

Exploring self-compassion as a refuge against recalling the body-related shaming of caregiver eating messages on dimensions of objectified body consciousness in college women



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ABSTRACT

Guided by an overarching body-related shame regulation framework, the present investigation examined the associations between caregiver eating messages and dimensions of objectified body consciousness and further explored whether self-compassion moderated these links in a sample of 322 U.S. college women. Correlational findings indicated that retrospective accounts of restrictive/critical caregiver eating messages were positively related to body shame and negatively related to self-compassion and appearance control beliefs. Recollections of experiencing pressure to eat from caregivers were positively correlated with body shame and inversely associated with appearance control beliefs. Higher self-compassion was associated with lower body shame and body surveillance. Self-compassion attenuated the associations between restrictive/critical caregiver eating messages and both body surveillance and body shame. Implications for advancing our understanding of the adaptive properties of a self-compassionate self-regulatory style in mitigating recall of familial body-related shaming on the internalized body-related shame regulating processes of body objectification in emerging adulthood are discussed.

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Introduction

Objectified body consciousness represents a reprioritized self-awareness directed from *self-objectification*, or having internalized an outsider's view of the body as an object to be gazed upon and scrutinized (Fredrickson & Roberts, 1997; McKinley, 2011; McKinley & Hyde, 1996). Research suggests that objectified body consciousness appears to be especially pronounced for women at younger life stages (McKinley, 1999, 2006; Moradi & Huang, 2008). Notably, a preponderance of scholarship has been devoted to two components of objectified body consciousness: body shame and body surveillance, leaving examination of the third component, appearance control beliefs highly underdeveloped (e.g., Fitzsimmons-Craft, Bardone-Cone, & Kelly, 2011; McKinley, 2011; Sanftner, 2011; see Moradi & Huang, 2008 for a review). McKinley and Hyde (1996) defined *body shame* as the tendency to experience

shame when one has not lived up to the internalized, culturally-proscribed norms of body size or weight; *body surveillance* reflects constantly monitoring one's body and being preoccupied with worry over how one's body appears in the eyes of others. *Appearance control beliefs* indicate attitudes characterized by perceptions of being able to successfully manage one's weight and/or other aspects of appearance if sufficient effort is invested (McKinley & Hyde, 1996).

Despite the sizeable research base on body shame and body surveillance, very little research has explored possible early familial socializing antecedents associated with objectified body consciousness (see Lindberg, Hyde, & McKinley, 2006; McKinley, 1999; Tylka & Hill, 2004 for notable exceptions). Goss and Gilbert's (2002) integrative biopsychosociocultural conceptual model can be used to address this gap in the literature. This model emphasizes the relevance of familial shaming experiences in promoting internal (i.e., self-directed criticism and negative affect) and external (i.e., beliefs others look down upon you or view you as inferior) body weight control shame regulation dynamics, which give rise to and perpetuate disordered eating. Aspects of this model have received empirical support (e.g., Cardi, Di Matteo, Gilbert, & Treasure, 2014; Ferreira, Pinto-Gouveia, & Duarte, 2013; Kelly & Carter, 2013; Kelly, Carter, &

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Borairi, 2014; Manjrekar, Schoenleber, & Mu, 2013; Matos, Ferreira, Duarte, & Pinto-Gouveia, 2014; Pinto-Gouveia, Ferreira, & Duarte, 2014).

Accordingly, drawing from Goss and Gilbert's (2002) model, the present investigation examined the relationships between participants' recalled frequency of the messages regarding eating and food consumption conveyed by early caregivers (e.g., parents, grandparents, babysitters, daycare providers, etc.) and dimensions of their current experience of objectified body consciousness in an ethnically-diverse sample of emerging adult women attending college. In this way, recollections of caregiver eating messages along both restrictive/critical and pressure to eat (i.e., coercive) lines (Kroon Van Diest & Tylka, 2010) are framed as representing potential sources of prior familial body-related shaming experiences. Certain components of objectified body consciousness (i.e., body surveillance and appearance control beliefs) represent internalized cognitive-behavioral processes, which operate to regulate experiences of both internal and external body shame.

We further were interested in ascertaining whether participants' levels of self-compassion would moderate these associations (Neff, 2003). Buddhism-inspired *self-compassion* encompasses the idea of valuing self-kindness over self-judgment, common humanity over social isolation, and mindfulness over over-identification (Neff, 2003). It is a health-promoting self-regulatory capacity recognized as a positive correlate of an array of well-being attributes and inversely linked to a comparably diverse spectrum of adverse psychological outcomes (e.g., Hall, Row, Wuensch, & Godley, 2013; see Barnard & Curry, 2011; MacBeth & Gumley, 2012 for comprehensive reviews). Importantly, research and theory bolster self-compassion as a healthier alternative to engaging in self-criticism (Gilbert, 2009; Neff, 2003) and experiencing shame in the face of failure or having one's perceived flaws or imperfections exposed (e.g., Albertson, Neff, & Dill-Shackleford, 2014; Ferreira et al., 2013; Gilbert, 2011; Johnson & O'Brien, 2013; Kelly et al., 2014; Mosewich, Kowalski, Sabiston, Sedgwick, & Tracy, 2011; Wong & Mak, 2013; Woods & Proeve, 2014).

Objectified Body Consciousness as Internalized Body-related Shame Regulatory Processes

For women in Western culture, the dogmatic pursuit of the elusive thin body ideal is considered by many to be a moral imperative (Fredrickson & Roberts, 1997; McKinley & Hyde, 1996). Understandably then, falling short from attaining thinness or not expending sufficient effort towards effectively controlling one's weight and appearance may be construed as contemptuous behavior warranting self-inflicted shame and other-inflicted shame in the forms of social stigma and interpersonal rejection (Fredrickson & Roberts, 1997; Goss & Allan, 2010; Goss & Gilbert, 2002; McKinley & Hyde, 1996). Given such a powerful social reinforcing agent, scholars suggest it is adaptive for young women to be acculturated to view the experience of body shame as intolerable and therefore be motivated to invest much time and energy in averting its occurrence (Fredrickson & Roberts, 1997; Goss & Allan, 2010; Goss & Gilbert, 2002; McKinley & Hyde, 1996).

