REAL WOMEN AND REAL BEAUTY: ASSESSING THE INTERNAL COMPARISON PROCESSES AND TARGET IMAGES IN BODY-IMAGE SELF-DISCREPANCIES

by

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ABSTRACT

JESSICA JEAN TAYLOR. Real Women and Real Beauty: Assessing the Internal Comparison Processes and Target Images in Body-Image Self-Discrepancies. (Under the direction of DR. JENNIFER B. WEBB and DR. AMY CANEVELLO)

The main purpose of the study was to assess if levels of state body shame and state appearance anxiety differ across two body-comparison conditions when controlling for baseline differences in weighted trait appearance self-discrepancy and BMI. Participants were asked to imagine and write about making a comparison with either a personal ideal of beauty (condition 1) or a sociocultural ideal of beauty (condition 2). Results of the manipulation check, which excluded the control variables, showed significant increases in the criterion variables for the personal but not the sociocultural condition. Results of hierarchical regression analyses testing the main hypothesis—and including controls—indicated a significant increase in both conditions for the dependent variables, but no significant difference between conditions. An additional test of moderation failed to show an interaction between condition and internalization of the sociocultural ideal. Additional qualitative data collected and analyzed via *t*-tests indicated that participants imagined multiple categories of appearance ideals (e.g., celebrity, friend) across both conditions. Findings from the current study suggest that an experimental manipulation consisting of a combination of imaginal exposure and open-ended writing task effectively elicited negative body-image-related affect. Moreover, results highlight that women think of multiple images when engaging in body-image comparison processes.

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INTRODUCTION

Research suggests that unfavorable comparisons with an internalized (mainstream) sociocultural ideal of beauty lead to negative emotional and psychological outcomes (e.g., Fredrickson, Roberts, Noll, Quinn, & Twenge, 1998; Groesz, Levine, & Murnen, 2002; Tiggemann, 2001). Many theoretical approaches imply that the personal ideal is essentially identical to the (unrealistically thin) sociocultural ideal (Calogero, Tantleff-Dunn, & Thompson, 2011; Dittmar, Halliwell, & Stirling, 2009; Fredrickson & Roberts, 1997; Harper & Tiggemann, 2007; Keery, van den Berg, & Thompson, 2004). However, correlational studies utilizing a self-discrepancy theoretical approach suggest that comparisons with this sociocultural ideal are conceptually different from comparisons with the personal ideal (Bessenoff & Snow, 2006; Harrison, 2001; Higgins, 1987). Moreover, these studies indicate that comparison with our own personal ideal of beauty is more relevant than comparisons with society's idea of beauty (Bessenoff & Snow, 2006; Szymanski & Cash, 1995). Lending some support to this idea are experimental studies showing that the degree of internalization of the thin-ideal moderates the extent of adverse outcomes elicited by thin-model images (e.g., Dittmar et al., 2009). This suggests that the more the sociocultural ideal has been adopted as a personal norm, the greater its influence. However, it is quite unclear what exactly this adopted sociocultural ideal looks like or if it is different from the personal ideal. Specifically, to the author's knowledge no study to date has collected qualitative data that

describes the appearance of the mental image of women's personal or sociocultural ideal of beauty.

Based on the issues outlined above, the purpose of the study was threefold: 1) to assess if negative emotional outcomes differ for comparisons with the personal ideal of beauty as compared to the sociocultural ideal of beauty, 2) to examine if the degree of internalization of the sociocultural ideal of beauty moderates the effect of comparisons on adverse emotional outcomes, and 3) to collect qualitative data as to the actual appearance of college women's ideals of beauty.

Background and Significance

Self-discrepancy theory (Higgins, 1987) posits that discrepancies between our self-concepts (how we actually perceive ourselves) and our self-guides (how we think we should be) lead to negative emotional outcomes such as shame and guilt. The two self-guides generally examined in research are the "ideal" self (what we want to be) and the "ought" self (what we think we ought to be as informed by social norms; Tangney, Niedenthal, Covert, & Barlow, 1998). With regard to the body image literature, these specific discrepancies are defined as the comparison between one's actual physical self and one's ideal physical self (actual:ideal) and the comparison between one's actual physical self and the sociocultural physical ideal (actual:ought).

Multiple theoretical approaches in the body image literature, including those based on self-discrepancy theory, have investigated the mechanisms involved in body image concerns for women via experimental paradigms (e. g., Dittmar et al., 2009;

Dittmar & Howard, 2004; Fredrickson et al., 1998; Harper & Tiggemann, 2007; Tiggemann, 2001). In general, most of these studies utilize image exposure techniques where women experience higher levels of negative affect and body dissatisfaction after exposure to images of thin models as compared to images of average-sized women or inanimate objects (Groesz et al., 2002). However, while the majority of these studies use the same image exposure techniques to activate comparison processes, they posit different explanatory mechanisms, each with its own specific set of assumptions (Bessenoff, 2006; Dittmar et al., 2009; Dittmar & Howard, 2004; Tiggemann & McGill, 2004).

These explanatory mechanisms range from social comparison (a direct external comparison with the media image; Tiggemann & McGill, 2004) to self-objectification (comparison with the internalized sociocultural ideal; Harper & Tiggemann, 2007) to physical self-discrepancies (comparison with the internalized personal ideal; Dittmar et al., 2009). The bulk of these body-image experiments assume that either internal or external comparison processes are triggered, but what these processes look like and whether and how they might differ has not been examined. Many studies seem to imply that the sociocultural ideal of beauty *is* the personal ideal of beauty and that to activate one is to activate the other (Calogero, Tantleff-Dunn, & Thompson, 2011; Harper & Tiggemann, 2007; Keery et al., 2004; Tiggemann & McGill, 2004). However, a few studies utilizing a self-discrepancy theoretical framework (Higgins, 1987) show that the personal ideal of beauty may be informed by—but is not identical to--the sociocultural

ideal of beauty (Arciszewski, Berjot, & Finez, 2012; Bessenoff & Snow, 2006; Bissell & Rask, 2010; Gordon, Castro, Sitnikov, & Holm-Denoma, 2010; Harrison, 2001).

For example, one study found that beliefs of body malleability ("My body's appearance can be changed") and exposure to body image threats (images of ultra-thin models) affected actual:ideal discrepancies but did not affect actual:ought discrepancies (Arciszewski et al., 2012). Another study found that exposure to a thin-reward portrayal (video of thin woman winning modeling contract) activated ideal self-discrepancies whereas exposure to a fat-punishing portrayal (video of obese woman being humiliated) activated ought self-discrepancies in a sample of 366 male and female adolescents (Harrison, 2001). Additionally, a study utilizing momentary assessment data collection techniques via palmtop computers found that actual:ideal discrepancies were associated with depressive symptoms whereas actual:ought discrepancies were related to anxious symptoms (Heron & Smyth, 2013). Overall these findings support the notion that the sociocultural ideal is conceptually and experientially different from the personal ideal.

Moreover, a small number of correlational studies indicate that one's personal ideal may be the more relevant comparison standard (Bessenoff & Snow, 2006). For example, a recent study examining self-reported size-related actual:ideal, actual:ought and actual:peer (body size of a typical female peer) discrepancies found that only discrepancies from one's personal ideal significantly predicted the positive body image outcome measures (Webb, Butler-Ajibade, & Robinson, 2014). A similar study found that the total effect of actual:ideal discrepancies on body appreciation (a positive,

protective and accepting stance towards the body) through body image flexibility (acceptance of negative body image thoughts/feelings as transient) was greater than the effect of either actual:ought or actual:peer self-discrepancies (Webb, 2015). Both studies highlight that the comparison with our own personal idea of beauty is more relevant to us than the comparison to society's idea of beauty or our idea of a typical female peer's appearance. Finally, a study by Bessenoff and Snow (2006) illustrated the relationship between actual:ideal and actual:ought self-discrepancies. Specifically, this study showed that comparisons with one's personal ideal of beauty (actual:ideal) fully mediated the relationship between comparisons with the sociocultural ideal of beauty (actual:ought) and body shame, while the reverse was not true (Bessenoff & Snow, 2006). These findings suggest that the more immediate and salient comparison target is the internalized personal ideal, where the sociocultural ideal influences the shape and form that this personal ideal takes. This interpretation would be in line with Festinger's (1954) research showing that people generally compare themselves to others with abilities or accomplishments that are deemed personally achievable, whereas people usually do not choose to compare themselves directly to unachievable ideals. These findings also underscore Szymanski's and Cash's (1995, p. 143) position that the ideal self-guide is "more relevant to self-evaluation" than the ought guide. Taking this perspective, it could be argued that, in general, when body comparison processes are triggered, a comparison with the personal ideal has greater adverse effects on one's emotional state than a comparison with the sociocultural ideal.

An important factor influencing the extent of this adverse emotional reaction is the degree to which one endorses the sociocultural idea of beauty. A number of studies show that exposure to images of thin models resulted in heighted negative body-focused affect only for those women high in thin-ideal internalization (Dittmar et al., 2009; Dittmar & Howard, 2004; Halliwell & Dittmar, 2004). This indicates that the degree to which the sociocultural standard has been adopted as one's private standard plays a pivotal role in adverse emotional outcomes. Therefore, it follows that when women are put into situations that trigger body comparisons, the degree to which they have internalized the sociocultural ideal as their own personal ideal would moderate the extent of negative emotional reactions.

And finally, while research has uncovered the attributes of the sociocultural ideal of beauty, this sociocultural ideal of beauty reflects the dominant cultural norms of the U.S. (and the Western world) and "glorifies thinness…a flat stomach, thin waist, boyish hips, long legs, well-developed breasts, well-defined muscles and flawless skin" (Calogero, Tantleff-Dunn, & Thompson, 2011, p. 8) and ignores the ideals endorsed by minority cultures such as African Americans or the Latin community. Research examining the particularities of minority beauty ideals is sparse but suggests differences in weight, shape and size-related physical ideals (e.g., Gordon, Castro, Sitnikov, & Holm-Denoma, 2010; Webb, 2015). A lack of clarity regarding the influence of non-mainstream ideals of beauty on self-discrepancies is compounded by the fact that in the majority of studies figure rating scales have been used to assess actual, ideal and ought

self-guides as they pertain to weight and shape (Webb, 2015; Webb et al., 2014). However, purposefully generic pencil drawings cannot capture the actual internal images used for comparisons. They cannot ascertain whether the self-guides look like Heidi Klum (e.g., a mainstream media image), or like a minority-cultural-specific icon (e.g., Beyoncé or Jennifer Lopez), one's sister or best friend (e.g., a peer) or like oneself ten years ago (e.g., a younger self) or like no one specific at all. Indeed, to the author's knowledge no study to date has explicitly asked participants to describe the image they use for comparison when put into a situation that triggers body comparison processes.

Therefore, the current study sought to extend the pertinent literature in three important ways: 1) to examine if comparisons with an internalized ideal of beauty versus a sociocultural ideal of beauty differ on outcome measures of state body shame and state physical appearance anxiety; 2) to test the moderating effect of sociocultural-ideal internalization; and 3) to assess the actual comparison target utilized in these comparison processes via qualitative data.

In order to pursue these aims, measures of body shame and physical appearance anxiety were utilized as outcome variables as these constructs are often used as measures of body-image-related emotions or affect (Castonguay, Brunet, Leah Ferguson, & Sabiston, 2012; Harper & Tiggemann, 2007) and align well with the principles of self-discrepancy theory. Specifically, the theory posits that discrepancies between the self-concept and self-guides lead to negative emotions or affect including shame and anxiety (Higgins, 1987; Tangney et al., 1998). Moreover, two potential confounds will be

accounted for in this study: BMI and weighted trait appearance self-discrepancy. Firstly, women with higher body weight tend to experience greater body-image disturbances than women with lower body weight (Bessenoff, 2006). Moreover, the literature shows that trait appearance self-discrepancy may have developed and solidified throughout adolescence and early adulthood through frequent exposures to body image threats (Bessenoff, 2006). Trait self-discrepancy can be defined as an internalized general sense of discrepancy or congruence with an appearance ideal and is considered a significant predictor of body-image disturbances (Bessenoff, 2006; Szymanski & Cash, 1995). Weighted trait appearance self-discrepancy adds the element of perceived importance placed on the discrepancy or congruence (Cash & Szymanski, 1995; Szymanski & Cash, 1995). For example, an individual may judge his or her weight as discrepant from an internalized ideal but places little importance on this discrepancy whereas another individual may place greater importance on a similar discrepancy. Another way of phrasing it is to say "discrepancy with strongly held physical ideals" (i.e., my *weight ideal* is important to me while my *hair texture ideal* is not). It is imperative to account for the potentially large variation in baseline weighted trait appearance self-discrepancy and BMI in order to accurately assess the effect of engaging in a comparison process.

Also, for the experimental design, imaginary scenarios were utilized to trigger body comparison processes with an internalized personal ideal (personal) versus a sociocultural ideal (sociocultural). Imaginary scenarios have shown to elicit similar effects as real-life or recalled events in fMRI research (Gilbert, 2009; Longe et al., 2010;

Rockliff et al., 2011) and have been successfully used in the body image literature (Lamarche, Bailey, & Gammage, 2015; Tiggemann, 2001). For example, Tiggemann's (2001) study utilizing imaginary scenarios showed that imagining oneself trying on a bathing suit alone had a larger effect on body dissatisfaction than asking participants to imagine walking along the beach in their bathing suits while passing a crowd of attractive men and women. These results point to effective elicitation of conceptually distinct comparison processes. Moreover, utilizing participants' own idealized standards of appearance as opposed to providing them with a comparison standard that may not account for cultural or ethnic influences increases ecological validity.

In summary the following hypotheses were examined:

H1: Participants instructed to imagine a comparison with their own personal standard of beauty would have higher state body shame and state physical appearance anxiety than participants instructed to imagine a comparison with the sociocultural ideal of beauty while controlling for weighted trait appearance self-discrepancy and BMI.

H2: Sociocultural-ideal internalization will moderate the effect of condition on state body shame and state physical appearance anxiety such that the effect will be greater for higher internalization and weaker for lower internalization while controlling for weighted trait appearance self-discrepancy and BMI.

A final aim of this study was to collect descriptive information of the comparison target's appearance and identity and conduct exploratory analysis of these qualitative results.

