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Self-Esteem, But Not Age, Moderates the Influence of Viewing Social Media on Body Image in Adult Females

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Viewing “thin-ideal” images on social media has been associated with reduced body image (BI) in females, however much evidence is correlational, based on young student samples and/or lacks robust controls. Furthermore, the moderating role of individual differences has not been examined. This study aimed to investigate the impact of viewing Instagram-like “thin-ideal” and “average” BIs on BI in females and the moderating roles of self-esteem and age. A sample of 690 adult females aged 18–60 years ($M [SD] = 36.95 [12.34]$) with wide-ranging body mass index ($BMI = 16.90–62.10$; $M [SD] = 31.28 [8.12]$) were randomly assigned to one of four image conditions (“thin-ideal,” “average,” holiday-scenery, or stationery). BI was measured before and after viewing images, followed by a measure of self-esteem. Results showed a significant decrease in BI after viewing the “thin-ideal” versus “average” and control images ($p < .0001$). Self-esteem (but not age) moderated this effect ($p = .036$). Self-esteem made no difference to the negative effects of viewing “thin-ideal” images, however, individuals with lower self-esteem showed a significantly greater increase in BI after viewing “average” images versus participants with higher self-esteem. Results suggest that females of all ages with low self-esteem could benefit from initiatives such as the body positivity movement on Instagram.

Public Policy Relevance Statement

Exposure to images depicting “thin-ideal” body shapes results in reduced body image (BI) across females of all ages and all levels of self-esteem. Exposure to images depicting “average” body shapes results in increased BI in females of all ages with low self-esteem. Females of all ages should be aware of the impact of viewing social media imagery on their BI perceptions.

Keywords: body image, Instagram, thin-ideal, self-esteem, age

Supplemental materials: <https://doi.org/10.1037/ppm0000493.supp>

Body image (BI) is a multifaceted construct that refers to perceptions of and attitudes toward one’s own body (Cash et al., 2002). Poor BI is related to the development of eating disorders (Tylka, 2004), comorbid mental health outcomes (Woodside & Staab, 2006), and has been attributed to sociocultural factors in young females (Thompson et al., 2004), with research indicating social

media, in particular thin-ideal body imagery, as a likely influence (e.g., Brown & Tiggemann, 2016; Pink et al., 2022; Saiphoo & Vahedi, 2019).

Instagram, an image-based social media platform, sees over 1.2 billion active users per month, is the third most-used social media (Statista, 2023). Concern has been raised over Instagram’s filtering

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role for conceptualization and writing–review and editing. Aadil Mehta served in a supporting role for conceptualization and writing–review and editing. Jennifer Gatzemeier served as lead for supervision and served in a supporting role for writing–original draft and writing–review and editing. Menna Price, Aimee E. Pink, and Jennifer Gatzemeier contributed equally to conceptualization and visualization. Menna Price, Aimee E. Pink, Vasiliki Anagnostopoulou, Liam Branford, Casey Fleming, Grace Jenkins, Lowri Jones, Chloe Lovesey, Aadil Mehta, and Jennifer Gatzemeier contributed equally to methodology. Menna Price, Aimee E. Pink, Vasiliki Anagnostopoulou, Liam Branford, Casey Fleming, Grace Jenkins, Lowri Jones, Chloe Lovesey, and Aadil Mehta contributed equally to investigation.

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and editing features, which allow users to enhance their images in order to manage their self-presentation (Chua & Chang, 2016). Exposure to edited images has been shown to directly lead to a less favorable BI (Kleemans et al., 2018), regardless of self-disclaimers about the inauthenticity of the image (Livingston et al., 2020). Therefore, it appears that the simple act of viewing “thin-ideal” images is detrimental to the BI of young females.

Increased Instagram use is associated with poorer BI (e.g., Hendrickse et al., 2017), yet correlational studies yield difficulty in inferring causation (Asamoah, 2014) as it is equally plausible that those with poorer BI use Instagram more often. Carefully designed experimental studies are best suited to establish the direction of the relationship between viewing Instagram images and BI. Therefore, researchers often expose participants to preselected images to assess their immediate psychological impact. For example, a 5-min exposure to “thin and beautiful” media images resulted in a more negative BI state (Yamamiya et al., 2005) and exposure to images of attractive peers increased body dissatisfaction and negative mood (Brown & Tiggemann, 2016). However, such experimental studies often compare “thin-ideal” body imagery with “average” body imagery only and fail to include robust controls for mood and baseline comparisons (Rodgers & Rousseau, 2022).