This stance is aligned with Gilbert's (1997) theory of social rank mentality, in which individuals are overly preoccupied with, for instance, how their level of physical attractiveness stands in relation to others in the social hierarchy and consequently are sensitive to any threats that may challenge their ability to secure access to social approval and acceptance (Gilbert, 2011; Goss & Gilbert, 2002; Matos et al., 2014; Pinto-Gouveia et al., 2014). Yet, the perceived social advantages garnered from attempting to conform to the thin ideal as a means to avoid social censure and inferiority may come at the cost of chronic, "normalized" body dissatisfaction (Rodin, Silberstein, & Striegel-Moore, 1984) compounded by unrelenting

social/body comparison processes (Cardi et al., 2014; Fitzsimmons-Craft et al., 2012; Pinto-Gouveia et al., 2014) and potentially their most pernicious outcomes (e.g., internalized body shame and eating disorders; Bessenoff & Snow, 2006; Cardi et al., 2014; Goss & Allan, 2010; Goss & Gilbert, 2002; Matos et al., 2014; McKinley & Hyde, 1996).

From this vantage point then, body surveillance and appearance control beliefs may be framed as interrelated cognitive-behavioral processes that arise as a consequence of self-objectification to prevent the emergence of or to lessen the negative impact of internalized body shame (i.e., both the distressing emotion and self-critical thoughts; McKinley, 2011; McKinley & Hyde, 1996; Moradi & Huang, 2008). For instance, body shame reflects the strength of an individual's ingrained beliefs regarding how shame is a natural and expected outcome for failing to conform to cultural and/or personal standards of the ideal body (e.g., Bessenoff & Snow, 2006; McKinley & Hyde, 1996). Holding these views in such a rigid and inflexible manner suggests that there is little room for alternative emotional reactions or critique of the standards themselves and thus over time likely results in shame becoming the dominant and automatic response when falling short from achieving culturally-dictated beauty standards (e.g., Bessenoff & Snow, 2006). This type of body-centric self-criticism could function to motivate the individual to engage in maladaptive weight control behaviors (Goss & Gilbert, 2002; Kelly & Carter, 2013; Pinto-Gouveia et al., 2014).

As such, the thoughts and feelings indicative of internalized body shame are deemed highly aversive for the individual (Manjrekar et al., 2013) as these experiences may be triggered by internal self-discrepancies (e.g., Bessenoff & Snow, 2006) as well as by the external body shaming of others, signaling threats to one's preferred social standing in desired relationships (Gilbert, 2011; Goss & Gilbert, 2002). Therefore, body surveillance and appearance control attitudes would appear to function to both impede and alleviate the harmful effects from encountering both body-related self-discrepancies and body shaming experiences. Nevertheless, these processes may also serve to further reinforce valuing the standards that give rise to thoughts and feelings of body shame in the first place, thereby maintaining evaluation of its experience as wholly undesirable (McKinley & Hyde, 1996).

For example, body surveillance denotes an intensified cognitive preoccupation with how one's appearance will be evaluated by others and a corresponding hypervigilant monitoring of the body (McKinley & Hyde, 1996). These characteristics are consistent with a heightened sensitivity to cues that might indicate both internal and external shame in order to ward off the perceived social threat associated with anticipating body shaming by others (Cardi et al., 2014; Goss & Gilbert, 2002). In conjunction with the shaming potential-detecting properties of body surveillance, believing that one has the ability to effectively control one's weight and appearance given adequate effort contributes to efficacy beliefs (e.g., Fitzsimmons-Craft et al., 2011) in being able to (a) proactively derail or pre-empt body shaming by others, and (b) mitigate the possible fallout stemming from body shaming by others and its concomitant self-critical evaluations, further underscoring the contradictory relationship young women have with their bodies in this context (McKinley & Hyde, 1996).

Caregiver Eating Messages as Reminders of Body-related Parental Control and Shaming from Childhood

Considerable evidence has accrued demonstrating the power that parents and other early caregivers exert on influencing children's eating behavior and body image (e.g., Brown & Ogden, 2004; Fisher, Sinton, & Birch, 2009; Kroon Van Diest & Tylka, 2010; Rodgers & Chabrol, 2009). The two most well-established channels

for transmitting this influence typically take the form of caregiver modeling and verbal commentary captured by phraseology such as encouragement, pressure, teasing, and criticism (Rodgers, 2012; Rodgers & Chabrol, 2009). This latter grouping overlaps conceptually and experientially with variants of what could be characterized as instances of familial shaming centered on the body, weight, and eating (Goss & Gilbert, 2002).

Yet to date, only a few studies have focused on clarifying the role of such early shame-engendering environmental variables in the context of objectified body consciousness (Lindberg et al., 2006; McKinley, 1999; Tylka & Hill, 2004). These studies have focused on relating: (a) maternal self-objectification and internalized body shame processes to those of their children (Lindberg et al., 2006; McKinley, 1999) and (b) general sociocultural pressures to be thin to body surveillance and body shame (Tylka & Hill, 2004). In light of this gap, we provided a more targeted exploration of the contribution of recalled shaming experiences surrounding eating and the body communicated by childhood primary caregivers in relation to internalized body shame and its associated regulatory processes of body surveillance and appearance control attitudes in emerging adulthood. A closer examination of these relationships is supported by emergent science implicating the internalization and centrality of memories of early shaming experiences in augmenting psychopathology risk, including that of eating disorders (Matos et al., 2014; Matos, Pinto-Gouveia, & Duarte, 2012; Matos, Pinto-Gouveia, & Duarte, 2013; Pinto-Gouveia, Castilho, Matos, & Xavier, 2013). Thus to address this aim, we opted to use Kroon Van Diest and Tylka's (2010) recently developed operationalization of restrictive/critical and pressure to eat caregiver eating messages to represent these early shaming experiences.

Restrictive/critical messages refer to remembering caregivers' blatant admonishments for failing to sufficiently limit food consumption and related commentary insinuating that one's weight may currently be viewed unfavorably or could become so (Kroon Van Diest & Tylka, 2010). There is an unmistakably invalidating quality to these recollections, though the intention behind these words may have functioned to ironically prevent the child from being socially ostracized and experiencing body shaming by others (Goss & Gilbert, 2002). Consistent with this shaming tone, such messages have been negatively linked to perceived familial body acceptance, body appreciation, and intuitive eating (Kroon Van Diest & Tylka, 2010). Individuals who reported higher levels of restrictive/critical caregiver eating messages also endorsed higher perceived familial pressure to be lean, body dissatisfaction, and disordered eating (Kroon Van Diest & Tylka, 2010). Iannantuono and Tylka (2012) additionally noted that college women who reported higher levels of restrictive/critical eating messages from caregivers experienced higher levels of depressive symptoms along with both attachment anxiety and avoidance.