METHOD

Participants

One hundred and thirty-nine women between the ages of 18 and 26 were recruited at a large public university located in the southeastern United States through flyers, personal solicitation and the psychology department's online subject pool. One participant was excluded due to missing data, reducing the final sample to 138 females. The majority of the body-image literature has focused on females (Grabe, Ward, & Hyde, 2008; Levine & Murnen, 2009; Reilly, Rochlen, & Awad, 2014), thus for purposes of structural generalizability, an exclusively female sample was utilized. Moreover, adolescent and young adult females are considered especially vulnerable to body-image concerns (Tiggemann, 2006), therefore, the age range of participants was restricted to between 18-26. The cell distribution of participants was as follows: 49 participants were randomly assigned to the comparison-with-a-personal-ideal condition (personal), 46 participants to the comparison-with-the-sociocultural-ideal condition (sociocultural), and 43 participants to the control condition (control). Each participant had a 50% chance of winning a $5 Target gift card as compensation for participation. At the end of the online survey participants were informed if they won through a random number generator application offered by the online survey system (1 = Win, 0 = No Win). Of the 139 participants 40% won a gift card. Moreover, participants recruited through the psychology department's online subject pool additionally received 1 research credit.

Fifty-eight percent (N=80) of participants were White or European-American, 24% (N=33) Black or African-American, 9% (N=12) Hispanic or Latino, 5% (N=7) Asian or Asian-American, 0.7% (N=1) American Indian/Alaskan Native, and 4% (N=5) Other. Three point six percent (N=5) of participants' mothers had not graduated from high school, 25 % (N=34) had earned a high school degree, 26% (N=36) had had some college experience, 32% (N=45) had earned a college degree, 10% (N=7) a Master's degree and 3% (N=4) a doctoral degree. The BMI of participants ranged from 16.83 to 45.19 with an average BMI of 24.59 (SD = 5.21) which falls into the high normal range. Human subjects IRB approval was obtained and all participants provided informed consent.

Procedure

As part of a 45-minute lab session participants were randomly assigned to either a comparison-with-personal-ideal condition (personal), a comparison-with-the-sociocultural-ideal condition (sociocultural), or a non-physical appearance-related control condition (control). Participants first completed pre-manipulation self-report questionnaires assessing weighted trait appearance self-discrepancy, internalization of the sociocultural ideal, self-compassion, self-esteem, perceived stress, mindfulness, and perfectionism and then were asked to imagine themselves in the randomly assigned scenario as well as write about their thoughts, feelings and the images that come up for five minutes. Subsequently, participants completed post-manipulation self-report questionnaires of state appearance anxiety, state body shame, state self-compassion, body-image coping strategies and state anxiety. All data were collected via Qualtrics.

In the personal condition, participants read a scenario instructing them to imagine comparing their bodies with their own personalized ideal. In the sociocultural condition, participants read a scenario instructing them to imagine comparing their bodies to what they perceived as the sociocultural ideal. Finally, participants in the control condition read a scenario instructing them to imagine a non-physical-appearance related scene (i.e, driving a car to school). The control condition also served as a manipulation check for the experimental conditions by providing a baseline comparison. The scenario texts for all conditions appear in Appendix A. The comparison scenarios were loosely based on the dressing room scenario utilized by Frederick, Peplau, and Lever, (2006) and Tiggemann (2001). In the comparison with a personal ideal scenario participants were asked to imagine themselves trying on a bathing suit in a dressing room with a full-length mirror and to evaluate their appearance based their own personal idea of beauty. The comparison with the sociocultural ideal scenario asked participants to imagine themselves trying on a bathing suit in a dressing room with a full-length mirror in the same situation, but to evaluate their appearance based society's idea of beauty. Participants in the control group imagined themselves driving to campus using their own or a borrowed car.

In order to minimize distractions participants were asked to report to a large computer lab (seating 32) in groups of five and seated in such a way as to maximize space between them. Moreover, to shift participants' focus away from body image-related concerns and minimize demand characteristics, participants completed additional measures not relevant to the current study pre- and post-manipulation assessing self-

compassion, self-esteem, perceived stress, mindfulness, perfectionism, state self-compassion, body-image coping strategies and state anxiety (. Participants were told that the purpose of the study was to investigate how women react to a variety of everyday events and that they would be assigned to one of five different conditions: 1) shopping, 2) studying, 3) spending time with friends, 4) driving, or 5) being in class. However, all participants received scenarios related to body-image concerns or the control condition.

After arriving at the lab the experimenter provided participants with the study instructions utilizing a prewritten script. They also asked participants to sit down at one of the five marked computers and handed out the Informed Consent. Participants were then asked to provide consent. Subsequently, participants completed all predictor, control and pre-manipulation distraction measures.. Then, the survey system randomly assigned each participant to one of the three conditions and the corresponding experimental manipulation (scenario text) appeared. They were asked to read the text closely, imagine themselves in the situation, and to spend the next five minutes writing about the thoughts, feelings, and images they would have if they were actually experiencing the situation described. The online survey software showed a timer informing participants when they had reached the time limit. Next, participants provided descriptions of the images they utilized as comparison targets, completed outcome measures of state physical appearance anxiety, state body shame, and all post-manipulation distraction measures (i.e., state self-compassion, body-image coping strategies, and state anxiety), and a demographics questionnaire. Subsequently, participants were thoroughly debriefed and the deception

was explained. Finally, the online software utilizing a Boolean generator (1=win, 0=loss) indicated either a win or loss of the $5 Target gift card, which was then handed out to all winning participants.

Measures

Before receiving the manipulation, participants completed the moderator and control measures of internalization of the sociocultural ideal and weighted trait appearance self-discrepancy, as well as the distraction measures trait self-compassion, self-esteem, perceived stress, perfectionism, and mindfulness. Subsequently, participants viewed a randomly assigned scenario text and wrote about their thoughts, feelings and images for five minutes. Finally, participants completed a questionnaire asking them to describe the images of the comparison targets utilized, the criterion measures of state physical appearance anxiety and state body shame, a demographic questionnaire including sex, ethnicity, maternal education, family income along with weight and height, which was used to calculate BMI (BMI formula: weight (lb) * 703 / height (in) squared), as well as the distraction measures of state self-compassion, body-image coping strategies, and state anxiety. The order of the pre-manipulation measures was randomized, whereas only the distraction measures for the post-manipulation measures was randomized. The demographic questions remained at the end of the post-manipulation survey. All measures, including distraction measures, can be viewed in Appendix B.

Internalization of Media's Appearance Ideal. Internalization of the appearance ideal was assessed using the Internalization General subscale of the Sociocultural Attitudes Toward Appearance Scale-3 (SATAQ-3; (J. K. Thompson, van den Berg, Roehrig, Guarda, & Heinberg, 2004). The Internalization General subscale consists of nine items which are rated on a scale of 1 (*Completely Disagree*) to 5 (*Completely Agree*). The subscale includes such items as "I would like my body to look like the people who are on TV," "I compare my appearance to the appearance of TV and movie stars," and "I wish I looked like the models in music videos." Scoring involves averaging the item-level values where higher mean scores reflect greater internalization of the media's appearance ideal. In the current study the scale evinced excellent internal consistency ($\alpha = .94$) in line with past research ($\alpha = .94$; Thompson et al., 2004). Good convergent validity is indicated by significant positive associations with disordered eating (J. K. Thompson et al., 2004).

Weighted Trait Appearance Self-Discrepancy. We measured the degree of weighted trait appearance self-discrepancy using the Body-Image Ideals Questionnaire (BIQ; Cash & Szymanski, 1995), which measures the level of congruence/discrepancy between actual physical characteristics and ideal physical characteristics as well as the importance placed on these particular physical characteristics. The BIQ contains eleven item pairs in which the first part of the pair asks participants to rate how much they resemble their physical ideal on a particular physical attribute on a scale from 0 (*Exactly As I Am*) to 3 (*Very Unlike Me*). The second part of the item pair asks respondents to rate

the importance of that particular physical attribute from 0 (*Not Important*) to 3 (*Very Important*). For example, the items include "My ideal height is:," "How important is your ideal height?," "My ideal skin complexion is:," "How important to you is your ideal skin complexion?," "My ideal overall physical appearance is:," and "How important to you is your overall physical appearance?". The discrepancy items are re-scored so that every 0 becomes a -1. Then the scores for each item pair are multiplied and the cross-products of all item pairs averaged producing a range of scores between -3 and +9. The Body-Image Ideals Questionnaire has shown good internal consistency in the current study ($\alpha = .82$) as well as in past research ($\alpha = .77$, Cash & Symanski, 1995). It has also evidenced good convergent validity in past research as scores on the BIQ are highly negatively correlated with body areas satisfaction and highly positively related to body-image dysphoria (Cash & Szymanski, 1995).

Qualitative Data Collection**.** The image that participants utilized as comparison targets was assessed via a questionnaire created for this project (see Appendix B). The questionnaire asked participants to choose from nine image options and subsequently asked them to provide detailed descriptive information. Participants saw the instructions "We are interested in understanding what images came up for you when you compared yourself to your own personal idea of beauty/to society's idea of beauty. Please choose one or more of the options below and provide as much detailed information as you can," followed by nine image options: "Celebrity," "Fashion Model," "Friend," "Family Member," "Acquaintance," "Younger Self," "Current Self," "Modified Self," and

"Other." Following each image option, participants were asked to provide information as to the identity (if applicable), race/ethnicity, gender, and approximate age of the image as well as any other descriptive characteristics they thought would be helpful.

State Physical Appearance Anxiety. State physical appearance anxiety was measured via the Weight-Related Physical Appearance State Anxiety subscale of the Physical Appearance State and Trait Anxiety Scale (PASTAS; Reed, Thompson, Brannick, & Sacco, 1991). The Weight-Related Physical Appearance State Anxiety subscale consists of eight items rated on a scale from 0 (*Not at All*) to 4 (*Exceptionally So*). All items are preceded by the stem: "Right now, I feel anxious, tense, or nervous about:" and followed by the items: "The extent to which I look overweight," "My thighs," "My buttocks," "My hips," "My stomach," "My legs," "My waist," and "My muscle tone." The subscale has shown excellent internal consistency with Cronbach alphas ranging from .90 to .92 (Reed et al., 1991). In the current study the internal consistency proved to be equally excellent with a Cronbach alpha's of .89. Moreover, the subscale showed excellent convergent validity in past research as evidenced by significant associations with drive for thinness, body dissatisfaction and physical appearance evaluation (Reed et al., 1991).

State Body Shame. State body shame was assessed via the Body Shame subscale (BSS) of the Body and Appearance Self-Conscious Emotions Scale (BASES; (Castonguay, Sabiston, Crocker, & Mack, 2014). This subscale measures the extent to which one experiences an acutely painful emotion because of failure to adhere to

internalized cultural standards of beauty. The body shame measure consists of four items rated on a scale from 0 (*Never*) to 5 (*Always*). Items are preceded by the stem: "In general, I feel…" and followed by items such as, "…ashamed of the way I look," and "…ashamed that I am a person who is unattractive". For purposes of the proposed study the stem item was modified to "Right now, I feel…" in order to assess state body shame. Scoring involves calculating the mean of all item ratings, such that higher scores indicate greater body shame. This scale has evidenced excellent internal consistency (α =.89) and two-week test-retest reliability (r =.88; Castonguay et al., 2014). Additionally, the subscale has shown excellent convergent validity in a sample of undergraduate students where body shame was inversely associated with self-esteem, positive affect, positive body-related self-perceptions and positively associated with depression, negative affect, social physique anxiety and neuroticism (Castonguay et al., 2014). In the current study the scale also indicated excellent internal consistency with a Cronbach alpha of .89.

Pre-Manipulation Distraction Questionnaire. Trait self-compassion was measured via the Self-Compassion Scale (Neff, 2003). Self-esteem was measured via the Rosenberg Self-Esteem Scale (Rosenberg, 1965). Perceived stress was assessed through the Perceived Stress Scale (S. Cohen, Kamarck, & Mermelstein, 1983). Perfectionism was measured via the Multidimensional Perfectionism Scale-F (Frost, Marten, Lahart, & Rosenblate, 1990). Mindfulness was assessed through the Five Facet Mindfulness Questionnaire (Baer, Smith, Hopkins, Krietemeyer, & Toney, 2006).

Post-Manipulation Distraction Questionnaire. State self-compassion was measured via the State Self-Compassion Scale (Breines & Chen, 2013; Neff, 2003). Body image coping strategies were measured through the Body Image Coping Strategies Inventory (Cash, Santos, & Williams, 2005). State anxiety was assessed via the State Anxiety Subscale of the State-Trait Anxiety Inventory for Adults (Spielberger, Gorsuch, Lushene, Vagg, & Jacobs, 1983).

Statistical Analysis

The data was analyzed using the SPSS version 22.0 statistical program. Basic descriptive statistics to measure means, standard deviations and ranges were calculated. Pearson's bivariate correlations were computed to evaluate the basic linear associations between all variables. Data screening procedures were performed to ensure that the key assumptions for multiple regression analysis were met. All predictors were mean-centered in order to reduce non-essential multicollinearity and simplify interpretation of coefficients. Normality of distribution was assessed using measures of skewness, kurtosis and boxplots. For all variables, skewness ranged from -.267 to 1.451, and kurtosis ranged from -1.149 to 2.776. These were within the acceptable range of _2.00 to +2.00 for skewness and -5.00 to +5.00 for kurtosis (Kendall & Stuart, 1960).

Furthermore, boxplots indicated two outliers in weighted trait appearance self-discrepancy (one above and one below more than 3 standard deviations the centered mean) and one outlier in BMI (more than 3 standard deviations above the centered mean), all three outliers appeared in the control condition. All results reported below

exclude these outliers as preliminary analyses indicated that inclusion of outliers increased statistical significance of all coefficients suggesting exaggeration of results.

Separate hierarchical multiple regression analyses (HMR) were utilized to examine group differences based on demographic variables. Neither race, class rank, maternal education, age, nor financial status (self-supporting, partially other-supported, fully other-supported) revealed themselves as statistically significant predictors of either of the dependent variables across the three conditions. However, income level, specifically an annual income level between $50,001 and $75,000 ($B$ = .90, SE = .43; p < .05), was a statistically significant predictor of state body shame within the context of the three conditions. Therefore, all HMR analyses with state body shame as the outcome were conducted with and without income levels included as a control.

One-Way-ANOVAs were employed to assess any baseline differences between conditions for the two main predictors: internalization of the sociocultural ideal (F(2,134)=1.29, p=.28) and weighted trait appearance self-discrepancy (F(2,134)=1.01, p=.37). Results indicated no significant differences between conditions.

In order to assess the effectiveness of the experimental manipulation, simultaneous entry regression analyses evaluated main effects of experimental conditions on state physical appearance anxiety and state body shame, above and beyond the control condition. Furthermore, hierarchical multiple regression (HMR) analyses were used to assess group differences between state physical appearance anxiety and state body shame based on the two experimental conditions while controlling for covariates. Moreover, additional HMR

analyses were used to examine interaction effects of sociocultural-ideal internalization on the relationship between condition and outcome variables.