The detrimental effect of social media exposure to idealized, attractive images on female BI has typically been attributed to the process of social comparison. Social comparison theory (Festinger, 1954) posits that we have an innate desire to develop an accurate reflection of the self. To do this, females evaluate their appearance by comparing themselves with ideals of beauty presented in the media, which can be divided into upward and downward comparisons (O’Brien et al., 2009). Upward appearance comparisons refer to the tendency to make physical appearance comparisons with more attractive targets, and such comparisons lead to dissatisfaction with the self (Groesz et al., 2002). On the contrary, downward comparison theory (Wills, 1981) predicts that people experiencing negative cognitions about themselves (e.g., low self-esteem) can enhance their self-regard by comparing themselves to people they perceive to be worse off than themselves. Research has revealed that appearance-based comparisons begin as early as adolescence (Mueller et al., 2010); however, social comparison occurs across the lifespan and can affect females of all ages (Fardouly et al., 2015). Therefore, self-esteem and age are important factors to consider when examining the impact of social media exposure on BI. These are discussed in more detail in turn below.

Self-Esteem

Self-esteem refers to one’s subjective evaluation of worth (Rosenberg et al., 1995). High self-esteem is associated with being confident and can act as a protective factor over BI concerns (Santarossa & Woodruff, 2017). In contrast, low self-esteem is associated with having an overall self-deflating attitude (Baumeister et al., 2003). During adolescence, self-esteem has been found to strongly relate to BI (Shroff & Thompson, 2006) and social media use (Saiphoo et al., 2020). However, most studies are correlational and no study has explored whether an individual’s self-esteem moderates the relationship between viewing images on social media and state BI, despite calls to do so (Saiphoo & Vahedi, 2019). It is vital to establish the impact of individual differences in self-esteem in order to

determine which individuals may be more vulnerable to the effects of social media on BI.

Age

Previous research focuses on young, student female populations (Quittkat et al., 2019) and fails to include an age-representative sample. Body mass index (BMI) generally increases with age (Ogden et al., 2006), along with negatively perceived changes to other aspects of appearance (e.g., skin aging and hair thinning) therefore, older females may also be affected by social media content. Furthermore, eating disorders (for which BI is a significant risk factor) are becoming increasingly more prevalent in older females and understanding the impact of social media on BI in this group is vital (Samuels et al., 2019). Hence, further experimental research is necessary to understand the impact of social media images on BI in females across adulthood (Rodgers et al., 2022).

This study aimed to address the previously identified gaps in the literature and be the first study to (a) investigate the impact on BI of viewing Instagram-like images of “thin-ideal” versus “average” body imagery *and robust mood and neutral controls* and (b) assess the *moderating roles* of trait self-esteem and age, in a large sample of females with wide-ranging age and BMI.

We predicted that the state BI scores would significantly decrease after viewing the “thin-ideal” BIs (vs. the “average” body, mood [holiday scenery] control and neutral [stationery] control images). Furthermore, we predicted that this effect would be moderated by trait self-esteem, such that in those with lower self-esteem, the negative effect of viewing “thin-ideal” imagery on BI will be significantly greater (vs. those with higher self-esteem). Given BI concerns and disordered eating is increasing in prevalence in older females (Samuels et al., 2019), we did not expect age to moderate this effect and instead for it to hold across age groups.