On the other hand, *pressure to eat messages* reflect an explicitly coercive quality where the young woman recalls times of being forced to continue to eat what she was given perhaps even beyond natural feelings of satiety (Kroon Van Diest & Tylka, 2010). Research suggests that this form of eating message is less clearly associated with body image and eating behavior in college students (Iannantuono & Tylka, 2012; Kroon Van Diest & Tylka, 2010), though similar themes were linked to greater dietary restraint in young girls (Carper, Fisher, & Birch, 2000). These messages, perhaps forceful in nature and possibly somewhat distressing to reflect upon, remain less conspicuously shaming in content with regard to the implied negative evaluation of one's body weight or size relative to restrictive messages. Yet, given data suggesting these messages are modestly linked to BMI (Kroon Van Diest & Tylka, 2010), for some recalling being pressured to eat could signal memories of perhaps having one's weight criticized in tandem with being told to eat more.

Nonetheless, we believe both types of caregiver eating messages manifest in participants recalling instances of (a) heightened attention to their body weight, which may be a likely contributor to their self-objectification/body surveillance (Moradi & Huang, 2008); (b) excessive parental/external control over the eating and weight regulation process (Ahmad, Waller, & Verduyn, 1994; Minuchin, Rosman, & Baker, 1978; Sheldon, 2013; Sira & Ballard, 2009; Sira & Parker White, 2010) that may challenge current appearance control attitudes; and (c) variations in body-related shaming (Goss & Gilbert, 2002). Thus, being reminded of past instances of early caregivers' overregulation of food intake, and in the case of restrictive/critical messages more overtly implied negative evaluation of weight or body size, would seem naturally associated with higher levels of objectified body consciousness.

Western cultural ideology tends to emphasize the developmental milestones of increased autonomy and individuality along with prioritizing control and discipline in taking care of one's body (Minuchin et al., 1978; Sira & Ballard, 2009). In this context, both forms of recalled caregiver eating messages may, for women, remind them of lacking personal control over their body while growing up. Consequently, these reminders of a time of not having mastery over what food went into her body may be experienced as shameful for its incompatibility with the prevailing mainstream sociocultural values she is repeatedly exposed to (Goss & Gilbert, 2002; Minuchin et al., 1978; Sheldon, 2013; Sira & Ballard, 2009; Sira & Parker White, 2010). This may be particularly salient in the case of pressure to eat messages, in which the young woman may experience dissonance over remembering grappling over these caregiver eating edicts as contrary to more dominant mainstream media and perhaps peer norms to restrict food consumption and to limit intake to a circumscribed selection of "healthy" or "good" foods.

Therefore, taken altogether, the retrospectively-measured frequency of these early body-related shaming experiences could account for the higher levels of reported objectified body consciousness in the present, especially with respect to the dimensions of internalized body shame and body surveillance. However, an opposite pattern could emerge in relation to appearance control beliefs. The possibility of observing this contrasting relationship is supported by theory and research which suggest that higher levels of this component of self-objectification may reflect more adaptive elements of self-construal, body experience, and well-being in undergraduate samples (John & Ebbeck, 2008; McKinley & Hyde, 1996; Sinclair & Myers, 2004).

Self-compassion as Buffer

Self-compassion, or turning compassion inward toward the self, is anchored in the wisdom of centuries old Buddhist spiritual philosophy, which has been translated into Western psychological science and practice only within the last decade (Germer & Neff, 2013; Gilbert, 2009; Neff, 2003). Self-compassion is characterized by acknowledging that personal inadequacies and failures are part of a shared human condition and accepting the idea that one is indeed worthy of receiving compassion (Neff, 2003). Engaging in a self-compassionate stance is perhaps especially advantageous during times of great emotional turmoil when the prospect of overcoming absorption in self-criticism, intense feelings of shame, and negative self-evaluation is seemingly insurmountable (Albertson et al., 2014; Ferreira et al., 2013; Gilbert, 2011; Johnson & O'Brien, 2013; Kelly et al., 2014; Mosewich et al., 2011; Neff, 2003; Wong & Mak, 2013; Woods & Proeve, 2014). Therefore, higher self-compassion is indicative of more frequently encountering such emotional pain with self-kindness, mindful equanimity, and a sense of connectedness with common humanity, which serve to defuse the aversiveness of shame, self-criticism, and social

isolation (Albertson et al., 2014; Johnson & O'Brien, 2013; Kelly et al., 2014; Neff, 2003; Wong & Mak, 2013). In other words, from Gilbert's (2009) neurophysiological perspective, this capacity has the ability to activate self-soothing and nurturing brain mechanisms that down regulate the threat-based self-esteem/ego preservation properties of shame.

There is an impressively growing scholarship supporting the adaptive value of this self-regulatory quality across a wide range of psychological outcomes (Barnard & Curry, 2011; MacBeth & Gumley, 2012), and its buffering effect has been substantiated in the context of self-criticism and depression (Wong & Mak, 2013). These encouraging findings have also recently been extended to the domain of body image. For instance, self-compassion has been associated with fewer body image disturbances (e.g., Ferreira et al., 2013; Pinto-Gouveia et al., 2014; Wasylikiw, MacKinnon, & MacLellan, 2012) and may alternatively promote more adaptive ways of relating to one's body (e.g., Ferreira, Pinto-Gouveia, & Duarte, 2011; Schoenefeld & Webb, 2013; Wasylikiw et al., 2012). Of particular relevance to the current study, higher levels of self-compassion are inversely associated with body shame and body surveillance in female adolescents (Mosewich et al., 2011), with trait shame/shame proneness in young adult men (Reilly, Rochlen, & Awad, 2014) and in college students (Woods & Proeve, 2014), and with perceptions of external shame in clinical and non-clinical female samples (Ferreira et al., 2013).

