved this document for use from 11/4/2020 to ---- . Protocol # 20-532 EX 2011.

Appendix E

Referral Form

Dear Participant;

If you have questions about your participation in the study, please contact me, Christine Dyas, M.A. (*kcc0020@auburn.edu*), or my faculty advisor, Marilyn Cornish, Ph.D. (*mac0084@auburn.edu*).

If you have questions about your rights as a research participant, you may contact the Office of Research Compliance (334-844-5966, IRBadmin@auburn.edu or the Auburn University Institutional Review Board (IRBChair@auburn.edu).

If your participation in this research study has raised concerns that you would like to discuss with someone, a referral list of mental health providers is attached to this document for your use. (Please remember that any cost in seeking medical assistance is at your own expense.)

Please again accept our appreciation for your participation in this study.

Christine Dyas, M.A.
Name *Date*

Psychological Help-Seeking Resources
(Here are just a few resources that can help you begin your help-seeking journey.)

National Alliance on Mental Illness (NAMI)
https://www.nami.org/Support-Education
https://www.nami.org/help
https://www.nami.org/Support-Education/Mental-Health-Education

Psychology Today (therapist locator)
https://www.psychologytoday.com/us