All HMR results were primarily evaluated based on the statistical significance and effect size measures of the Unstandardized Regression Coefficients *(B)* of the various predictors. However, for comprehensiveness' sake overall and unique variance accounted for by the models (Adjusted R^2, ΔR^2) were also included. Intercept values for the HMR analyses are included in the Results section as well as the tables in order to provide context for interpretation of the unstandardized regression coefficients. Intercept values denote average criterion values in the control condition.

In order to assess the qualitative data, the number of total images endorsed by participants was calculated for the two experimental conditions and compared via an independent samples *t*-test. Moreover, the differences between mean number of images endorsed by category (celebrity, fashion model, friend, acquaintance, family member, younger self, current self, and modified self) per condition was also assessed via independent samples *t*-tests. Finally, a table with samples of the qualitative descriptions given by participants for each of the endorsed images was constructed to provide further detail and context of the appearance of the comparisons targets (see Longmore, Johnson, Manning, & Giordano, 2013 for precedent of including qualitative descriptions without formal analysis).

RESULTS

Zero-Order Correlations and Descriptive Values

Most zero-order correlations were in the expected directions (see Table 1). Specifically, internalization of the sociocultural ideal was positively correlated with weighted trait appearance self-discrepancy, state appearance anxiety, state body shame, but not BMI. Moreover, weighted trait appearance self-discrepancy was positively correlated with state appearance anxiety, and state body shame, and not with BMI. In the same vein, it was found that BMI correlated positively with state appearance anxiety and state body shame. Finally, state appearance anxiety and state body shame were positively correlated in this study as well.

Moreover, means and standard deviations of the study variables broken down by conditions are presented in Table 2. Values indicate sufficient variance across the different variables.

Manipulation Check

To test the effectiveness of the scenario texts and instructions, a simultaneous-entry regression analysis for state appearance anxiety was conducted with the structural set of the dummy-coded conditions as the predictors. For state body shame two analyses were conducted: one simultaneous entry regression analysis with the dummy-coded conditions as a structural set of predictors and one hierarchical regression analysis with the structural set of weighted-effect coded income levels as step one and the structural set

of conditions as step two. Excluding income levels, participants in the personal condition experienced a statistically significant increase in state appearance anxiety ($B_{anxiety}$ = .38, *SE* = .18., *p* = .04) and approached a statistically significant increase in state body shame (B_{shame} = .42, *SE* = .21, *p* = .05), compared to the control group ($Intercept_{\_anxiety}$ = 3.27, *SE* = .13; $Intercept_{\_shame}$ = 1.

63, *SE* = .16). Overall, the conditions did not explain any variance in state body shame (ΔR^2 = .03, *p* = .14)

In the sociocultural condition, participants did not experience a statistically significant increase in state appearance anxiety ($B_{anxiety}$ = .24, *SE* = .18, *p* = .19) or state body shame (B_{shame} = .23, *SE* = .21, *p* = .28) as compared to the control group ($Intercept_{\_anxiety}$ = 3.27, *SE* = .13; $Intercept_{\_shame}$ = 1.63, *SE* = .16). Moreover, the conditions did not account for any significant variance in state appearance anxiety (ΔR^2 = .03, *p* = .11)

Including income levels for state body shame produced a statistically significant increase in the criterion variable for the personal condition (B_{shame} = .44, *SE* = .21, *p* = .04) as compared to the control group ($Intercept_{\_shame}$ = 1.62, *SE* = .15) while participants in the sociocultural condition (B_{shame} = .25, *SE* = .21, *p* = .23) again did not. Furthermore, conditions plus income did not account for any significant variance in state body shame (ΔR^2 = .03, *p* = .11) either.

Hypothesis 1

For the test of group differences between experimental conditions while controlling for covariates, three separate HMR's were conducted (one for state body shame excluding income, one for state body shame including income, one for state appearance anxiety) ; the process was the same for state body shame excluding income and state appearance anxiety: In step 1, the covariates, BMI and weighted trait appearance self-discrepancy, were entered, in step 2 the dummy-coded conditions were entered as a structural set. For state body shame including income levels, an additional separate step consisting of a weighted-effect coded structural set of income levels was utilized as the first step, with the covariates BMI and weighted trait appearance self-discrepancy as step 2, and the conditions as step 3. To ascertain a significant difference between groups the following formula from (Cohen, Cohen, West, & Aiken, 2003, p.43) was utilized to calculate the 95% confidence intervals around the difference between the regression coefficients: $(B_{Personal} - B_{Sociocultural}) \pm ((\sqrt{(SE_{B_{Personal}})^2 + (SE_{B_{Sociocultural}})^2}) * 1.96)$. If the confidence intervals did not contain zero it was concluded that there was a 95% probability that the regression coefficients were significantly different from each other.

Table 3 presents findings from the HMR analyses for state appearance anxiety and state body shame excluding income and Table 4 presents findings from the HMR analysis for state body shame including income.

For state body shame, results of the final model excluding income (see Table 3) indicated that weighted trait appearance self-discrepancy, BMI, and both the personal

condition and the sociocultural condition were statistically significant predictors ($p < .05$; see Table 3). Overall, this suggests that participants in the personal condition (M_{shame}= 1.96) and in the sociocultural condition (M_{shame}= 2.00) experienced a small but statistically significant increase in state body shame as compared to participants in the control condition (M_{shame}= 1.60).

A calculation constructing a 95% confidence interval around the probability of statistically significant differences between the regression coefficients of the two experimental conditions contained zero and thus had to be interpreted as statistically non-significant ($B_{personal}$ = .36, $SE_{personal}$ = .16; $p < .05$; $B_{sociocultural}$ = .40, $SE_{sociocultural}$ = .16, $p <$ .05; 95% CI [-0.48, 1.24]). This means that the levels of state body shame did not differ between experimental conditions. The overall final model explained 47% of the variance in state body shame, however, income did not account for any statistically significant proportion of this variance, while the conditions accounted for 3% of unique variance ($\Delta R^2 = .03$, $p < .05$).

For state body shame, results of the final model *including income* (see Table 4) indicated that weighted trait appearance self-discrepancy, BMI, and both conditions were statistically significant predictors ($p < .05$) while income was not a significant predictor (see Table 4). Overall, this suggests that participants in the personal condition (M_{shame}= 1.99) and in the sociocultural condition (M_{shame}= 1.99) experienced a small but statistically significant increase in state body shame as compared to participants in the control condition (M_{shame}= 1.61). A calculation constructing a 95% confidence interval

around the probability of statistically significant differences between the regression coefficients of the two experimental conditions contained zero and thus had to be interpreted as statistically non-significant ($B_{personal}$ = .38, $SE_{personal}$ = .16; $p < .05$; $B_{sociocultural}$ = .38, $SE_{sociocultural}$ = .16, $p < .05$; 95% CI [-0.44, 1.15]). This indicates that levels of state body shame did not differ between experimental conditions even when accounting for income levels.

The overall final model explained 47% of the variance in state body shame, however, income did not account for any statistically significant proportion of this variance, while the conditions accounted for 3% of unique variance ($\Delta R^2 = .03$, $p < .05$).

For state appearance anxiety, weighted trait appearance self-discrepancy, BMI, and both conditions were statistically significant predictors ($p < .05$; see Table 3). Overall, this suggests that participants in the personal ($M_{anxiety}$= 3.61) and sociocultural ($M_{anxiety}$= 3.57) conditions experienced a small but statistically significant increase in state appearance anxiety as compared to participants in the control condition ($M_{anxiety}$= 3.26).

A calculation of group differences between conditions was performed but, again, did not show statistically significant differences between the regression coefficients of the two conditions ($B_{personal}$ = .35, $SE_{personal}$ = .14; $p < .05$, $B_{sociocultural}$ = .31, $SE_{sociocultural}$ = .14; $p < .05$, 95% CI [-0.35, 0.91]). Again, these findings suggest that the levels of state appearance anxiety did not differ between conditions.

The overall final model explained 46% of the variance in state appearance anxiety, where the conditions accounted for 3% of unique variance ($\Delta R^2 = .03$, $p < .05$).

In conclusion, Hypothesis 1 was not supported, however, results indicated statistically significant effects for the personal and sociocultural conditions. These findings provide preliminary and tentative support for the notion that comparisons with person-specific imaginary ideals of beauty have a detrimental effect on women's momentary affective states.

Hypothesis 2

To assess the interaction effect of sociocultural-ideal internalization three additional HMR's were conducted (one for state body shame excluding income, one for state body shame including income, one for state appearance anxiety). Again, for state body shame excluding income and state appearance anxiety, the basic processes were identical for both: In step 1, the control variables were entered, in step 2, the dummy-coded conditions were entered as a structural set, and in step 3, the moderator (socio-cultural-ideal internalization) was entered and in Step 4, the interaction terms of the structural set (Personal_X_Sociocultural-Ideal-Internalization; Sociocultural_X_Sociocultural-Ideal-Internalization) specific to the DV were entered. As with the previous analysis, for state body shame including income levels, an additional separate step consisting of a weighted-effect coded structural set of income levels was utilized as the first step, with the covariates BMI and weighted trait appearance self-

discrepancy as step 2, and the conditions as step 3, the moderator as step 4, and the interaction terms as step 5.

As shown in Table 5, in the final model for state body shame excluding income, only weighted trait appearance self-discrepancy, BMI and the sociocultural condition emerged as statistically significant predictors. The personal condition approached statistical significance, however, neither internalization of the sociocultural ideal nor the two interaction terms of condition X internalization of the sociocultural ideal were statistically significant (see Table 6). These findings suggest that degree of internalization of the sociocultural ideal does not moderate the effect of imaginary comparison with either a personal or sociocultural ideal of beauty on state body shame.

In the final model predicting state body shame *including income*, weighted trait appearance self-discrepancy, BMI and the personal condition emerged as statistically significant predictors while the sociocultural condition approached statistical significance. Again, neither internalization of the sociocultural ideal nor the two interaction terms of condition X internalization of the sociocultural ideal were statistically significant (see Table 6). These findings suggest that degree of internalization of the sociocultural ideal does not moderate the effect of imaginary comparison with either a personal or sociocultural ideal of beauty on state body shame even when controlling for income levels.

In the final model for state appearance anxiety, results indicated that weighted trait appearance self-discrepancy, BMI and internalization of the sociocultural ideal were

statistically significant predictors while the personal condition approached statistical significance. Neither the sociocultural condition, nor the two interaction terms of condition and or by or X internalization of the sociocultural ideal were statistically significant (see Table 5). These results indicate that the extent of internalization of the sociocultural ideal of beauty has little effect on the impact of an imaginary comparison with either a personal or a sociocultural ideal of beauty on state appearance anxiety.

In conclusion, Hypothesis 2 was not supported suggesting that a high degree of internalization of the sociocultural ideal of beauty did not increase the effect of the experimental manipulation on levels of state body shame or appearance anxiety.

Exploratory Analysis of Qualitative Results

Results of an independent samples *t*-test comparing the mean number of images endorsed by condition ($M_{personal}$=3.47, *SD*=1.36; $M_{sociocultural}$=3.76, *SD*=1.66) indicated no statistically significant differences between groups (*t*(93)=-.94, *p*=.35), suggesting that participants in the personal condition on average endorsed just as many different images as participants in the sociocultural condition. Moreover, the differences between mean number of images endorsed by category (celebrity, fashion model, friend, acquaintance, family member, younger self, current self, and modified self) per condition was also assessed via independent samples *t*-tests (see Table 7). Only the category "Younger Self" differed significantly between conditions where participants in the sociocultural condition (*M*=.52; 52%) endorsed significantly more images than participants in the personal condition (*M*=.27; 27%; *t*(93)=-2.63, *p*<.05). This may indicate that drawing a

comparison image from a sociocultural context may put more emphasis on youthfulness. Despite this one exception, overall, results indicated that women thought of multiple different types of images, drawing from both personal and sociocultural contexts, regardless of condition.

Finally, Table 8 makes available samples of the qualitative descriptions given by participants for each of the endorsed images by condition in order to provide further detail and context of the appearance of the comparisons targets (see Table 8; see Longmore, Johnson, Manning, & Giordano, 2013 for precedent of including qualitative descriptions without formal analysis). Table contents highlight the similarities between the two conditions in terms of identities of the comparison images (e.g. Kim Kardashian, mother, modified self), the descriptions of the physical attributes (e.g., large breasts, thin, tall) as well as the use of non-physical attributes (e.g., caring, outgoing, faithful) when describing the appearance of friends and family members.

DISCUSSION

An abundance of body-image literature has provided ample evidence that unfavorable comparisons with an internalized (mainstream) sociocultural ideal of beauty generally leads to negative emotional and psychological outcomes (Fredrickson et al., 1998; Groesz et al., 2002; Tiggemann, 2001). While some theoretical approaches imply that the personal ideal is essentially identical to the (unrealistically thin) sociocultural ideal (Calogero, Tantleff-Dunn, & Thompson, 2011; Dittmar et al., 2009; Fredrickson & Roberts, 1997; Harper & Tiggemann, 2007; Keery et al., 2004) some correlational research indicates that the personal ideal of beauty is conceptually different from the sociocultural ideal and may be the more salient comparison target (Bessenoff & Snow, 2006; Harrison, 2001; Higgins, 1987).

Results of the current study suggest that comparisons with a personal ideal of beauty do not differ from comparisons with the sociocultural ideal of beauty when employing this study's novel imaginary experimental methodology. Moreover, findings indicate that the degree of internalization of the sociocultural ideal of beauty does not moderate levels of the criterion variables elicited by experimental manipulations—as some previous image-exposure experiments have suggested (e.g., Dittmar & Howard, 2004). Finally, the qualitative data collected shed some light on the types of images women thought of and the appearance of these images when engaging in comparison

process with their perceived ideals (personal or sociocultural). Implications of the results are discussed below.

Linear Associations Between Continuous Study Variables

Most zero-order correlations were in the expected directions according to previous research (Castonguay et al., 2012, 2014; Jefferson & Stake, 2009; Lamarche et al., 2015; Moradi, Dirks, & Matteson, 2005; A. M. Thompson & Chad, 2002; Tiggemann, 2013; Tiggemann & McGill, 2004; Titchener & Wong, 2015; Webb & Hardin, 2016). Notably, state body shame and state appearance were highly correlated, however, these strong positive associations make sense as someone with high appearance anxiety might also be prone to experiencing body shame. Moreover, despite the strong association, these two variables are, nonetheless, still considered distinct constructs (Castonguay et al., 2014).

Manipulation Check

In general, the manipulation check was at or approached statistical significance for the personal condition but failed to do so for the sociocultural condition. The manipulation check would have been deemed successful if both conditions had experienced a significant increase in the criterion variables, as it did not, it failed. However, as further analyses indicated, the manipulation elicited a small effect in both conditions when controlling for weighted trait appearance self-discrepancy and BMI.