Finally, the results of three innovative experimental analyses bear mentioning as they provide compelling support for the present investigation's anticipated protective effect of self-compassion on the internalized shame regulating aspects of objectified body consciousness in the context of recollecting the frequency of the early body-related shaming of caregiver eating messages. In Johnson and O'Brien's (2013) study, shame-prone college students directed to enlist a self-compassion writing strategy following the recall of a shaming event reported less shame and negative affect in the immediate aftermath and diminished shame proneness and depressive symptoms at 2-week follow-up relative to a control group. Albertson and colleagues found that an age-diverse community sample of women exposed to a 3-week self-compassion training evidenced reduced levels of body dissatisfaction, body shame, and appearance-contingent self-worth; these findings were maintained at 3-month follow-up as compared to a wait-list control group (Albertson et al., 2014). Lastly, in a transdiagnostic sample of patients with eating disorders, researchers found that larger increases in self-compassion early in treatment predicted a sharper decline in reports of shame experiences (including those involving the body) over the 12-week intervention period (Kelly et al., 2014).

The Present Study

In summary, the previously elaborated theoretical and empirical analysis provides a persuasive rationale for objectified body consciousness being conceptualized from a novel internalized body-related shame regulation framework. We also considered how having one's food consumption (which unfolds in the context of the body and overall physical appearance management) constantly scrutinized and controlled by primary caregivers in childhood could serve as an under examined precursor to instilling attitudes and values reflective of body objectification processes. More specifically, we contend that recalling these early caregiver eating messages while completing a self-report questionnaire in emerging adulthood involves accessing memories of exposure to potential implicit and explicit body-related shaming events that originally occurred in childhood. We hypothesized that the salience of these recollections marked by the frequency of their perceived occurrence will be concurrently linked to elevated body shame and body surveillance attitudes and reduced appearance control

beliefs. We further surmised that participants' pre-existing levels of self-compassion would be inversely associated with both types of recalled caregiver eating messages as well as with body shame and body surveillance. In contrast, we anticipated that self-compassion would be positively correlated with appearance control beliefs. The hypothesized directionality of this relationship was informed by our conceptualization of appearance control beliefs reflecting themes of personal efficacy in conjunction with recent evidence demonstrating components of self-compassion being positively related to self-efficacy and control beliefs for learning in a college student sample (Iskender, 2009). We finally predicted that self-compassion would moderate the associations between recollecting the frequency of caregiver eating messages and dimensions of objectified body consciousness while controlling for BMI, given its association with body shame (e.g., McKinley, 1999), in our ethnically-diverse sample of college women.

Method

Participants

Data were collected from 322 undergraduate females between the ages of 18–24 years ($M = 19.48$, $SD = 1.46$) who were attending a large state university in the southeastern United States. Women identified as White or European American (65.3%), African American (20.4%), Hispanic or Latino (5.6%), Asian or Asian American (3.1%), American Indian or Alaska Native (1.5%), and Hawaiian or other Pacific Island (0.9%). The remaining 3% of the sample did not report a primary ethnic identity. Sixty-nine percent of the participants' mothers had completed at least some college. The representation of the sample by class standing was as follows: 54% first-years, 24% sophomores, 12% juniors, and 10% seniors. The mean calculated BMI score fell within the normal weight range ($M = 22.78$, $SD = 4.95$). Participants' BMIs reflected the following classifications: 14% underweight, 62% normal weight, 16% overweight, and 8% obese.

Measures

Demographics. A demographic questionnaire requested participants' age, ethnicity, year in school, maternal education, and height and weight. The latter two parameters were used to calculate self-reported BMI in kg/m^2 using the following formula: $\text{weight (lb)} / [\text{height (in)}]^2 \times 703$.

Caregiver eating messages. The Caregiver Eating Messages Scale (CEMS; Kroon Van Diest & Tylka, 2010) measures a participant's recalled childhood experiences regarding messages conveyed about and actions related to food by their caregivers about "what to eat, when to eat, and how much to eat" (p. 319). The 10-item measure consists of two 5-item subscales reflecting pressure to eat content (e.g., "Made you eat despite the fact that you were full") as well as restrictive/critical content (e.g., "Commented that you were eating too much"). Participants respond to each item using a 6-point scale ranging from 1 (*never*) to 6 (*always*), rating the extent to which they remember a caregiver communicating similar content to them while growing up. Subscale scores were averaged with higher scores indicative of more frequent recollections of being pressured to eat and receiving negative critical commentary regarding eating from caregivers. High levels of internal consistency have been reported for the restrictive/critical ($\alpha = .82$) and pressure to eat ($\alpha = .86$) scales in initial validation work with college females (Kroon Van Diest & Tylka, 2010). In the current study, internal consistency levels also exceeded acceptable limits for both subscales: restrictive/critical ($\alpha = .86$) and pressure to eat ($\alpha = .82$).

Objectified body consciousness. The 24-item Objectified Body Consciousness Scale (OBC; McKinley & Hyde, 1996) consists of three 8-item subscales and was designed to assess body surveillance, body shame, and appearance control beliefs. The Body Surveillance subscale measures a participant's tendency to worry about and to scrutinize the way her body looks valuing the body's appearance over its function (e.g., "During the day, I think about how I look many times"). The Body Shame subscale measures how much a participant internalizes cultural body standards in relation to her own and experiences shame in response to failing to meet these externalized norms (e.g., "I feel ashamed of myself when I haven't made the effort to look my best"). The Appearance Control subscale measures how much influence a respondent believes she has on changing her body with sufficient effort (e.g., "I think a person can look pretty much how they want to if they are willing to work at it"). All of the subscales are scored on a 7-point scale from 1 (*strongly agree*) to 7 (*strongly disagree*). After reverse-scoring relevant items, subscale scores are averaged, and higher scores reflect higher levels of each dimension of the construct. In the original validation work conducted with college females (McKinley & Hyde, 1996) moderate-high levels of internal consistency were documented: Body Surveillance ($\alpha = .89$), Body Shame ($\alpha = .75$), and Appearance Control Beliefs ($\alpha = .72$). In the present sample, the following internal consistencies were observed: Body Surveillance ($\alpha = .83$), Body Shame ($\alpha = .83$), and Appearance Control Beliefs ($\alpha = .74$).