Method

Participants

Participants ($N = 693$) were female adults aged between 18 and 60 years ($M = 36.95$, $SD = 12.34$) with a BMI between 17 and 62 kg/m² ($M = 30.37$, $SD = 14.85$). According to the classification of the World Health Organization, 0.4% of our sample had underweight, 24.1% “normal” weight, 25.7% overweight, 34.1% obesity, and 14.5% obesity Class 1 or above (with 1.2% failing to include their height and/or weight). Therefore, 74.3% had overweight or obesity, with 48.6% falling in the obese category or above. This is higher than the national distribution of weight groups, where 58% of the population is estimated to have overweight or obesity (26% in the obese or above categories; UK Parliament, 2023). Post hoc power calculations using an F test (analysis of variance [ANOVA]) indicated that the sample size was highly powered ($\beta = .99$) to detect small to medium effect sizes ($f = 1.6$; G*Power 3.1.9.7; Faul et al., 2007). Volunteers were recruited through advertisements on Facebook, Twitter, and Instagram. A cover story (“personality traits and memory performance”) was used to avoid demand characteristics. Inclusion criteria were being aged between 18 and 60 years of age and female. Exclusion criteria were diagnosis of an eating disorder in the past 3 years. Participants identified as White (77.5%), Asian (1.3%), mixed race (<1%), Black (<0.5%), or Hispanic (<0.5%) (with the remaining participants failing to answer the question).

Design

This study employed a mixed-model experimental design. The between-subjects factor constituted the type of image condition exposed to and the within-subjects factor represented pre- and post-exposure completion of a state BI measure. Standardized, self-reported trait measures, and age were used for the moderators of interest.

Manipulation

Employing the stimuli selection method of Tiggemann and Zaccardo (2015), all images were sourced from public Instagram accounts (10 images in each condition) using the hashtag search feature (see Table 1 for the hashtags used). Four image conditions were included in this study: “thin-ideal” body, “average” body, holiday scenery, and stationery. The purpose of each condition and the selection criteria are described below and in Table 1.

Thin-Ideal

Females presented in the “thin-ideal” body condition reflected model-type #ideal bodies with very slender frames and acted as the experimental condition.

Average

The images in the “average” body condition represented the #normal female body. This condition acted as a comparison for exposure to “thin-ideal” female bodies and was presented in a #bodyconfident manner, in light of the growing popularity of the “body positivity” movement on social media (Rodgers et al., 2022).

Mood Control

Scenes of visually attractive holiday landscapes were selected as they are a common type of image posted on Instagram and they matched a commonly used background for the first two conditions, therefore controlling for the effects of picture location on mood.

Neutral Control

To include a completely neutral control group for comparison, stationery images were included and consisted of an assortment of basic stationery items (pens, pencils, erasures, etc.).

To ensure the images that included females (in the “thin-ideal” and “average” body conditions) were representative of the images found on Instagram and were matched across conditions, images were sourced and collated collectively by a team of seven researchers.

Table 1
Hashtag Searches Used to Collate Images

| Image condition | Hashtags searched |
|-----------------|---|
| Thin-ideal body | #perfectbodiesmotivation #perfectbody #idealbody #model |
| Average body | #bodyconfidence #realwomen #normalbody |
| Holiday | #luxuryholiday #holidaydestination #vacation #perfectholiday #dreamvacation |
| Stationery | #stationery |

Each researcher indicated their agreement with the images chosen for each condition through discussion. Ten images were selected per condition, as this has previously been shown to cause an experimental effect of image exposure (Groesz et al., 2002). Images were presented without the Instagram border or associated likes/comments. To maintain consistency between the images in the “thin-ideal” and “average” body conditions, full-bodied images were chosen of each female partially clothed and wearing swimwear or underwear. The females were posed in kneeling or standing position looking toward the camera. Further criteria for selection of the images in each condition were that they should be from diverse ethnic groups, with varying hair and eye color, and the background displays of the images were kept similar to avoid distraction away from the target female. All images were judged to be in their 20s or 30s to control for age, with all images in the “average” body condition showing females with a larger body shape, compared to the “thin-ideal” condition. There were no other people in any of the images other than the target female. In keeping with the cover story, a total of eight additional distractor images (two for each condition) were selected for use in a memory task to test participants’ attention (see below). Distractor images were closely matched to the images presented in discrete conditions.