Therefore, it is possible that only when accounting for baseline variation of a woman's general sense of appearance discrepancy or congruence with strongly held physical ideals could the imaginary scenario actually trigger an effect[1]. Some women likely entered the experiment feeling very congruent with their beauty ideal while others felt very discrepant from their beauty ideal, the manipulation may have triggered positive emotions in the former and negative emotions (body shame, appearance anxiety) in the latter, potentially neutralizing each other's effects. Therefore, these baseline variations may have clouded the effect of the manipulation and controlling for them allowed the manipulation's effect to crystalize.

Hypothesis 1

Furthermore, in direct contrast to the predicted hypothesis, regression analyses indicated that neither the personal nor the sociocultural condition elicited stronger reactions in participants. In fact, there were no significant differences in effect sizes between the two experimental conditions; thus hypothesis 1 was not supported.

A number of explanations might account for the lack of difference in effect size between the personal and sociocultural conditions. First and foremost, the experimental manipulation included two components: an imaginary scenario and five-minute writing task. The writing task was meant to promote and enhance engagement with the imaginary content of the scenario, however, in retrospect, it is likely that the process of writing

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[1] As BMI accounted for a much smaller portion of this variance the discussion will focus on weighted trait self-discrepancy.

functioned as an additional manipulation and permitted participants time to explore both personal and sociocultural contexts of beauty ideals. Previous body-image research has successfully utilized either imaginal exposure (Lamarche et al., 2015) or open-ended writing (Alleva, Veldhuis, & Martijn, 2016) but to the author's knowledge no study to date has combined the two. Thus, the complex nature of the manipulation (combining imaginal exposure with open-ended writing) likely contributed to the lack of difference in effects between the two experimental groups. Future research should compare a writing versus imaginal scenario condition for each type of body comparison.

Moreover, it is possible that the instructions permitting participants to freely utilize any number images as comparison targets provided too much opportunity for overlap across conditions. It's also possible that the instructions at the end of each scenario ("…how do you measure up to your personal idea of beauty?", "…how do you measure up to society's idea of beauty?"), were neither directive nor strong enough to limit participants' comparison targets to one kind. Future studies should strengthen the wording for the instructions for the writing to remind the participants of what specifically they were asked to imagine.

Finally, it is also possible that participants did not make distinctions between a personal and a sociocultural ideal and did indeed consider one to the be the same as the other. However, the qualitative results contradict the latter explanation and favor the two former. Indeed, the qualitative data indicates that both manipulations elicited personal and sociocultural images equally. Specifically, regardless of condition, participants

endorsed an average of 3.5 images with the three most endorsed images located in the celebrity, friend and modified-self categories.

As mentioned previously, with weighted trait appearance self-discrepancy and BMI as control variables, the personal and sociocultural manipulations induced statistically significant increases in state body shame and state appearance anxiety as compared to participants in the control condition. In that sense, the regression analyses testing hypothesis 1 served as a manipulation check and an illustration of the nuanced and complex relationships between body-image-related experiences. In fact, it is likely, that the inclusion of weighted trait appearance self-discrepancy and BMI as control variables accounted for both negative and positive pre-existing body-image attitudes—allowing the effect of the manipulation to become apparent.

Indeed, research shows that women differ on their trait perception of congruence vs. discrepancy with their strongly held physical ideals (i.e., weighted trait appearance self-discrepancy; Bessenoff, 2006), which significantly affects body-image related outcomes. Specifically, congruence with strongly held physical ideals is associated with positive outcomes (Cash et al., 2005; Knobloch-Westerwick, 2015; Tiggemann, Polivy, & Hargreaves, 2009) and discrepancy with strongly held physical ideals is associated with negative outcomes (Cash et al., 2005; Cash & Szymanski, 1995; Veldhuis, Konijn, & Knobloch-Westerwick, 2016).

In the current study, an evaluation of participants' level of congruence vs. discrepancy with strongly held physical ideals (according to Cash & Szymanski, 1995)

showed that of 135 participants, 25 met the criteria for congruence while 110 met the criteria of discrepancy, indicating variation in baseline body-image perceptions. Thus, it is possible that these baseline variations in weighted trait appearance self-discrepancy functioned as a suppressor of the effect of the conditions (see Thompson & Levine, 1997 for an explanation of suppressor processes in multiple regression analyses). Therefore, including weighted trait appearance self-discrepancy then "unsuppressed" the impact of the manipulation and allowed it to take effect. Providing supporting evidence of this suppressor effect is the fact that the manipulations accounted for 3% of unique variance above and beyond weighted trait appearance self-discrepancy (ca. 50%) in both state appearance anxiety and state body shame once weighted trait appearance self-discrepancy was included. Considering that controlling for self-discrepancy reduced the available variance in the criterion variables by half this in and of itself is no mean feat and indicates that the manipulations, subtle as they may be, did indeed produce an effect.

Hypothesis 2

Findings showed that the internalization of the sociocultural ideal did not moderate or interact with the effect of the conditions on the criterion variables. It is possible that with this imaginary comparison methodology, arguably a less controlled method than an image-exposure technique, interaction between variables cannot be easily identified or perhaps simply does not exist. Previous research indicating interactions between internalization and experimental image-exposure utilized artificial dichotomization of the internalization variable and neglected to account for BMI and self-

discrepancy (e.g., Dittmar et al., 2009). Future studies should consider strengthening the manipulation to elicit a stronger effect and consider drawing their sample from a body-image-disturbed population.

Qualitative Results

The main focus of the qualitative data collection was the number and type of images women thought when engaging in comparison processes and the specific appearance of these images. On average participants thought of three to four images that fell into a variety of categories. For example, in both conditions roughly 50% of participants described a celebrity as a comparison target, over 60% of participants imagined a friend as a comparison target, and contrary to expectations, more participants in the sociocultural condition (70%) thought of a modified self than participants in the personal condition (59%), though the differences were not statistically significant.

Furthermore, results of an independent samples *t*-tests indicated that participants in the sociocultural condition thought of a younger self (52%) significantly more than participants in the personal condition (27%). It's possible that drawing comparison images from a sociocultural context placed more emphasis on youthfulness as the beauty ideal promulgated by the media is often portrayed as young (Fredrickson & Roberts, 1997). Nevertheless, further qualitative analyses will be required in order to assess potential explanations.

Overall the analyses indicate that women imagine multiple specific images that are drawn from both personal and sociocultural contexts (i.e., celebrities and family

members) regardless of instructions. The qualitative data also revealed that the comparison targets were not always described in purely physical terms. Indeed, the family member and peer categories often elicited character adjectives in addition to physical appearance adjectives. Perhaps, the more admiration is felt for another person, the greater the perceived beauty. This would be another avenue for future research.

Implications

Findings from the current study showcase that women think of multiple different images when engaging in an ecologically valid body-image comparison process with an internalized ideal of beauty. This stands in contrast to the assumption often implicit in the majority of body-image literature that women have one specific ideal image that they use to compare themselves against (e.g., Dittmar et al., 2009; Halliwell, 2013; Tiggemann et al., 2009). The only theory acknowledging a divergence in internalized ideal images is self-discrepancy theory, however, even here, the assumption is that women have internalized one image as a personal ideal and one as a sociocultural ideal (e.g., Bessenoff, 2006; Bessenoff & Snow, 2006; Higgins, 1987). As seen in the current study, when given the opportunity to freely engage in comparison processes, participants described three to four images from a number of different categories (e.g., celebrity, friend, family member, modified self). Therefore, this study's findings provide tentative and preliminary evidence that women's internal processes of comparisons with beauty ideals is more complex and nuanced than previously acknowledged. Future studies examining these complexities, utilizing a similar experimental paradigm and including

more rigorous and formal qualitative data analysis techniques, may aid in developing effective and tailored therapeutic interventions for populations struggling with body-image disturbances.

Moreover, results from current study serve as support for an experimental paradigm utilizing a combination of imaginary manipulation and open-ended writing task to assess body-image-related processes and outcomes. Indeed, imaginary experimental manipulations in body-image research are still rare. To the author's knowledge only two studies have thus far been conducted: 1) Tiggemann (2001) successfully utilized short written scenarios in a within-subjects experimental design to assess interactions between levels of trait variables with situational factors, and 2) Lamarche et al. (2015) recently used imaginary scenarios in a between-subjects (control vs. experimental) design to successfully elicit body shame and physique anxiety. Furthermore, only a small number of open-ended writing task manipulations have been successfully used in the body-image literature to assess body-image-related outcomes (e.g., Alleva, Martijn, Van Breukelen, Jansen, & Karos, 2015; Alleva et al., 2016).

However, to the author's knowledge, the combination of these two manipulations has thus far not been used to elicit body-image-related affect—a combination that also permits the examination of internal processes from a qualitative point of view. While the current study failed to elicit significantly different levels of the criterion variables across the two experimental conditions, the manipulations successfully produced significant differences as compared to the control group. Therefore, this study adds to an area of

body-image literature that is still in its infancy and provides support for the notion that imaginary manipulations in combination with a writing task provide a feasible alternative to more time and cost-intensive real-world experimental manipulations.

Strengths, Limitations & Future Directions

Limitations of this study include its small sample size, restricted age-range, as well as the largely white and female sample. However, due to the testing of novel experimental methodology it was prudent to limit the sample to only female participants in order to test its effectiveness with the population generally affected by body-image disturbances (Fredrickson & Roberts, 1997). However, future studies should endeavor to utilize a more ethnic and age diverse sample, potentially including males, and certainly a larger sample size.

Furthermore, the average levels of sociocultural ideal internalization and state appearance anxiety were relatively high—with regards to their respective scales—across all conditions while more variation occurred for weighted trait appearance self-discrepancy, BMI, and state body shame. Potentially, the high internalization and anxiety levels are suggestive of a ceiling effect. Indeed, the high overall mean of state appearance anxiety (3.50 out of a 4-point scale) across all conditions may be indicative of generally high levels of appearance anxiety. This might indicate that women who have internalized the sociocultural appearance ideal to a significant degree might also experience a normative form of appearance anxiety often referred to as “normative discontent” in the feminist literatures (Calogero, Tantleff-Dunn, & Kevin, 2011). Future studies may wish

to assess levels of trait self-objectification—defined as the degree to which women view themselves as a physical object subject to sociocultural norms—as a possible explanation and control (Fredrickson & Roberts, 1997).

Another limitation as well as a potential strength is the novel methodology that employed an imaginary manipulation combined with an open-ended writing task. The manipulation did not elicit differing intensities of reactions as predicted. Instead, the emotional reactions of participants were similar regardless of condition. It is also important to note that by combining manipulations, it is no longer clear whether the imaginal exposure, the writing task, or the combination of both were responsible for the elicitation of reactions. Therefore, it is possible that the writing process mediated the relationship between imaginal exposure and the criterion variables. Future research should assess if employing a less intensive way of engaging the imaginal manipulation may affect the strength of the effects. Another way of assessing the internal experiences of participants may be to combine imagery with articulating thoughts, feelings, and behavioral intentions out loud during different points in the scenario via an Articulated Thoughts in Simulated Situation (ATSS; Zanov & Davison, 2010) paradigm. However, while the manipulations may not have been able to accomplish exactly what was hoped, namely the elicitation of different comparison targets and intensity of outcomes between the personal and sociocultural conditions, they did provide an ecological valid way of assessing these comparison processes as well as provide qualitative data that can be further analyzed to gain a deeper understanding of these processes.

The addition of qualitative data collection inherent in this new methodology allowed a first glimpse at the images that women think of as they are undergoing such a comparison experience. However, a rich source of qualitative data—the answers to the open-ended writing task—were not included in the current study's analysis. Future studies should use rigorous qualitative data analysis techniques to explore the answers participants provide to the writing task in order to examine the internal processes occurring during such a comparison experience.

An additional limitation of the current study was the presence of other women in the room during the experimental manipulation and subsequent data collection. Due to time constraints, it was deemed more feasible to test five women at a time, and due to limitations in the study design, number of participants per session (another way of controlling for social comparison) was not recorded, which meant that social comparison processes were not accounted for. As social comparison was not a focus of the current study it was considered an acceptable trade-off for the improved timeline. However, future studies should account social comparison tendencies.

Moreover, the current study also uncovered annual income between 50,001 and 75,000 as a significant predictor of state body shame. Based on the data collected and the design of the study it is unclear why this particular income bracket functioned as a predictor of state body shame. One possible explanation could be that the pressure to conform to appearance ideals is greater when the financial means are available to achieve it (e.g., hire a personal trainer, buy more fruits and vegetables etc.). Most research

focuses on low SES and obesity (e.g., L. L. Hardy et al., 2012; Hardy, King, Hector, & Baur, 2013). Unfortunately, to the author's knowledge no study has examined high SES and its relationship to body shame. However, providing some support for this potential explanation is a cross-regional study examining the difference in the ideal female figure and body dissatisfaction across 10 world regions (Swami, Hadji-Michael, & Furnham, 2008). Results suggest that body dissatisfaction and desire for thinness is commonplace in high-SES settings across the world and much less so in low-SES regions. Regardless of the veracity of this possibility, it appears vital that further research examine the link between high SES and body-image-related disturbances.

Conclusion

Overall, findings from the current study highlight that simple instructions to imagine a fairly common body-image-related occurrence (buying a bathing suit) resulted in increased levels of body shame and appearance anxiety for most of the participants in the experimental conditions. Results also showed that in such an ecologically valid setting, women engage in comparisons with both sociocultural and personal ideals of beauty regardless of instructions. Thus, contrary to assumptions in the body-image literature that the sociocultural ideal is essentially the same as the personal ideal, it seems that women think of multiple images, some of which are sociocultural and some of which are personal, when engaging in comparison processes. Indeed, the qualitative data points towards multiple distinctive categories of comparison images when women undergo comparisons with a beauty ideal. The current study is a small but important step in

deepening our understanding of women's internal comparison experiences. Therefore, this study adds incremental but vital knowledge to the body-image literature.

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APPENDIX A: LIST OF TABLES

Table 1: Zero-order correlations, means, and standard deviations for all study variables excluding outliers

	1.	2.	3.	4.	5.	*M* (*SD*)
1. Pre Internalization						3.07 (1.13)
2. Pre Trait Self-Discrepancy	.27**					0.71 (0.74)
3. Post BMI	.04	.11				24.60 (5.18)
4. Post State Appearance	.49***	.59***	.36***			3.49 (0.85)
5. Post State Body Shame	.44***	.61***	.28***	.69***		1.86 (0.99)
6. Condition Personal	.10	.10	-.07	.14	.14	
7. Condition Sociocultural	.03	-.12	.07	.02	.00	

Note: $N = 135$. ** $p < .01$, *** $p < .001$. Internalization of the Sociocultural Appearance Ideal (Internalization Sociocultural) was measured on a scale ranging from 1(*Completely Disagree*) to 5 (*Completely Agree*). Weighted Trait Appearance Self-Discrepancy (Trait Self-Discrepancy) was measured on a scale ranging from -3 (*Exactly as I Am/Not Important*) to 9 (*Very Unlike Me/Very Important*). State Appearance Anxiety was measured on a scale ranging from 0 (*Not At All*) to 4 (*Exceptionally So*) and State Body Shame was measured on a scale ranging from 1 (*Never*) to 5 (*Always*). Body Mass Index (BMI) was calculated using the following formula: weight (lb) * 703 / height (in) squared. "Pre" in variable names indicate pre-manipulation data collection while "post" indicates post-manipulation data collection.