Self-compassion. The Self-Compassion Scale (SCS; Neff, 2003) measures participants' overall capacity to be kind and non-judgmental toward their own suffering. A high score on the SCS reflects a participant's ability to be kind to oneself, to recognize that one's experience is a part of the shared human condition, and to be able to not over-identify with strong negative emotions and self-evaluative thoughts. The SCS is divided into six subscales; for purposes of the current analysis, only the full-scale score was used. The 26 items (e.g., "I am tolerant of my own flaws and inadequacies") are scored on a 5-point scale (1 = *almost never*; 5 = *almost always*) and averaged, with higher scores representing higher levels of self-compassion. A superior level of internal consistency has been calculated for the full scale in a college student sample ($\alpha = .92$; Neff, 2003), which was replicated in the current sample ($\alpha = .92$).

Procedure

Before recruiting participants, approval was obtained from the university's institutional review board. After acquiring consent, participants completed a series of self-report measures administered in an online survey format via Sona Systems. Questionnaires were presented in a fixed order (i.e., demographics, SCS, CEMS, and OBC). The analyses reported here were drawn from a larger data set (see Schoenefeld & Webb, 2013 for a recent report generated from the current sample in which self-compassion and BMI were the only two duplicated variables). Students received course credit in exchange for their participation.

Results

Preliminary Analyses

Prior to conducting the primary analyses, the distribution of missing data was examined across the major study variables. The percentage of missingness, calculated as the number of missing cases at the variable level divided by the number of complete cases (as suggested for basic reporting purposes in Schlomer, Bauman, & Card, 2010), was as follows (in increasing order): CEMS-Restrictive/Critical (0.00%), CEMS-Pressure to Eat (0.01%), OBC-Body Surveillance (1.6%), OBC-Appearance Control (3.5%), BMI

(4.5%), OBC-Body Shame (5.9%), and SCS (8.7%). We performed *t*-tests to compare the mean responses on the other primary study variables between participants who did and did not have scores on the SCS and OBC-Body Shame (i.e., observed missingness > 5%). Participants without scores on the measure of self-compassion tended to report both higher levels of body shame, $t(303) = 2.079$, $p = .038$ and body surveillance, $t(316) = 2.693$, $p < .01$ relative to young women with SCS scores; *t*-test comparisons based on OBC-Body Shame missingness failed to detect significant mean differences on the other variables included in this study. Based on the amount and pattern of missing data, we chose to rely on using complete cases for each analysis (Schlomer et al., 2010).

Table 1 presents the means, standard deviations and correlational matrix for the primary study variables. An examination of the distributional characteristics of the variables was conducted in order to ensure the assumptions of normality were tenable. In accordance with criteria set forth by Kline (2010), no variable was transformed as skew and kurtosis values did not exceed recommended thresholds (i.e., >3.00 for skew and >10.00 for kurtosis). In the present analysis, skew ranged from -0.017 (SCS) to 1.734 (BMI) and kurtosis varied from -0.428 (CEMS-Pressure to Eat) to 4.498 (BMI).

As noted in Table 1, the observed linear associations were mostly in the predicted directions. Young women reporting more frequent recall of experiencing restrictive/critical caregiver eating messages tended to endorse higher levels of body shame and lower levels of appearance control beliefs and self-compassion. Similarly, among the emerging adult females in our sample, more frequent recollections of being pressured to eat by early caregivers while growing up were inversely associated with appearance control beliefs and positively linked to reports of body shame. As anticipated, self-compassion was also negatively correlated with body shame and body surveillance but was not associated with appearance control beliefs or pressure to eat messages in the current sample.

Hierarchical Moderated Regression Analyses

Three separate hierarchical linear regression models were computed in order to evaluate the hypothesis that self-compassion would moderate the association between both types of caregiver eating messages and each dimension of objectified body consciousness. All predictor variables were mean-centered in the regression models to minimize the occurrence of multi-collinearity and to enhance interpretability (Aiken & West, 1991). The two interaction terms were calculated by multiplying the respective centered variables.

For each regression analysis, BMI, restrictive/critical caregiver eating messages, pressure to eat caregiver eating messages, and self-compassion scores were entered at Step 1, the restrictive/critical caregiver eating messages \times self-compassion interaction term was entered at Step 2, and the pressure to eat caregiver eating messages \times self-compassion interaction term was entered at Step 3. Each interaction term was included on a separate step in order to determine the specific amount of variance accounted for individually. Including both types of caregiver eating messages and their respective interaction terms with self-compassion in a single model was deemed a more parsimonious approach for reducing possible Type 1 error inflation than running six separate moderated regressions. The Aiken and West (1991) procedure including a simple slopes analysis was used to graph and interpret any significant interaction effects. Additionally, a region of significance analysis (e.g., Preacher, Curran, & Bauer, 2006) was conducted to aid in determining precisely for what specific values of self-compassion (e.g., ± 1 SD vs. ± 2 SD) was the moderator effect significant. This approach does not assume that a significant interaction effect is meaningful for all values of the moderator, which in fact may

Table 1
Means, standard deviations and correlations for the primary study variables.

| | <i>M</i> | <i>SD</i> | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
|------------------------------|----------|-----------|-------|------|--------|-------|--------|--------|-------|
| 1. BMI | 22.78 | 4.95 | – | | | | | | |
| 2. Age | 19.48 | 1.46 | .15** | – | | | | | |
| 3. Self-compassion | 3.00 | .63 | –.06 | .00 | – | | | | |
| 4. OBC-Body surveillance | 4.75 | 1.09 | .05 | –.03 | –.47** | – | | | |
| 5. OBC-Body shame | 3.38 | 1.24 | .32** | .09 | –.51** | .49** | – | | |
| 6. OBC-Appearance control | 4.94 | .92 | .01 | .02 | –.02 | .07 | –.20** | – | |
| 7. CEMS-Restrictive/critical | 2.23 | 1.11 | .28** | –.05 | –.18** | .09 | .41** | –.29** | – |
| 8. CEMS-Pressure to eat | 3.14 | 1.12 | .07 | .01 | –.11 | .04 | .20** | –.13* | .28** |

Note: *Ns* ranged from 280 to 322 due to missing data. BMI, body mass index; OBC, Objectified Body Consciousness Scale; CEMS, Caregiver Eating Messages Scale. The possible score ranges for the primary measures are as follows: Self-compassion (1–5), OBC scales (1–7), CEMS scales (1–6).