Measure

State BI

Body Image States Scale (BISS; Cash et al., 2002) is a six-item psychometric measure of individual’s evaluative/affective BI state. For each item, participants indicated their (dis)satisfaction with their overall physical appearance: body size and shape; weight (all measured on a scale from *extremely dissatisfied* to *extremely satisfied*); feelings of physical (un)attractiveness (measured on a scale from *extremely physically attractive* to *extremely physically unattractive*); current feelings about their own looks relative to how one usually feels (measured on a scale ranging from *a great deal worse about my looks than I usually feel* to *a great deal better about my looks than I usually do*); and their evaluation of their appearance relative to how the average person looks (measured on a scale ranging from *a great deal better than the average person looks* to *a great deal worse than the average person looks*). Total BISS scores reflected the mean of all items (Items 2, 4, and 6 reversed scored), with higher scores on the 9-point dimension indicating more favorable BI states. BISS scores were highly reliable (Time 1 $\alpha = .87$; Time 2 $\alpha = .88$), which is in line with a previous sample of female university students (Yamamiya et al., 2005).

State Mood

Profile of Mood States-bipolar version (POMS-BI; Lorr & McNair, 1984–1988) was used to assess participants’ current affective state. Participants were presented with 72 adjectives forming positive and negative aspects of six bipolar subscales (composed–anxious; agreeable–hostile; confident–unsure; energetic–tired; elated–depressed; clearheaded–confused). For each of the 12 adjectives that formed each subscale, participants rated the extent to which their current feelings reflected such adjective on a 4-point Likert scale (1 = *much unlike this* to 4 = *much like this*). The total score for each subscale represents the sum of positive items minus the sum of negative items plus a constant of 18 (to avoid negative scores). Internal consistency of this measure has been assured ($\alpha = .78-.90$; O’Halloran et al., 2004).

Self-Esteem

The Rosenberg Self-Esteem Scale (RSES; Rosenberg, 1965) is a 10-item self-report measure of global self-worth that assesses both positive and negative feelings about the self. Participants rated agreement with each item on a 4-point Likert scale (1 = *strongly agree* to 4 = *strongly disagree*). The total score was computed by summing the scores for all items (with reverse scoring where appropriate; Items 1, 3, 4, 7, and 10). Higher scores indicated higher self-esteem. Scores were of high reliability in the current sample ($\alpha = .90$), consistent with published estimates (see Furnham et al., 2002).

Social Media Use

The Self-report Habit Index (SRHI; Verplanken & Orbell, 2003) was included to check that the individuals in each condition were matched for habitual social media use. The SRHI is a measure of habitual behavior that can be adapted to capture the habitual use of social media. We used a 10-item version that captured responses to the statement “Browsing social media is something ...” for example, “...I do automatically” “...that belongs to my daily routine.” Responses are recorded on a 7-point Likert scale ranging from *strongly disagree* to *strongly agree*. Overall habitual social media use score was calculated as an average and the higher the score the more habitual the use of social media.

Memory Task/Attention Check

A simple memory task was included to both support the research cover story and act as an attention check. Inspiration for the memory task was taken from Cohen and Blaszczynski (2015). Before image exposure, participants were instructed to pay close attention to the images presented to them as their memory for these would be tested at the end of the study. According to their assigned condition, participants were presented with four images to test their memory; two images were familiar stimuli pictures and two were closely matched distractor images. Participants were instructed to select the two images that were familiar to them. Participants were scored based on how many of the two images they had successfully remembered (0 = *none remembered*, 1 = *one image remembered*, 2 = *both images remembered*). The computed score acted as a measure of the level of attention paid to the images. Anyone scoring 0 was excluded from the analysis on the basis that they were unlikely to be paying attention.

Additional note. Other trait measures were included as part of a larger student project: three-factor eating questionnaire (Karlsson et al., 2000); narcissistic personality inventory (Ames et al., 2006); Iowa–Netherlands comparison orientation measure (Schneider & Schupp, 2011); the multidimensional perfectionism scale (Hewitt & Flett, 1996); and fat phobia scale (Bacon et al., 2001). Please see the online supplemental materials for the full details. Each of these measures was explored as moderators for completeness but none were significant.

Procedure

Participants were invited to take part in a study about “memory for images and personality” which was completed online via the Qualtrics survey platform (Qualtrics, Provo, Utah, United States). Firstly, participants completed pre-exposure state measures of body image (BISS) and mood (POMS-BI). Participants were then

randomly assigned to one of the four conditions in which they viewed 10 Instagram images. Each image was displayed to participants for a total of 10 s, as recommended by Tiggemann and Zaccardo (2015). Following exposure to the images, participants completed post-exposure state measures of body image (BISS) and mood (POMS-BI) once again. Participants then completed trait measures, including the self-esteem measure (RSES) and demographic information including height and weight (to calculate BMI) and age. Finally, the memory test was administered to support the cover story and act as an attention check. Upon completion, participants received a full debrief. The study received ethical approval from the University Ethical Review Committee and informed consent was obtained from all participants.