Table 2: Means and standard deviations of study variables by condition excluding outliers

Variables	Personal (*N*=49) *M* (*SD*)	Socio (*N*=46) *M* (*SD*)	Control (*N*=40) *M* (*SD*)
Pre Internalization Sociocultural	3.22 (1.15)	3.12 (1.19)	2.84 (1.03)
Pre Trait Self-Discrepancy	1.56 (1.19)	1.22 (1.18)	0.73 (0.84)
Post BMI	24.17 (4.78)	24.93 (5.72)	24.62 (4.68)
Post State Body Shame	2.05 (1.16)	1.86 (0.90)	1.63 (0.83)
Post State Appearance Anxiety	3.64 (0.86)	3.51 (0.75)	3.27 (0.92)

Note. N=135. Internalization of the Sociocultural Appearance Ideal (Internalization Sociocultural) was measured on a scale ranging from 1(Completely Disagree) to 5 (Completely Agree). Weighted Trait Appearance Self-Discrepancy (Trait Self-Discrepancy) was measured on a scale ranging from -3 (Exactly as I Am/Not Important) to 9 (Very Unlike Me/Very Important). State Appearance Anxiety was measured on a scale ranging from 0 (Not At All) to 4 (Exceptionally So) and State Body Shame was measured on a scale ranging from 1 (Never) to 5 (Always). Body Mass Index (BMI) was calculated using the following formula: weight (lb) * 703 / height (in) squared. “Pre” in variable names indicate pre-manipulation data collection while “post” indicates post-manipulation data collection. One-Way-ANOVAs indicated no significant differences between the three conditions on Ideal Internalization ($F(2,134)=1.29$, $p=.28$) or Self-Discrepancy ($F(2,134)=1.01$, $p=.37$).

Table 3: Hierarchical regression analysis testing effect of conditions on state appearance anxiety and state body shame excluding income and outliers

	State Appearance Anxiety				State Body Shame			
Step and predictors	*Adj. R2*	*R2Δ*	*B*	*SE B*	*Adj. R^2*	*R^2Δ*	*B*	*SE B*
Step 1	.44***	.44***			.45***	.46***		
Intercept (Control Condition)			3.50***	.06			1.88***	.07
Pre Trait Self-Discrepancy			.67***	.08			.86***	.09
Post BMI			.05***	.01			.04**	.01
Step 2	.46*	.03*			.47*	.03*		
Intercept (Control Condition)			3.26***	.10			1.60***	.12
Pre Trait Self-Discrepancy			.68***	.08			.87***	.09
Post BMI			.05***	.01			.04**	.01
Personal Condition			.35*	.14			.36*	.16
Sociocultural Condition			.31*	.14			.40*	.16

Note: *** $p < .001$, ** $p < .01$, * $p < .05$, †† $p < .08$, † $p < 1.00$ $N = 135$. Internalization of the Sociocultural Appearance Ideal (Internalization Sociocultural) was measured on a scale ranging from 1(*Completely Disagree*) to 5 (*Completely Agree*). Weighted Trait Appearance Self-Discrepancy (Trait Self-Discrepancy) was measured on a scale ranging from -3 (*Exactly as I Am/Not Important*) to 9 (*Very Unlike Me/Very Important*). State Appearance Anxiety was measured on a scale ranging from 0 (*Not At All*) to 4 (*Exceptionally So*) and State Body Shame was measured on a scale ranging from 1 (*Never*) to 5 (*Always*). Body Mass Index (BMI) was calculated using the following formula: weight (lb) * 703 / height (in) squared. "Pre" in variable names indicate pre-manipulation data collection while "post" indicates post-manipulation data collection. Results exclude Income as a predictor.

Table 4: Hierarchical regression analysis testing effect of conditions on state body shame including income and excluding outliers

	State Body Shame			
Step and predictors	*Adjusted R^2*	$R^2\Delta$	*B*	*SE B*
Step 1	.02	.04		
Intercept (Control Condition)			1.87***	.09
Post Income $0 - $20,000			-.02	.05
Post Income $20,001 – $50,000			.20	.30
Post Income $50,001 - $75,000			.87*	.44
Step 2	.45***	.43***		
Intercept (Control Condition)			1.88***	.07
Post Income $0 - $20,000			.01	.04
Post Income $20,001 – $50,000			-.04	.23
Post Income $50,001 - $75,000			.41	.33
Pre Trait Self-Discrepancy			.85***	.09
Post BMI			.04**	.01
Step 3	.47*	.03*		
Intercept (Control Condition)			1.61***	.12
Post Income $0 - $20,000			.01	.04
Post Income $20,001 – $50,000			-.03	.22
Post Income $50,001 - $75,000			.45	.33
Pre Trait Self-Discrepancy			.86***	.09
Post BMI			.04**	.01
Personal Condition			.38*	.16
Sociocultural Condition			.38*	.16

Note: *** $p < .001$, ** $p < .01$, * $p < .05$, †† $p < .08$, † $p < 1.00$ $N = 135$.

Internalization of the Sociocultural Appearance Ideal (Internalization Sociocultural) was measured on a scale ranging from 1(*Completely Disagree*) to 5 (*Completely Agree*). Weighted Trait Appearance Self-Discrepancy (Trait Self-Discrepancy) was measured on a scale ranging from -3 (*Exactly as I Am/Not Important*) to 9 (*Very Unlike Me/Very Important*). State Appearance Anxiety was measured on a scale ranging from 0 (*Not At All*) to 4 (*Exceptionally So*) and State Body Shame was measured on a scale ranging from 1 (*Never*) to 5 (*Always*). Body Mass Index (BMI) was calculated using the following

formula: weight (lb) * 703 / height (in) squared. “Pre” in variable names indicate pre-manipulation data collection while “post” indicates post-manipulation data collection. Results exclude Income as a predictor.

Table 5: Hierarchical regression analysis testing interaction effect of internalization of sociocultural ideal with conditions on relationship between conditions and state appearance anxiety and state body shame excluding income and outliers

	State Appearance Anxiety				State Body Shame			
Step and predictors	*Adjusted R^2*	$R^2\Delta$	*B*	*SE B*	*Adjusted R^2*	$R^2\Delta$	*B*	*SE B*
Step 1.	.43***	.43***			.45***	.46***		
Intercept (Control Condition)			3.26***	.06			1.88***	.07
Pre Trait Self-Discrepancy			.67***	.08			.86***	.09
Post BMI			.05***	.01			.04**	.01
Step 2	.46*	.03*			.47*	.03*		
Intercept (Control Condition)			3.26***	.10			1.68***	.12
Pre Trait Self-Discrepancy			.67***	.08			.87***	.09
Post BMI			.05***	.01			.04**	.01
Personal Condition			.35*	.14			.36*	.16
Sociocultural Condition			.31*	.14			.40*	.16

Step 3	.56***	.10***			.52***	.05***		
Intercept (Control Condition)			3.34***	.09			1.68***	.12
Pre Trait Self-Discrepancy			.55***	.07			.78***	.09
Post BMI			.05***	.01			.04**	.01
Personal Condition			.25*	.12			.28††	.15
Sociocultural Condition			.21	.13			.31††	.16
Pre Internalization Sociocultural			.25***	.05			.22***	.06
Step 4	.55	.00			.52	.00		
Intercept (Control Condition)			3.34***	.10			1.67***	.12
Pre Trait Self-Discrepancy			.55***	.08			.78***	.09
Post BMI			.05***	.01			.04**	.01
Personal Condition			.23††	.13			.29††	.15

Sociocultural Condition	.20	.13	.32*	.16
Pre Internalization	.33***		.17	.11
Sociocultural		.09		
Internalization X Personal	-.07	.12	.06	.14
Internalization X Socio	-.14	.12	.06	.14

Note: *** $p < .001$, ** $p < .01$, * $p < .05$, †† $p < .08$, † $p < 1.00$ $N = 135$. Internalization of the Sociocultural Appearance Ideal (Internalization Sociocultural) was measured on a scale ranging from 1(*Completely Disagree*) to 5 (*Completely Agree*). Weighted Trait Appearance Self-Discrepancy (Trait Self-Discrepancy) was measured on a scale ranging from -3 (*Exactly as I Am/Not Important*) to 9 (*Very Unlike Me/Very Important*). State Appearance Anxiety was measured on a scale ranging from 0 (*Not At All*) to 4 (*Exceptionally So*) and State Body Shame was measured on a scale ranging from 1 (*Never*) to 5 (*Always*). Body Mass Index (BMI) was calculated using the following formula: weight (lb) * 703 / height (in) squared. "Pre" in variable names indicate pre-manipulation data collection while "post" indicates post-manipulation data collection. Results exclude Income as a predictor.

Table 6: Hierarchical regression analysis testing interaction effect of internalization of sociocultural ideal with conditions on relationship between conditions and state body shame including income and excluding outliers

	State Body Shame			
Step and predictors	*Adjusted R^2*	$R^2\Delta$	*B*	*SE B*
Step 1	.20	.20		
Intercept (Control Condition)			1.87***	.09
Post Income $0 - $20,000			-.02	.05
Post Income $20,001 – $50,000			.19	.30
Post Income $50,001 - $75,000			.87*	.44
Step 2	.45***	.43***		
Intercept (Control Condition)			1.88***	.07
Post Income $0 - $20,000			.01	.04
Post Income $20,001 – $50,000			-.04	.22
Post Income $50,001 - $75,000			.41	.33
Pre Trait Self-Discrepancy			.85***	.09
Post BMI			.04**	.01
Step 3	.47*	.03*		
Intercept (Control Condition)			1.61***	.17
Post Income $0 - $20,000			.01	.04
Post Income $20,001 – $50,000			-.03	.22
Post Income $50,001 - $75,000			.45	.33
Pre Trait Self-Discrepancy			.86***	.09
Post BMI			.04**	.01
Personal Condition			.38*	.16
Sociocultural Condition			.39*	.16
Step 4	.53***	.06***		
Intercept (Control Condition)			1.67***	.12

Post Income $0 - $20,000			.01	.03
Post Income $20,001 – $50,000			.06	.21
Post Income $50,001 - $75,000			.44	.31
Pre Trait Self-Discrepancy			.75***	.09
Post BMI			.04**	.01
Personal Condition			.30*	.15
Sociocultural Condition			.30††	.16
Pre Internalization Sociocultural			.22***	.06
Step 5	.52	.00		
Intercept (Control Condition)			1.67***	.12
Post Income $0 - $20,000			.01	.03
Post Income $20,001 – $50,000			.04	.22
Post Income $50,001 - $75,000			.45	.31
Pre Trait Self-Discrepancy			.75***	.09
Post BMI			.04**	.01
Personal Condition			.31*	.15
Sociocultural Condition			.31††	.16
Pre Internalization Sociocultural			.18	.11
Internalization X Personal			.07	.14
Internalization X Socio			.05	.14

Note: *** $p < .001$, ** $p < .01$, * $p < .05$, †† $p < .08$, † $p < 1.00$ $N = 135$.

Internalization of the Sociocultural Appearance Ideal (Internalization Sociocultural) was measured on a scale ranging from 1(*Completely Disagree*) to 5 (*Completely Agree*). Weighted Trait Appearance Self-Discrepancy (Trait Self-Discrepancy) was measured on a scale ranging from -3 (*Exactly as I Am/Not Important*) to 9 (*Very Unlike Me/Very Important*). State Appearance Anxiety was measured on a scale ranging from 0 (*Not At All*) to 4 (*Exceptionally So*) and State Body Shame was measured on a scale ranging from 1 (*Never*) to 5 (*Always*). Body Mass Index (BMI) was calculated using the following

formula: weight (lb) * 703 / height (in) squared. “Pre” in variable names indicate pre-manipulation data collection while “post” indicates post-manipulation data collection. Results exclude Income as a predictor.

Table 7: Means, frequencies, percentages of endorsed images by condition and results of t-tests of comparing number of type of images endorsed by condition

Image	Personal Condition (N = 49)			Sociocultural Condition (N = 46)			Independent Samples *t*-tests	
	Mean	Frequency	Percentage	Mean	Frequency	Percentage	*t*-test	*Sig.*
Celebrity	.51	25	51%	.50	23	50%	*t*(93)=.10	p>.05
Fashion Model	.35	17	35%	.33	15	33%	*t*(93)=.21	p>.05
Friend	.67	33	68%	.65	30	65%	*t*(93)=.22	p>.05
Family Member	.35	17	35%	.26	12	26%	*t*(93)=.91	p>.05
Acquaintance	.24	12	25%	.33	15	33%	*t*(93)=-.87	p>.05
Younger Self	.27	13	27%	.52	24	52%	*t*(93)=-2.63	p<.05
Current Self	.49	24	49%	.48	22	48%	*t*(93)=.11	p>.05
Modified Self	.59	29	59%	.70	32	70%	*t*(93)=-1.05	p>.05

Table 8: Frequencies and qualitative examples of comparison target images of participants in personal condition and sociocultural conditions. Note the similarities between descriptions across the two conditions as well as the use of non-physical-attribute words to describe the images.