* $p < .05$.

** $p < .01$.

Table 2
Hierarchical multiple regression analyses predicting objectified body consciousness.

| Step/variable | <i>R</i> ² | ΔR^2 | <i>B</i> | <i>SE B</i> | 95% CI | <i>t</i> | <i>p</i> |
|---|-----------------------|--------------|----------|-------------|---------------|----------|----------|
| Body surveillance ^a , $F(6, 285) = 14.218, p < .001$ | | | | | | | |
| Step 1 | .214 | | | | | | |
| BMI | | | .009 | .012 | –.015, .032 | 0.73 | .466 |
| Restrictive/critical messages | | | –.001 | .055 | –.108, .107 | –0.01 | .991 |
| Pressure to eat messages | | | –.008 | .052 | –.111, .095 | –0.15 | .879 |
| Self-compassion | | | –.770 | .090 | –.948, –.592 | –8.53 | <.001 |
| Step 2 | .231 | .018 | | | | | |
| Restrictive/critical messages \times Self-compassion | | | –.202 | .079 | –.358, –.046 | –2.55 | .011 |
| Step 3 | .234 | .003 | | | | | |
| Pressure to eat messages \times Self-compassion | | | .076 | .077 | –.075, .227 | 0.99 | .324 |
| Body shame ^b , $F(6, 274) = 36.421, p < .001$ | | | | | | | |
| Step 1 | .439 | | | | | | |
| BMI | | | .062 | .012 | .039, .085 | 5.30 | <.001 |
| Restrictive/critical messages | | | .278 | .054 | .170, .385 | 5.10 | <.001 |
| Pressure to eat messages | | | .059 | .052 | –.043, .161 | 1.14 | .255 |
| Self-compassion | | | –.880 | .090 | –1.056, –.703 | –9.82 | <.001 |
| Step 2 | .448 | .009 | | | | | |
| Restrictive/critical messages \times Self-compassion | | | –.162 | .079 | –.317, –.007 | –2.06 | .040 |
| Step 3 | .449 | .001 | | | | | |
| Pressure to eat messages \times Self-compassion | | | .054 | .076 | –.096, .204 | 0.71 | .478 |
| Appearance control beliefs ^c , $F(6, 279) = 5.888, p < .001$ | | | | | | | |
| Step 1 | .105 | | | | | | |
| BMI | | | .020 | .011 | –.002, .041 | 1.81 | .072 |
| Restrictive/critical messages | | | –.271 | .051 | –.370, –.171 | –5.36 | <.001 |
| Pressure to eat messages | | | –.023 | .048 | –.118, .073 | –0.47 | .638 |
| Self-compassion | | | –.098 | .084 | –.262, .067 | –1.17 | .243 |
| Step 2 | .113 | .008 | | | | | |
| Restrictive/critical messages \times Self-compassion | | | –.113 | .073 | –.258, .032 | –1.54 | .125 |
| Step 3 | .115 | .001 | | | | | |
| Pressure to eat messages \times Self-compassion | | | –.047 | .072 | –.188, .094 | –0.66 | .509 |

^a $N = 286$.

^b $N = 275$.

^c $N = 280$.

preclude the traditionally analyzed and reported values of the moderator at ± 1 *SD* above and below the mean. Table 2 presents the estimated regression parameters for each model.

In the first regression, the full model inclusive of all predictors accounted for 23.4% of the variance in body surveillance scores. Self-compassion was negatively associated with body surveillance in Step 1. As hypothesized, the interaction term between restrictive/critical caregiver eating messages and self-compassion scores contributed roughly 2% incremental variance in Step 2. A graphical representation of this relationship is shown in Fig. 1. A region of significance analysis indicated that values of self-compassion falling outside of the following range yield a significant moderation effect: [–.883, .703]. This would correspond to self-compassion scores at ± 2 *SD* above and below the mean. Therefore, a *t*-test of the simple slopes at these values revealed a positive relationship between the frequency of recalled restrictive/critical caregiver eating messages and body surveillance at low levels of self-compassion, slope = .229,

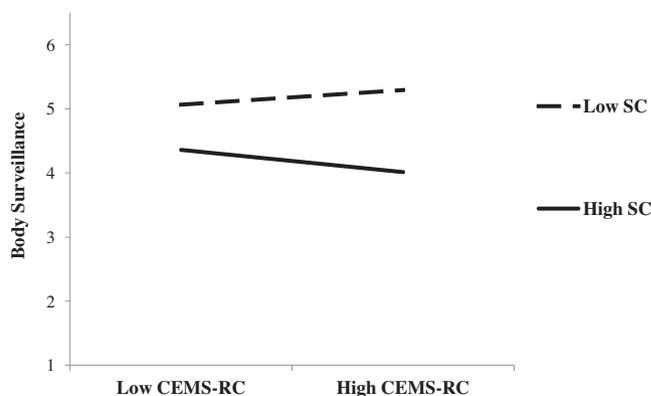


Fig. 1. The relationship between restrictive/critical caregiver eating messages and body surveillance as a function of level of self-compassion.

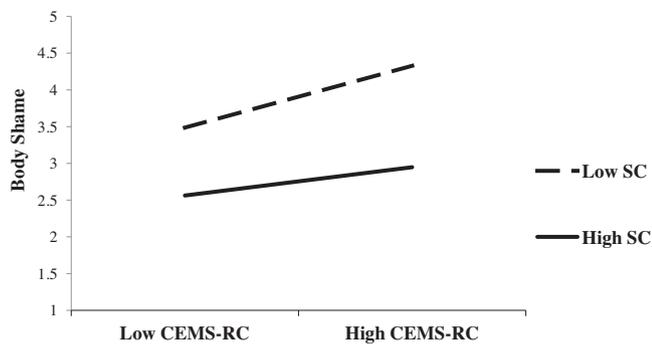


Fig. 2. The relationship between restrictive/critical caregiver eating messages and body shame as a function of level of self-compassion.

$t(280) = 2.298$, $p = .022$ and an inverse association at high levels of self-compassion, slope = $-.283$, $t(280) = -2.279$, $p = .023$. These findings suggest that low self-compassion strengthens the relationship while high self-compassion buffers this link among the young women in our sample. However, in contrast to our hypotheses, the interaction between pressure to eat caregiver eating messages and self-compassion scores did not add unique variance to the prediction of body surveillance.

In the second regression, the full model explained 44.9% of the variance in body shame scores. As shown in Table 2, Step 1, both BMI and restrictive/critical caregiver eating messages were positively associated with body shame whereas self-compassion was negatively related to this component of objectified body consciousness. Consistent with our hypothesis, in Step 2 the interaction between restrictive/critical caregiver eating messages and self-compassion scores accounted for an additional 1% of the variance in participants' reported body shame. Fig. 2 presents a graphical depiction of this moderator effect. A region of significance analysis indicated that the values on the measure of self-compassion falling outside of the following window would generate a significant interaction effect: $[-.610, 29.8]$. Thus, in the present study, the conventional ± 1 SD above and below the mean of self-compassion would be appropriate data points in which to assess the significance of the simple slopes. Calculated t -tests of the simple slopes revealed a highly positive relationship between the frequency of recollecting restrictive/critical caregiver eating messages and body shame at low levels of self-compassion, slope = $.361$, $t(269) = 5.580$, $p < .001$, and a marginally-significant association at high levels of self-compassion, slope = $.153$, $t(269) = 1.868$, $p = .063$. This pattern of results suggests that among our participants, higher self-compassion attenuates the link between these two variables while lower self-compassion exacerbates the association. Nonetheless, inconsistent with our anticipated findings, once again, a significant moderating effect of self-compassion in the association between pressure to eat caregiver eating messages and body shame scores was not detected.

In the final regression, all predictors combined accounted for only 11.5% of the variance in participants' appearance control belief scores. In Step 1, restrictive/critical caregiver eating messages were negatively related to this dimension of objectified body consciousness as shown in Table 2. Contrary to our predicted associations, neither interaction term involving the two types of caregiver eating messages in conjunction with self-compassion added unique variance to the prediction of appearance control belief scores in the present sample.

Discussion

The present investigation sought to merge Goss and Gilbert's (2002) understanding of the linkages between early familial influences on developing internal and external shame with feminist

perspectives on objectified body consciousness conceptualized as internalized body-related shame regulating processes (Fredrickson & Roberts, 1997; McKinley & Hyde, 1996). We applied this integrative framework by examining the relationships between the frequency of recalling exposure to restrictive/critical and pressure to eat caregiver eating messages and dimensions of objectified body consciousness and further explored whether self-compassion would moderate these associations. Overall, our findings were mostly in the expected directions, the most significant of which was demonstrating that self-compassion did indeed attenuate the links between more pervasive recollections of restrictive/critical caregiver eating messages and both body surveillance and body shame in the current undergraduate female sample. However, inconsistent with our predicted associations, pre-existing levels of this adaptive self-regulatory quality failed to buffer the relationship of pressure to eat messages with any of our self-objectification-related criterion variables.

Our preliminary correlational results corroborate and extend existing research noting how greater general perceptions of excessive parental control and more specific verbalized caregiver opinions about food consumption may undermine the development of healthy approaches to relating to one's body (e.g., Ahmad et al., 1994; Birch, Fisher, & Davison, 2003; Iannantuono & Tylka, 2012; Kroon Van Diest & Tylka, 2010; Sheldon, 2013; Sira & Parker White, 2010). More specifically, consistent with contemporary theory delineating the function of familial shaming in promoting internalized shame-regulating processes (i.e., Goss & Gilbert, 2002), we found that recalling such experiences of caregiver-elicited body-related shaming as a young woman were associated with heightened reports of self-directed body shame and diminished perceptions of one's personal control over successfully managing weight and appearance. Accentuation of these self-objectification processes could subsequently give rise to engaging in an unproductive, ruminative loop of harsh self-criticism in relation to remembering experiences of body-related shaming by childhood primary attachment figures (see Pinto-Gouveia et al., 2013 in the context of depressive symptoms). In efforts to complement ongoing scholarship in the domain of shaming memories and psychopathology vulnerability (e.g., Matos et al., 2012, 2013, 2014; Pinto-Gouveia et al., 2013), our initial-stage evidence may be fruitful for future multi-method investigations to uncover the specific role of early body-related shaming memories in enhancing eating disorder risk, possibly as mediated by activation of components of objectified body consciousness. Relatedly, the nonsignificant relationships observed between caregiver eating messages and body surveillance in the present study may suggest the utility of examining whether the influence of such content conveyed by early caregivers on this dimension of self-objectification is evident when considering other potential moderators such as race/ethnicity (e.g., Moradi & Huang, 2008), worry about physical imperfections (Yang & Stoeber, 2012), and shame proneness/trait shame (Cook, 1987; Tangney & Dearing, 2002).

The current findings may also have important implications for guiding subsequent developmental research towards clarifying the antecedents of objectified body consciousness processes (Lindberg et al., 2006; McKinley, 1999, 2011; Moradi & Huang, 2008; Tylka & Hill, 2004). Indeed, the pattern of results observed here suggests the relevance of considering the extent to which experiencing a "caregiver's shaming gaze" in the context of over regulating food intake behavior (i.e., promoting either over- or under-consumption) and concomitantly body weight or size could serve as an early precursor to: (a) engendering the value of objectifying the body, (b) prioritizing an outsider's perspective on eating and weight, and (c) instilling the belief that experiencing shame both intra- and interpersonally for failing to effectively regulate one's eating and weight in accordance with culturally-proscribed standards is normative.

In line with our predictions and current theory (e.g., Neff, 2003), we also found that participants reporting a greater self-compassionate mindset in how they treat themselves during difficult times tended to endorse lower levels of body shame, body surveillance and less frequent recall of restrictive/critical caregiver eating messages. These results replicate earlier work exploring the associations between self-compassion and components of objectified body consciousness conducted among younger adolescent female athletes (Mosewich et al., 2011) and augment prior research on caregiver eating messages and body image examined in undergraduate samples (e.g., Iannantuono & Tylka, 2012; Kroon Van Diest & Tylka, 2010).

Nonetheless, contrary to expectations, self-compassion was not related to appearance control beliefs in the present sample. It is plausible that since self-compassion reflects actively engaging in the adaptive regulation of self-evaluative affect (e.g., problematic thoughts and emotions; Gilbert, 2009; Neff, 2003), it would not necessarily be associated with the relatively affect-neutral content of the appearance control beliefs measure. The lack of its explicitly negative (or positive) self-evaluative cognitive-emotional content is what distinguishes it from the more affect-laden body surveillance and body shame measures (McKinley & Hyde, 1996).