Image	Personal Condition (N = 49)	Examples of Images Selected	Examples of Open-Ended Descriptions	Sociocultural Condition (N = 46)	Examples of Images Selected	Examples of Open-Ended Descriptions
Celebrity	25 (51%)	Angelina Jolie Ariana Grande Blake Lively Carrie Underwood Kim Kardashian GiGi Hadid Sana Lanthum Selena Gomez	"Big boobs, small waist, and big butt" "Kim Kardashian. Perfect shape, nice boobs, hips, legs, everything is perfect!" "perfectly toned body; large breasts; tan; pretty face; no fat" "Tall, thin, blonde, big boobs, nice butt, fit, toned"	23 (50%)	Alexis Ren Beyonce Blake Lively Carrie Underwood Kim Kardashian Kylie Jenner Taylor Swift Zendaya	"a fit younger women who has her life together" "Dark hair, full lips, nice body type as in like an hour glass figure." "Green Eyes. Beautiful hair. Intelligent, caring, outspoken, outgoing, athletic, and great at just about anything." "She has an amazing complexion, light brown eyes, and really nice curly hair"

						"Tall, really long legs, really tiny waist with a structured face"
Fashion Model	17 (35%)	Adriana Lima Cara Delvene Chanel Iman Galinka Miracova Kendall Jenner Tyra Banks Victoria Secret Model	"Fit and long dark hair" "Tall, blonde, skinny, nice eyebrows, curly hair, physically fit" "Thin yet toned, tall, brown hair, bigger chest, small waist and proportionate butt." "Victoria Secret Model. Just absolutely gorgeous!"	15 (33%)	Gigi Hadid Heidi Klum Kendall Jenner Tyra Banks	"athletic, skinny, model, face proportions perfect" "Long black brown hair, structured face, really tall, long legs" "Tyra Banks show, fresh prince of bel air"
Friend	33 (68%)	Friend Cousin Home Town Friend Best Friend	"a person that always there" "blonde, skinny, equal proportioned body, pretty smile" "long brown hair, petite" "loyal, kind, supportive, true" "Perfect size 0. Thigh gap, flat stomach, proportional chest and	30 (65%)	Best Friend Boyfriend Friend Roommate Sorority Sister	"5'6 Brazilian, light skinned, luscious lips, gorgeous smile" "Boyfriend. Helps me cope helps me understand myself Has taught me many things

			butt, long hair, pretty face." "Healthy and happy"			about myself" "Has amazing legs, very toned (also doesn't have to work for a good body)" "Her smiles are wonderful! Her teeth are super straight and my teeth are not as straight and smooth as her. The two teeth on the side are sharp."
Family Member	17 (35%)	Cousin Aunt Mom Sister Stepmom	"Confident, strong, works for two, is able to work without complain, faithful, trusts but with some hesitation, beautiful, knows what to wear and when to wear it. Can match clothes perfectly. Able to become a leader quickly"	12 (26%)	Brother Cousin Mother Sister	"blue green eyes, short brown hair, soft voice" "Fit, light brown eyes, bronze skin, long brown hair, and long toned legs" "Outgoing, tall, friendly, and very lovable to a lot of people. Dark haired and

			"short, curvy, pretty" "someone who is strong minded and always there for you" "taller, skinny, and everything that she tries on looks good on her."			attractive to a lot of people." "small stomach, small waist"
Acquaintance	12 (25%)	Sorority Sister College Girls Teammate	"prettier than me; more in shape, tanner, bigger curves" "short, big fake boobs" "skinny with flat tummy, long legs/ short legs, full luscious long hair, perfect skin, no acne, nice round butt, skinny thighs" "tall, skinny, cute clothes"	15 (33%)	Co-Worker Friend Other Students Sorority Sister Stranger next to me	"beautiful women who look perfect" "Can pull off short or long hair, straight white teeth, short like me, similar build to me but weighs less, little bit of curve, good legs, bubbly personality" "Light skin female, that is particularly skinny with a big poufy Afro" "Really, really tan skin, extremely toned stomach,

						big breasts, long, thin, and naturally pretty hair, skinny legs and thigh gap."
Younger Self	13 (27%)	Me Myself when I was younger	"I was younger and worked out more which made my body more toned and I want to be able to look like that again." "Really muscular from track with a really nice lower body, about an inch shorter" "Toned/skinny stomach, thinner thighs, more toned butt" "I was a lot thinner and happier with myself. I was in very good shape." "much skinnier, blonder hair, smaller thighs"	24 (52%)	High School Me Little Me Me Myself	"A very lanky girl who was born with stick legs and big feet and constantly got teased by the birth defect (feet). A little girl that never liked her race and wanted to be lighter." "Athletic, weighed less than now." "Cheerleader with a rocking body, very skinny, always ready for a good time, always friendly, always wanting to go do fun things no matter what clothing I

						have to wear” “Flat stomach with nice muscular legs and butt” “Happy, carefree, outgoing, had a lot of friends, very hardworking and ambitious. Lovable and had a lot of confidence.”
Current Self	24 (49%)	Black Female Friend Love Me Me as I am now Self	“5' 5" 155 LBS Green eyes, brunette, freckles on face, tan skin, wide hips and shoulders, "curvy" “Acceptable” “athletic, peaceful. kind, supportive, joyous” “college student, blends in with "normal look", happy, friendly, somewhat shy”	22 (48%)	Beautiful Current Self Me Myself	“5'4. love handles and a little gut. short hair, sense of style though.” “A girl who's still trying to find herself, feels like every day is a struggle just to be here, despite all the things that she has in store for her future. She has

	“Good, some flaws, confident”	natural kinky hair and struggles to love it every day, but is saddened that it isn't "curly" and "pretty".”
		“bigger muscles on legs, muscular calves, not so muscular arms”
		“Could always look better, "the ugly friend", bad skin, awkward facial expressions ”
		“fat stomach, cellulite, fat chin”
		“pessimisti c, a bit overweight, terrible skin, has no friends, is very lonely, and not physically attractive. Less ambition

						than my older self”
Modified Self	29 (59%)	4 years ago in High School A fitter me Future me Hot me Wishful me	“Height is fine, hair would be better, blue eyes, more muscle definition, larger chest and butt, smaller waist, defined abdominals, etc.” “I envision my future, modified self to be skinny with a flat tummy, no fat in my thighs, long , full hair, no acne or stretch marks” “Just a slimmer face and waist” “Like I am but with toned thighs, toned arms, and good abs” “laughing, friendly, compassionate, loving, caring, athletic, healthy, beautiful, kind, soulful, direct”	32 (70%)	Back to My Previous Weight Future Self Imagine Me Myself	“2 inches taller (5'7"), tanner skin, no rosacea, more slender fingers, shorter toes, thinner hair, naturally cool slightly wavy and not frizzy, longer, thicker eyelashes, more toned stomach, thigh gap, no cellulite on butt.” “A modified me, meaning I still have the same skin eyes, nose, etc. But I am thinner.” “Happy, braces off, lost weight, and bigger hair” “I just want to be a little skinnier in every

	“Slimmer, whiter teeth, smaller less baby like face” “Thinner, more athletic build, tanner, longer hair”	aspect. My stomach, legs, arms, butt, chest” “Lean legs, athletic yet feminine build, white straight teeth, think healthy hair, soft tan complexion, comfortable and confident in own skin.”

APPENDIX B: SCENARIO TEXTS

(Blue text will not be seen by participants)
Scenario Texts and Instructions
Created by Author

Below is a description of an everyday situation you may experience. Please read it carefully and then imagine yourself in the situation. Once you have immersed yourself in the situation, please write about your thoughts, feelings, images as if you were experiencing the situation in real life for five minutes. (The survey will let you know when the time is up.). Please don't worry about the quality of your writing (spelling, grammar, etc.). You can write in sentence fragments, run-on sentences or stream-of-consciousness. I'm asking you to write about your thoughts, feelings, and images in order to help you utilize your imagination as much as possible…HOWEVER, absolutely no one will evaluate the quality of your writing! Thank you!

Experimental Condition 1: Comparison to Personal Ideal

You are out alone at a mall, shopping for a new bikini. In one of the department stores you find one in your size that you really like. You take it to the fitting rooms and notice that you are alone. You pick a room, close the door and proceed to take off your clothes. You try on the bikini and you notice how it feels on your body. You look at yourself in the full-length mirror and notice how the bikini fits you. As you continue to look at yourself you notice how your body looks in it. You turn around, craning your neck, to see how the bikini looks on your body from all angles. As you turn back to face the mirror you start thinking about how your current appearance measures up to your own personal idea of beauty.

Experimental Condition 2: Comparison to the Sociocultural Ideal

You are out alone at a mall, shopping for a new bikini. In one of the department stores you find one in your size that you really like. You take it to the fitting rooms and notice that you are alone. You pick a room, close the door and proceed to take off your clothes. You try on the bikini and you notice how it feels on your body. You look at yourself in the full-length mirror and notice how the bikini fits you. As you continue to look at yourself you notice how your body looks in it. You turn around, craning your neck, to see how the bikini looks on your body from all angles. As you turn back to face the mirror you start thinking about how your current appearance measures up to society's idea of beauty.

Control Condition: Driving to Campus

Today you are driving yourself to campus using your own or a borrowed car. You leave your building and move towards the car. You notice the color of the car. You move to the passenger side door and open it. As you put your things on the passenger seat you notice crumbs on the floor of the car. You close the passenger side door and move around the car to the driver's side. You open the door and get inside…as you do so you notice the color of the parking tag hanging from the rearview mirror. You pull the seatbelt forward and snap the buckle into the clasp…as you do so you notice the temperature of the metal and the plastic of the buckle. You put the car in gear and drive towards the road. As you join traffic you notice the other cars around you as well as the pedestrians.

Writing Prompt

Please use the space below to write about your thoughts, feelings, images as if you were experiencing the situation in real life for five minutes

APPENDIX C: MEASURES

(Blue text was not seen by participants)

Thank you for participating in the Circumstances, Emotions and Coping in College Women. This series of questionnaires will take about 45 minutes to complete.

We ask that you give the questions your complete attention and please do not talk with anyone else during that time. If a particular question does not make sense to you, just interpret as best as you can. You may also skip any questions you do not feel comfortable answering.

There are no right or wrong answers to these questions. We are very interested in your honest personal opinions, attitudes, feelings and behaviors. Your name will not be directly linked to these data. Please give the answer most in line with your first reaction.
Do not overthink your responses.

Pre-Manipulation Questionnaires

Sociocultural Attitudes toward Appearance Scale-3 (SATAQ-3)
Scoring = Mean
Range between 1 and 5, where high scores indicate high influence by sociocultural ideals toward appearance.

Information Subscale: 1, 5, 9, 13, 17, 21, 25, 28, 29
Internalization General Subscale: 3, 4, 7, 8, 11, 12, 15, 16, 27
Pressures Subscale: 2, 6, 10, 14, 18, 22, 26
Internalization Athletic Subscale: 19, 20, 23, 24, 30

Thompson, J. K., van den Berg, P., Roehrig, M., Guarda, A. S., & Heinberg, L. J. (2004). The sociocultural attitudes toward appearance scale-3 (SATAQ-3): Development and validation. *International Journal of Eating Disorders, 35,* 293-304. doi:10.1002/eat.10257

Heinberg, L. J., Thompson J. K., & Stormer, S. (1995). Development and validation of the sociocultural attitudes towards appearance questionnaire. *International Journal of Eating Disorders, 17,* 81-89.

	Directions: read each of the following items an circle the number that best reflects your agreement with the statement:	Completely Disagree		Neither Agree Nor Disagree		Completely Agree

1	TV programs are an important source of information about fashion and ‘‘being attractive.’’	1	2	3	4	5
2	I’ve felt pressure from TV or magazines to lose weight.	1	2	3	4	5
3	I would like my body to look like the people who are on TV.	1	2	3	4	5
4	I compare my body to the bodies of TV and movie stars.	1	2	3	4	5
5	TV commercials are an important source of information about fashion and ‘‘being attractive.’’	1	2	3	4	5
6	I’ve felt pressure from TV or magazines to look pretty.	1	2	3	4	5
7	I would like my body to look like the models who appear in magazines.	1	2	3	4	5
8	I compare my appearance to the appearance of TV and movie stars.	1	2	3	4	5
9	Music videos on TV are an important source of information about fashion and ‘‘being attractive.’’	1	2	3	4	5
10	I’ve felt pressure from TV and magazines to be thin.	1	2	3	4	5
11	I would like my body to look like the people who are in the movies.	1	2	3	4	5
12	I compare my body to the bodies of people who appear in magazines.	1	2	3	4	5
13	Magazine articles are an important source of information about fashion and ‘‘being attractive.’’	1	2	3	4	5
14	I’ve felt pressure from TV or magazines to have a perfect body.	1	2	3	4	5
15	I wish I looked like the models in music videos.	1	2	3	4	5
16	I compare my appearance to the appearance of people in magazines.	1	2	3	4	5
17	Magazine advertisements are an important source of information about fashion and ‘‘being attractive.’’	1	2	3	4	5
18	I’ve felt pressure from TV or magazines to diet.	1	2	3	4	5
19	I wish I looked as athletic as the people in magazines.	1	2	3	4	5
20	I compare my body to that of people in ‘‘good shape.’’	1	2	3	4	5

21	Pictures in magazines are an important source of information about fashion and ‘‘being attractive.’’	1	2	3	4	5
22	I’ve felt pressure from TV or magazines to exercise.	1	2	3	4	5
23	I wish I looked as athletic as sports stars.	1	2	3	4	5
24	I compare my body to that of people who are athletic.	1	2	3	4	5
25	Movies are an important source of information about fashion and ‘‘being attractive.’’	1	2	3	4	5
26	I’ve felt pressure from TV or magazines to change my appearance.	1	2	3	4	5
27	I try to look like the people on TV.	1	2	3	4	5
28	Movies stars an important source of information about fashion and ‘‘being attractive.’’	1	2	3	4	5
29	Famous people are an important source of information about fashion and ‘‘being attractive.’’	1	2	3	4	5
30	I try to look like sports athletes.	1	2	3	4	5

Body-Image Ideals Questionnaire (BIQ)
Scoring = Mean of Cross-Products

(The scoring of the 22-item BIQ involves calculation of a mean of the item-by-item cross-products of discrepancy X importance ratings. These are computed after recoding all discrepancy (Part A) ratings of 0 to -1. This permits the extension of the range of scores to include importance-weighted self-ideal congruence ("exactly as I am") for each item.)

Range between -3 and +9, where high scores indicate greater self-ideal disparity with strongly held physical ideals.

Recode Items: 1A, 2A, 3A, 4A, 5A, 6A, 7A, 8A, 9A, 10A, 11A (0 = -1)

Cash, T. F., & Szymanski, M. L. (1995). The development and validation of the body-image ideals questionnaire. *Journal of Personality Assessment, 64,* 466-477.