A major contribution of the current investigation was exploring self-compassion's potential protective role in this body-related shame regulation context. More specifically, the significant interaction effects further clarified that lower levels of self-compassion were associated with stronger positive relationships between recalling early exposure to restrictive/critical caregiver eating messages and both current experiences of body shame and body surveillance in the present sample. On the contrary, it is possible that we did not observe a significant interaction effect involving self-compassion and pressure to eat caregiver messages given that the item content of such recalled eating directives did not directly indicate that one's body size or weight was being negatively evaluated. Therefore, the content of this subscale does not hold the same affectively-charged body shaming tone as do the restrictive/critical caregiver eating messages (Kroon Van Diest & Tylka, 2010).

Though our moderation via self-compassion effects were modest in size, which might be expected in a relatively healthy emerging adult female population, these findings raise important considerations for how this self-regulatory style could serve to weaken sociocultural vulnerability to certain components of objectified body consciousness in young adulthood from the overarching body-related shame regulating framework offered (Goss & Allan, 2010; Goss & Gilbert, 2002). These novel results contribute to the nascent line of research which has demonstrated the value of self-compassion in mitigating self-criticism, shame, and body image disturbance in both undergraduate and clinical-community samples (Albertson et al., 2014; Johnson & O'Brien, 2013; Kelly et al., 2014; Wong & Mak, 2013). Our findings in conjunction with Albertson et al.'s (2014) recent randomized controlled trial point to promising extensions of Compassion Focused Therapy (e.g., Goss & Allan, 2010) and Mindful Self-Compassion Training (e.g., Germer & Neff, 2013; Neff & Germer, 2013) in the prevention and defusion of self-objectification-related processes triggered by early familial body-related shaming memories and in turn potentially averting their adverse impact on eating and other weight-regulating behavior at this developmental juncture (Cardi et al., 2014; Goss & Gilbert, 2002; Kelly & Carter, 2013; Kelly et al., 2014; Matos et al., 2014).

Limitations and Future Directions

Despite the present study's unique contributions to the burgeoning literature on self-compassion as a protective factor, several limitations must be considered. Our results are susceptible to the caveats associated with self-selection/volunteer bias and the

reliance on self-report instruments that were administered in a fixed versus counterbalanced sequence. Thus, the accuracy of participants' recall may be questionable and the influence of questionnaire ordering effects cannot be discounted. The all-female sample was largely represented by less advanced undergraduates and thus findings in the current study may not generalize to their more academically-senior or to their male college student counterparts. We also did not measure participants' pre-existing levels of internal and external shame, which collectively would further strengthen our theoretical claims. Moreover, as noted earlier, interaction effects, although significant, were small in magnitude, which is not uncommonly found in non-experimental research designs (see McClelland & Judd, 1993 for an extensive discussion of these statistical issues). Results may be stronger with the inclusion of a clinical sample.

Regarding the limitations of the measure of caregiver eating messages, there is some ambiguity surrounding the sex of the caregiver referent: maternal versus paternal influences are not specifically distinguished. The exact relationship to the caregiver is also unclear as is the actual nutritional content of food being referred to consuming. Scale developers may additionally want to further refine the extent to which the content of both types of caregiver eating messages demonstrate a shaming tone that communicates the negative evaluation of one's body size or weight that is more directly tied to the food one is recalling being pressured to consume or avoiding/restricting consumption. Likewise, due to the preliminary nature of this investigation, we chose to use the full-scale self-compassion score in our analyses. Yet, emerging science in this area suggests that it would be beneficial to identify which components of self-compassion at the subscale level could be most strongly accounting for the observed effects (Akin & Eroglu, 2013; Hall et al., 2013; Iskender, 2009; Wasylkiw et al., 2012; Wong & Mak, 2013; Ying, 2009). Lastly, our cross-sectional design precludes assuming casual inferences.

Future directions may involve differentiating caregiver eating messages from maternal and paternal sources. The quality of the relationship between the caregiver and child and other attachment-related factors should also be examined further as additional variables in influencing the development of objectified body consciousness processes in the context of eating-related messages that is suggested by previous research (e.g., Hardit & Hannum, 2012; Iannantuono & Tylka, 2012). Also, caregiver eating messages and their link to self-objectification processes should be more comprehensively studied across other demographics such as gender, age, ethnicity, sexual orientation, socioeconomic status, and region of the country. The perception of caregiver eating messages may not align with actual intentions or experiences, therefore qualitative study designs would prove valuable. Similarly, given that reports are based on retrospective accounts, it is important to disentangle whether these constructs might be better conceptualized as how individuals have internalized these messages versus a true reflection of actual exposure to the eating-related message content communicated by early caregivers. Finally, later-stage observational and experimental research may want to consider more complex models that incorporate the extent to which worry and ruminative processes are driving the associations between recalling caregiver eating messages experienced earlier in life to body objectification processes in emerging adulthood. These analyses may further ascertain whether a self-compassionate mindset could disrupt these forms of maladaptive mental preoccupation and their ill effects in this context.

Conclusions

The present investigation offers a unique and incremental contribution to the literature concerned with identifying potential

protective factors involved in buffering the impact of recalled early body-related shaming experiences on internalized body-focused shame regulation processes in at-risk college women. Study findings have implications for guiding negative body image prevention and treatment initiatives among emerging adult females. Due to their enduring impact, caregivers can also be encouraged to use non-shaming communication strategies towards establishing healthy eating behaviors and body attitudes in their children early on that balance appropriate levels of parental involvement with fostering the increasing autonomy of the child. When parental figures adopt this flexible and empowering approach, they are bolstering children's choice, self-trust, and sense of competence and enjoyment in the process of eating and relating to their body (Satter, 2007), the benefits of which may sustain through young adulthood and beyond. In both contexts, self-compassion can be emphasized as a skill to cultivate in girls and young women to promote a healthier, intuitively-based relationship with eating and body image (e.g., Schoenefeld & Webb, 2013). Finally, our preliminary effort may advance additional scholarship devoted to unpacking the psychological regulatory processes involved in attenuating psychopathology risk arising from early shaming memories.

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