	Each item on this questionnaire deals with a different physical characteristic. For each characteristic, think about how you would describe yourself as you actually are. Then think about how you wish you were. The difference between the two reveals how close you come to your personal ideal. In some instances, your looks may closely match your ideal. In other instances, they may differ considerably. On Part A of each item, rate how much you resemble your personal physical ideal by circling a number which corresponds most closely with how you feel: 0 (Exactly As I Am), 1 (Almost As I Am), 2 (Fairly Unlike Me), 3 (Very Unlike Me). Your physical ideals may differ in their importance to you, regardless of how close you come to them. You may feel strongly that some ideals embody the way you want to look or to be. In other areas, your ideals may be less important to you. On Part B of each item, rate how important your ideal is to you by circling a number, which corresponds most to how you feel: 0 (Not Important), 1 (Somewhat Important), 2 (Moderately Important), 3 (Very Important).	**Part A**: Exactly As I Am **Part B**: Not Important	**Part A**: Almost As I Am **Part B**: Somewhat Important	**Part A**: Fairly Unlike Me **Part B**: Moderately Important	**Part A:** Very Unlike Me **Part B**: Very Important
1 A	My ideal height is:	0	1	2	3
1 B	How important to you is your ideal height?	0	1	2	3
2 A	My ideal skin complexion is:	0	1	2	3
2 B	How important to you is your ideal skin complexion?	0	1	2	3
3 A	My ideal hair texture and thickness are:	0	1	2	3
3 B	How important to you are your ideal hair texture and thickness?	0	1	2	3

4 A	My ideal facial features (eyes, nose, ears, facial shape) are:	0	1	2	3
4 B	How important to you are your ideal facial features?	0	1	2	3
5 A	My ideal muscle tone and definition is:	0	1	2	3
5 B	How important to you is your ideal muscle tone and definition?	0	1	2	3
6 A	My ideal body proportions are:	0	1	2	3
6 B	How important to you are your ideal body proportions?	0	1	2	3
7 A	My ideal weight is:	0	1	2	3
7 B	How important to you is your ideal weight?	0	1	2	3
8 A	My ideal chest size is:	0	1	2	3
8 B	How important to you is your ideal chest size?	0	1	2	3
9 A	My ideal physical strength is:	0	1	2	3
9 B	How important to you is your ideal physical strength?	0	1	2	3
10 A	My ideal physical coordination is:	0	1	2	3
10 B	How important to you is your ideal physical coordination?	0	1	2	3
11 A	My ideal overall physical appearance is:	0	1	2	3
11 B	How important to you is your overall physical appearance?	0	1	2	3

Self-Compassion Scale (Long Version) (SCS)
Scoring = Mean of Subscale Means

Range between 1 and 5, where high scores indicate greater self-compassion.

Reverse Score: 1, 2, 4, 6, 8, 11, 13, 16, 18, 20, 21, 24, 25
Self-Kindness Subscale: 5, 12, 19, 23, 26
Self-Judgment Subscale: 1, 8, 11, 16, 21
Common Humanity Subscale: 3, 7, 10, 15
Isolation Subscale: 4, 13, 18, 25
Mindfulness Subscale: 9, 14, 17, 22
Over-Identified Subscale: 2, 6, 20, 24

Neff, K. D. (2003). Development and validation of a scale to measure self-compassion. *Self and Identity, 2*, 223-250.

	HOW I TYPICALLY ACT TOWARDS MYSELF IN DIFFICULT TIMES Please read each statement carefully before answering. To the left of each item, indicate how often you behave in the stated manner, using the following scale:	Almost Never				Almost Always
1	I'm disapproving and judgmental about my own flaws and inadequacies.	1	2	3	4	5
2	When I'm feeling down I tend to obsess and fixate on everything that's wrong.	1	2	3	4	5
3	When things are going badly for me, I see the difficulties as part of life that everyone goes through.	1	2	3	4	5
4	When I think about my inadequacies, it tends to make me feel more separate and cut off from the rest of the world.	1	2	3	4	5
5	I try to be loving towards myself when I'm feeling emotional pain.	1	2	3	4	5
6	When I fail at something important to me I become consumed by feelings of inadequacy.	1	2	3	4	5
7	When I'm down and out, I remind myself that there are lots of other people in the world feeling like I am.	1	2	3	4	5
8	When times are really difficult, I tend to be tough on myself.	1	2	3	4	5
9	When something upsets me I try to keep my emotions in balance.	1	2	3	4	5
10	When I feel inadequate in some way, I try to remind myself that feelings of inadequacy are shared by most people.	1	2	3	4	5

11	I’m intolerant and impatient towards those aspects of my personality I don't like.	1	2	3	4	5
12	When I’m going through a very hard time, I give myself the caring and tenderness I need.	1	2	3	4	5
13	When I’m feeling down, I tend to feel like most other people are probably happier than I am.	1	2	3	4	5
14	When something painful happens I try to take a balanced view of the situation.	1	2	3	4	5
15	I try to see my failings as part of the human condition.	1	2	3	4	5
16	When I see aspects of myself that I don’t like, I get down on myself.	1	2	3	4	5
17	When I fail at something important to me I try to keep things in perspective.	1	2	3	4	5
18	When I’m really struggling, I tend to feel like other people must be having an easier time of it.	1	2	3	4	5
19	I’m kind to myself when I’m experiencing suffering.	1	2	3	4	5
20	When something upsets me I get carried away with my feelings.	1	2	3	4	5
21	I can be a bit cold-hearted towards myself when I'm experiencing suffering.	1	2	3	4	5
22	When I'm feeling down I try to approach my feelings with curiosity and openness.	1	2	3	4	5
23	I’m tolerant of my own flaws and inadequacies.	1	2	3	4	5
24	When something painful happens I tend to blow the incident out of proportion.	1	2	3	4	5
25	When I fail at something that's important to me, I tend to feel alone in my failure.	1	2	3	4	5
26	I try to be understanding and patient towards those aspects of my personality I don't like.	1	2	3	4	5

Rosenberg Self-Esteem Scale (RSE)
Scoring = Mean

Range between 1 and 4, where high scores indicate greater conscientiousness

Reverse Scored: 2, 5, 6, 8, and 9

Rosenberg, M. (1965). *Society and the adolescent self-image*. Princeton, NJ: Princeton University Press.

	Below is a list of statements dealing with your general feelings about yourself. Please indicate how strongly you agree or disagree with each statement:	Strongly Disagree	Disagree	Agree	Strongly Agree
1	On the whole, I am satisfied with myself.	1	2	3	4
2	At times I think I am no good at all.	1	2	3	4
3	I feel that I have a number of good qualities.	1	2	3	4
4	I am able to do things as well as most other people.	1	2	3	4
5	I feel I do not have much to be proud of.	1	2	3	4
6	I certainly feel useless at times.	1	2	3	4
7	I feel that I'm a person of worth, at least on an equal plane with others.	1	2	3	4
8	I wish I could have more respect for myself.	1	2	3	4
9	All in all, I am inclined to feel that I am a failure.	1	2	3	4
10	I take appositive attitude toward myself.	1	2	3	4

Perceived Stress Scale (PSS)
Scoring = Sum

Range between 0 and 4, where high scores indicate greater perceived stress.

Reverse Score: 4, 5, 6, 7, 9, 10, 13

	The questions in this scale as you about your feelings and thoughts during the last month. In each case, you will be asked to indicate how often you felt or thought a certain way. Although some of the questions are similar, there are differences between them and you should treat each one as a separate question. The best approach is to answer each question fairly quickly. That is, don't try to count up the number of times you felt a particular way, but rather indicate the alternative that seems like a reasonable estimate.	Never	Almost Never	Sometimes	Fairly Often	Very Often
1	In the last month, how often have you been upset because of something that happened unexpectedly?	0	1	2	3	4
2	In the last month, how often have you felt that you were unable to control the important things in your life?	0	1	2	3	4
3	In the last month, how often have you felt nervous and "stressed"?	0	1	2	3	4
4	In the last month, how often have you dealt successfully with irritating life hassles?	0	1	2	3	4
5	In the last month, how often have you felt that you were effectively coping with important changes that were occurring in your life?	0	1	2	3	4
6	In the last month, how have you felt confident about your ability to handle your personal problems?	0	1	2	3	4
7	In the last month, how often have you felt that things were going your way?	0	1	2	3	4
8	In the last month, how often have you found that you could not cope with all the things that you had to do?	0	1	2	3	4
9	In the last month, how often have you been able to control irritations in your life?	0	1	2	3	4

10	In the last month, how often have you felt that you were on top of things?	0	1	2	3	4
11	In the last month, how often have you been angered because of things that happened that were outside of your control?	0	1	2	3	4
12	In the last month, how often have you found yourself thinking about things that you have to accomplish?	0	1	2	3	4
13	In the last month, how often have you been able to control the way you spend your time?	0	1	2	3	4
14	In the last month, how often have you felt difficulties were piling up so high that you could not overcome them?	0	1	2	3	4

Multidimensional Perfectionism Scale (MDPS-F)
Scoring = Mean

Range between 1 and 5, where high scores indicate greater perfectionism.

Concern Over Mistakes Subscale: 9, 10, 13, 14, 18, 21, 23, 25, 34
Personal Standards Subscale: 4, 6, 12, 16, 19, 24, 30
Parental Expectations Subscale: 1, 11, 15, 20, 26
Parental Criticism Subscale: 3, 5, 22, 35
Doubts About Actions Subscale: 17, 28, 32, 33
Organization Subscale: 2, 7, 8, 27, 29, 31

Frost, R. O., Marten, P., Lahart, C., & Rosenblate, R. (1990). The dimensions of perfectionism. *Cognitive Therapy and Research, 14*, 449-468.

	Below is a list of statements dealing with your general feelings about yourself, your characteristics, and your experiences. Please indicate how strongly you agree or disagree with each statement:	Strongly Disagree	Somewhat Disagree	Neither Agree Nor Disagree	Somewhat Agree	Strongly Agree
1	My parents set very high standards for me.	1	2	3	4	5
2	Organization is very important to me.	1	2	3	4	5
3	As a child, I was punished for doing things less than perfect.	1	2	3	4	5
4	If I do not set the highest standards for myself, I am likely to end up a second-rate person.	1	2	3	4	5
5	My parents never tried to understand my mistakes.	1	2	3	4	5
6	It is important to me that I be thoroughly competent in everything I do.	1	2	3	4	5
7	I am a neat person.	1	2	3	4	5
8	I try to be an organized person.	1	2	3	4	5
9	If I fail at work/school, I am a failure as a person.	1	2	3	4	5
10	I should be upset if I make a mistake.	1	2	3	4	5
11	My parents wanted me to be the best at everything.	1	2	3	4	5
12	I set higher goals than most people.	1	2	3	4	5

13	If someone does a task at work/school better than I, then I feel like I failed the whole task.	1	2	3	4	5
14	If I fail partly, it is as bad as being a complete failure	1	2	3	4	5
15	Only outstanding performance is good enough in my family.	1	2	3	4	5
16	I am very good at focusing my efforts on attaining a goal.	1	2	3	4	5
17	Even when I do something very carefully, I often feel that it is not quite right.	1	2	3	4	5
18	I hate being less than the best a things.	1	2	3	4	5
19	I have extremely high goals.	1	2	3	4	5
20	My parents have expected excellence from me.	1	2	3	4	5
21	People will probably think less of me if I make a mistake.	1	2	3	4	5
22	I never felt like I could meet my parents' expectations.	1	2	3	4	5
23	If I do not do as well as other people, it means I am an inferior human being.	1	2	3	4	5
24	Other people seem to accept lower standards from themselves than I do.	1	2	3	4	5
25	If I do not do well all the time, people will not respect me.	1	2	3	4	5
26	My parents have always had higher expectations for my future than I have.	1	2	3	4	5
27	I try to be a neat person.	1	2	3	4	5
28	I usually have doubts about the simple everyday things I do.	1	2	3	4	5
29	Neatness is very important to me.	1	2	3	4	5
30	I expect higher performance in my daily tasks than most people.	1	2	3	4	5
31	I am an organized person.	1	2	3	4	5

32	I tend to get behind in my work because I repeat things over and over.	1	2	3	4	5
33	It takes me a long time to do something “right”.	1	2	3	4	5
34	The fewer mistakes I make, the more people will like me.	1	2	3	4	5
35	I never felt like I could meet my parents’ standards.	1	2	3	4	5

The Five Facets of Mindfulness Questionnaire (FFMQ)
Scoring = Mean per Subscale
Overall Mindfulness Score = Mean of four Subscale Means: Describing, Acting with Awareness, Non-Judging of Inner Experience, and Non-Reactivity to Inner Experience

Range between 1 and 5, where high scores indicate greater mindfulness.

Items marked with an "R" are reverse-scored:

Observing Subscale: 1, 6, 11, 15, 20, 26, 31, 36
Describing Subscale: 2, 7, 12R, 16R, 22R, 27, 32, 37
Acting with Awareness Subscale: 5R, 8R, 13R, 18R, 23R, 28R, 34R, 38R
Non-Judging of Inner Experience Subscale: 3R, 10R, 14R, 17R, 25R, 30R, 35R, 39R
Non-Reactivity to Inner Experience Subscale: 4, 9, 19, 21, 24, 29, 33

Baer, R. A., Smith, G. T., Hopkins, J., Krietemeyer, J., & Toney, L. (2006). Using self-report assessment methods to explore facets of mindfulness. Assessment, 13, 27-45.

	Please rate each of the following statements using the scale provided.	Never or Very Rarely True	Rarely True	Sometimes True	Often True	Very Often or Always True
1	When I'm walking, I deliberately notice the sensations of my body moving.	1	2	3	4	5
2	I'm good at finding words to describe my feelings. .	1	2	3	4	5
3	I criticize myself for having irrational or inappropriate emotions.	1	2	3	4	5
4	I perceive my feelings and emotions without having to react to them.	1	2	3	4	5
5	When I do things, my mind wanders off and I'm easily distracted.	1	2	3	4	5
6	When I take a shower or bath, I stay alert to the sensations of water on my body.	1	2	3	4	5
7	I can easily put my beliefs, opinions and expectations into words.	1	2	3	4	5
8	I don't pay attention to what I'm doing because I'm daydreaming, worrying, or otherwise distracted..	1	2	3	4	5
9	I watch my feelings without getting lost in them.	1	2	3	4	5
10	I tell myself I shouldn't be feeling the way I'm feeling.	1	2	3	4	5

11	I notice how foods and drinks affect my thoughts, bodily sensations, and emotions.	1	2	3	4	5
12	It's hard for me to find the words to describe what I'm thinking.	1	2	3	4	5
13	I am easily distracted.	1	2	3	4	5
14	I believe some of my thoughts are abnormal or bad and I shouldn't think that way.	1	2	3	4	5
15	I pay attention to sensations, such as the wind in my hair or sun on my face.	1	2	3	4	5
16	I have trouble thinking of the right words to express how I feel about things.	1	2	3	4	5
17	I make judgments about whether my thoughts are good or bad.	1	2	3	4	5
18	I find it difficult to stay focused on what's happening in the present.	1	2	3	4	5
19	When I have distressing thoughts or images, I "step back" and am aware of the thought or image without getting taken over by it.	1	2	3	4	5
20	I pay attention to sounds, such as clocks ticking, birds chirping, or cars passing.	1	2	3	4	5
21	In difficult situations, I can pause without immediately reacting.	1	2	3	4	5
22	When I have a sensation in my body, it is difficult for me to describe it because I can't find the right words.	1	2	3	4	5
23	It seems I am "running on automatic" without much awareness of what I'm doing.	1	2	3	4	5
24	When I have distressing thoughts or images, I feel calm soon after.	1	2	3	4	5
25	I tell myself that I shouldn't be thinking the way I'm thinking.	1	2	3	4	5
26	I notice the smells and aromas of things.	1	2	3	4	5
27	Even when I'm feeling terribly upset, I can find a way to put it into words.	1	2	3	4	5
28	I rush through activities without being really attentive to them.	1	2	3	4	5
29	When I have distressing thoughts or images I am able to just notice them without reacting.	1	2	3	4	5
30	I think some of my emotions are bad or inappropriate and I shouldn't feel them.	1	2	3	4	5
31	I notice visual elements in art or nature, such as colors, shapes, textures, or patterns of light and shadow.	1	2	3	4	5

32	My natural tendency is to put my experiences into words.	1	2	3	4	5
33	When I have distressing thoughts or images, I just notice them and let them go.	1	2	3	4	5
34	I do jobs or tasks automatically without being aware of what I'm doing.	1	2	3	4	5
35	When I have distressing thoughts or images, I judge myself as good or bad, depending what the thought/image is about.	1	2	3	4	5
36	I pay attention to how my emotions affect my thoughts and behavior.					
37	I can usually describe how I feel at the moment in considerable detail.					
38	I find myself doing things without paying attention.					
39	I disapprove of myself when I have irrational ideas.					

Post-Manipulation Questionnaires

Physical Appearance State and Traits Anxiety Scale (PASTAS)
State Physical Appearance Anxiety Subscale
Scoring = Mean
Range between 0 and 4, where high scores indicate high state physical appearance anxiety.

Weight-Related Subscale: 1, 2, 3, 4, 5, 6, 7, 8
Non-Weight-Related Subscale: 9, 10, 11, 12, 13, 14, 15, 16

Reed, D. L., Thompson, J. K., Brannick, M. T., & Sacco, W. P. (1991). Development and validation of the Physical Appearance State and Trait Anxiety Scale (PASTAS). *Journal of Anxiety Disorders*, *5*, 323–332. doi.org/0887-6185/91

The statements listed below are to be used to describe how anxious, tense, or nervous you feel *right now* about your body (use the following scale).

Not at all 0	Slightly 1	Moderately 2	Very much so 3	Exceptionally so 4

Right now, I feel *anxious*, *tense*, or *nervous* about:

1. The extent to which I look overweight	0	1	2	3	4
2. My thighs	0	1	2	3	4
3. My buttocks	0	1	2	3	4
4. My hips	0	1	2	3	4
5. My stomach	0	1	2	3	4
6. My legs	0	1	2	3	4
7. My waist	0	1	2	3	4
8. My muscle tone	0	1	2	3	4
9. My ears	0	1	2	3	4
10. My lips	0	1	2	3	4
11. My wrists	0	1	2	3	4
12. My hands	0	1	2	3	4
13. My forehead	0	1	2	3	4
14. My neck	0	1	2	3	4
15. My chin	0	1	2	3	4
16. My feet	0	1	2	3	4

Body and Appearance Self-Conscious Emotions Scale (BASES)
Scoring = Mean
Range between 1 and 5, where high scores indicate higher levels of body shame

Instructions modified by author to reflect interest in participant's current emotional state, as opposed to a general tendency to experience the self-conscious emotions. Specifically, author changed "Please indicate how often you have generally experienced the emotions" to "please indicate how you feel right now" and "In general, I have felt…" to "Right now, I feel…"

Shame Subscale: 1, 5, 8, 16
Guilt Subscale: 4, 7, 11, 13
Authentic Pride Subscale: 3, 10, 12, 14
Hubristic Pride Subscale: 2, 6, 9, 15

Castonguay, A. L., Sabiston, C. M., Crocker, P. R. E., & Mack, D. E. (2014). Development and validation of the Body and Appearance Self-Conscious Emotions Scale (BASES). *Body Image*, *11*(2), 126–136. doi.org/10.1016/j.bodyim.2013.12.006

	We are interested in people's emotions. Listed below are a variety of statements. Using a 5-point scale (1 = never, 2 = rarely, 3 = occasionally, 4 = frequently, 5 = always), please indicate how you feel right now. There are no 'right' or 'wrong' answers. Right now, I feel…	Never	Rarely	Occasionally	Frequently	Always
1	…ashamed of the way I look.	1	2	3	4	5
2	…proud that I am more attractive than others.	1	2	3	4	5
3	…proud of the effort I place on maintaining my appearance.	1	2	3	4	5
4	….guilty that I do not do enough to improve the way I look.	1	2	3	4	5
5	…inadequate when I think about my appearance.	1	2	3	4	5
6	…proud that I am a great looking person.	1	2	3	4	5
7	…guilty that I look the way I do.	1	2	3	4	5
8	…ashamed of my appearance.	1	2	3	4	5
9	…proud of my superior appearance.	1	2	3	4	5
10	…proud about my effort to improve the way I look.	1	2	3	4	5
11	…regret that I do not put effort into my appearance.	1	2	3	4	5
12	…proud that I have achieved my appearance goals.	1	2	3	4	5

13	…regret that I do not put effort into my appearance.	1	2	3	4	5
14	…proud of my appearance efforts.	1	2	3	4	5
15	…proud that I am an attractive person.	1	2	3	4	5
16	…ashamed that I am a person who is unattractive.	1	2	3	4	5

State Self-Compassion
Scoring = Mean of Subscale Means

Range between 1 and 5, where high scores indicate greater self-compassion.

Self-Kindness Subscale: 1, 2, 3, 4
Self-Judgment Subscale: 5, 6, 7
Common Humanity Subscale: 8, 9, 10
Isolation Subscale: 11, 12
Mindfulness Subscale: 13, 14
Over-Identified Subscale: 15, 16

Breines, J. G., & Chen, S. (2013). Activating the inner caregiver: The role of support-giving schemas in increasing state self-compassion. *Journal of Experimental Social Psychology*, 49(1), 58–64. doi.org/10.1016/j.jesp.2012.07.015

Neff, K. D. (2003). Development and validation of a scale to measure self-compassion. *Self and Identity, 2*, 223-250.

	Please read each statement carefully before answering. To the left of each item, indicate how much you agree with each statement, using the following scale: RIGHT NOW…	Strongly Disagree						Strongly Agree
1	I'm trying to be kind and reassuring to myself.	1	2	3	4	5	6	7
2	I'm being understanding towards myself.	1	2	3	4	5	6	7
3	I'm trying to take a supportive attitude towards myself.	1	2	3	4	5	6	7
4	It's okay to make mistakes.	1	2	3	4	5	6	7
5	I'm being hard on myself.	1	2	3	4	5	6	7
6	I'm being intolerant towards those aspects of myself that I don't like.	1	2	3	4	5	6	7
7	I feel stupid.	1	2	3	4	5	6	7
8	A lot of people have negative experiences, I'm not the only one.	1	2	3	4	5	6	7
9	Everyone makes mistakes sometimes.	1	2	3	4	5	6	7
10	Everyone feels bad about themselves sometimes.	1	2	3	4	5	6	7
11	I feel like other people have it easier than me.	1	2	3	4	5	6	7
12	These types of things seem to happen to me more than to other people.	1	2	3	4	5	6	7
13	In the scheme of things, this is not that big of a deal.	1	2	3	4	5	6	7

14	I'm taking a balanced perspective on the situation.	1	2	3	4	5	6	7
15	I keep thinking about what happened.	1	2	3	4	5	6	7
16	I feel consumed by feelings of inadequacy.	1	2	3	4	5	6	7

Body Image Coping Strategies Inventory (BICSI)
Scoring = Mean
Range between 0 and 3, where high scores indicate higher subscale-specific body image coping.

Appearance Fixing Subscale: 1, 4, 5, 6, 8, 13, 14, 19, 24, 26
Avoidance Subscale: 3, 7, 9, 11, 17, 21, 25, 28
Positive Rational Acceptance Subscale: 2, 10, 12, 15, 16, 18, 20, 22, 23, 27, 29

Cash, T. F., Santos, M. T., & Williams, E. F. (2005). Coping with body-image threats and challenges: Validation of the Body Image Coping Strategies Inventory. *Journal of Psychosomatic Research*, *58*(2), 190–199.

	"Body image" refers to how we think and feel about our own physical appearance. In the course of everyday life, there are situations and events that occur which can negatively affect our body image. These situations and events are called "body image threats or challenges," because they threaten or challenge our ability to feel okay about our looks. People do lots of different things to cope or deal with these challenges or threats. Listed below are some of the ways that people may try to cope with body image threats or challenges. For each item, think about how much it is characteristic of how you usually cope or would probably cope with an event or situation that poses a threat or challenge to your body image feelings. Using the scale below, enter a number from 0 to 3 in the space to indicate how well each way of coping describes what you actually do or would do. There are no right or wrong answers. It doesn't matter how helpful or unhelpful your ways of coping are. Don't answer based on how you wish you usually reacted. Just be completely truthful.	Definitely NOT Like Me	Mostly NOT Like Me	Mostly Like Me	Definitely Like Me
1	I spend extra time trying to fix what I don't like about my looks	0	1	2	3
2	I consciously do something that might make me feel good about myself as a person	0	1	2	3

3	I try to tune out my thoughts and feelings	0	1	2	3
4	I seek reassurance about my looks from other people	0	1	2	3
5	I do something to try to look more attractive.	0	1	2	3
6	I spend more time in front of the mirror	0	1	2	3
7	I try to ignore the situation and my feelings	0	1	2	3
8	I think about what I should do to change my looks.	0	1	2	3
9	I avoid looking at myself in the mirror.	0	1	2	3
10	I remind myself of my good qualities	0	1	2	3
11	I eat something to help me deal with the situation	0	1	2	3
12	I tell myself that I'm just being irrational about things	0	1	2	3
13	I fantasize about looking different	0	1	2	3
14	I think about how I could "cover up" what's troublesome about my looks	0	1	2	3
15	I tell myself that the situation will pass.	0	1	2	3
16	I try to figure out why I am challenged or threatened by the situation.	0	1	2	3
17	I tell myself that I am helpless to do anything about the situation.	0	1	2	3
18	I tell myself that I am probably just overreacting to the situation.	0	1	2	3
19	I compare my appearance to that of physically attractive people	0	1	2	3
20	I remind myself that I will feel better after awhile	0	1	2	3
21	I react by overeating.	0	1	2	3
22	I tell myself that there are more important things than what I look like.	0	1	2	3
23	I tell myself that I probably look better than I feel I that do.	0	1	2	3
24	I make a special effort to look my best.	0	1	2	3
25	I withdraw and interact less with others.	0	1	2	3
26	I make a special effort to hide or "cover up" what's troublesome about my looks.	0	1	2	3
27	I react by being especially patient with myself.	0	1	2	3
28	I make no attempt to cope or deal with the situation.	0	1	2	3
29	I tell myself that the situation is not that important.	0	1	2	3

State-Trait Anxiety Inventory for Adults
State Anxiety Subscale
Scoring = Sum
Range between 20 and 80, where high scores indicate high anxiety.
Reverse Scoring: 1, 2, 5, 8, 10, 11, 15, 16, 19, & 20.

Spielberger, D. C., Gorsuch, R. L., Lushene R. E., Vagg, P. R., & Jacobs, G. A. (1968, 1977). *State-Trait anxiety inventory for adults*. Redwood City, CA: Mind Garden.

	Directions: Please circle the appropriate number to the right of the statement to indicate how you ***feel right now,*** that is, ***at this moment.*** There are no right or wrong answers. Do not spent too much time on any one statement but give the answer which seems to describe your present feelings best.	NOT AT ALL	SOMEWHAT	MODERATELY SO	VERY MUCH SO
1	I feel calm	1	2	3	4
2	I feel secure	1	2	3	4
3	I am tense	1	2	3	4
4	I feel strained	1	2	3	4
5	I feel at ease	1	2	3	4
6	I feel upset	1	2	3	4
7	I am presently worrying over possible misfortunes	1	2	3	4
8	I feel satisfied	1	2	3	4
9	I feel frightened	1	2	3	4
10	I feel comfortable	1	2	3	4
11	I feel self-confident	1	2	3	4
12	I feel nervous	1	2	3	4
13	I am jittery	1	2	3	4
14	I feel indecisive	1	2	3	4

15	I am relaxed	1	2	3	4
16	I feel content	1	2	3	4
17	I am worried	1	2	3	4
18	I feel confused	1	2	3	4
19	I feel steady	1	2	3	4
20	I feel pleasant	1	2	3	4

Comparison Target Questionnaire
Scoring=Frequencies
Questionnaire Created by Author

For Experimental Condition 1: Comparison to Internalized Ideal

We are interested in understanding what images came up for you when you compared yourself to your own personal idea of beauty. Please choose one or more of the options below and provide as much detailed information as you can about the image.

Image	Identity (if applicable)	Race/Ethnicity	Gender	Approx. Age	Description (Anything you can think of that would help us understand what this image looks like)
Celebrity					
Fashion Model					
Friend					
Family Member					
Acquaintance					
Younger Self					
Current Self					
Modified Self					
Other					

For Experimental Condition 2: Comparison to Sociocultural Ideal

We are interested in understanding what images came up for you when you compared yourself to society's idea of beauty. Please choose one or more of the options below and provide as much information as you can about the image.

Image	Identity (if applicable)	Race/Ethnicity	Gender	Approx. Age	Description
Celebrity					
Fashion Model					
Friend					
Family Member					
Acquaintance					
Younger Self					
Current Self					
Modified Self					
Other					

Demographics

The following items ask about you to help us interpret the results of the survey.

1. Your Gender: _____Male _____Female

_____

Please provide any explanation or description you wish to qualify your gender identity. (REMINDER: THIS INFORMATION CANNOT BE LINKED BACK TO YOU)

2. Your Race/Ethnicity (check one):

_____ American Indian/Alaska Native _____Black or African American

_____Asian _____Caucasian/White

_____Native Hawaiian or other Pacific Islander _____White Hispanic/Latino

Other, please specify:_____ _____Non-White Hispanic/Latino

3. Your Age: _____

4. Your Height:_____ (in inches)

5. Your Weight:_____ (in pounds)

6. Your Year in School:

a. first-year/freshman
b. sophomore
c. junior
d. senior
e. post-baccalaureate

7. How many years of education did your mother receive?

a. less than high school
b. high school graduate
c. some college
d. college graduate
e. master's degree
f. doctoral degree

8. Please indicate your total annual income

a. $0 – $20,000
b. $20,001 – $50, 000
c. $50,001 – $75,000
d. $75,001 - $120,000
e. $120,001 and over

9. Please indicate your financial status

a. Partly supported by others
b. Completely supported by others
b. Supporting self.