Analysis Plan

BI change scores acted as the dependent variable and were calculated by subtracting BISS scores at Time 1 from BISS scores at Time 2. A negative score indicated a reduction in BI and a positive score indicated an increase in BI.

To check for potential covariates, BI change scores were entered into a bivariate correlation matrix with age, BMI, mood change scores (Time 2 POMS–Time 1 POMS scores), attention check scores, and SRHI scores. Any significant correlates were added to the main analysis as covariates. One-way ANOVAs were then used to check that the participants in each of the four conditions did not differ significantly in the characteristics described above.

To address the first aim of the study and establish whether BI change scores differed across the four conditions, a one-way, analysis of (co)variance (AN(C)OVA) was used, with Bonferroni post hoc analysis. To address the second aim of the study, and test for the moderating effects of self-esteem and age, two separate multicategorical moderation models using PROCESS Version 3.5 (Hayes, 2017) were run using SPSS Version 26.0. The “thin-ideal” condition was used as the indicator condition utilizing the “effect” method.

Results

Cleaning of Data

After examination of the data, one participant was excluded as there was no record of which condition they were in and a further two were excluded for having BI change scores that were extreme outliers (boxplots indicating the scores were >3 SDs from the mean). All participants scored at least 1 on the attention check and so were retained in the analysis, therefore, for the final analysis $N = 690$. The data files on which the analysis was performed can be accessed using this link: <https://osf.io/6nxak/>.

Covariate Check

No potential covariates correlated with BI change scores (see Table 2) or varied significantly between conditions ($p > .05$; see Table 3). Therefore, there was no need to include any covariates in the main analysis.

Comparison Between Conditions

Univariate ANOVA analysis showed that there was a significant difference in BI change scores between conditions, $F(3, 689) =$

Table 2
Correlations Between Body Image Change Scores and Potential Covariates

| | | Age | BMI | POMS | SRHI |
|------------|-------------------|------|-----|------|------|
| Body image | Pearsons <i>r</i> | -.01 | .07 | .05 | -.03 |
| | <i>p</i> | .81 | .08 | .16 | .46 |

Note. BMI = body mass index; POMS = profile of mood state change score; SRHI = self-report habit index for social media use.

17.93, $p < .0001$, $f = 0.23$. Bonferroni post hoc tests revealed that the “thin-ideal” condition saw a significantly greater reduction in BI compared to all other conditions ($p < .0001$). No significant differences were observed between the other three conditions ($p > .05$). See Figure 1.

Self-Esteem Moderation Analysis

RSES scores significantly moderated the effect of condition on BI change scores for the “thin-ideal” versus the “average” body condition ($t = -2.10$, $p = .037$, $f = 0.15$, lower level confidence interval (LLCI) = -0.034 , upper level confidence interval (ULCI) = -0.001), but not for the “thin-ideal” versus the holiday scenery ($t = 1.34$, $p = .180$, LLCI = -0.006 , ULCI = 0.029) or stationery ($t = 1.32$, $p = .187$, LLCI = -0.006 , ULCI = 0.028) conditions. Simple slopes analysis revealed that moderation was significant only for low versus high self-esteem in response to the “average” body condition ($t = 2.40$, $p = .017$, LLCI = -0.043 , ULCI = -0.004) and not the “thin-ideal” condition ($t = -1.24$, $p = .217$, LLCI = -0.029 , ULCI = 0.007). See Figure 2.

Age Moderation Analysis

Age did not moderate the effect of the condition on BI change scores ($p \geq .10$). See Figure 3.

Discussion

The aims of this study were to, firstly, investigate the impact of viewing Instagram-like images of “thin-ideal” versus “average” body imagery and controls on BI and secondly, assess the moderating roles of trait self-esteem and age, in a large sample of females with wide-ranging age and BMI. In relation to the first aim, we found that state BI did indeed decrease significantly more in those exposed to “thin-ideal” imagery versus “average” body imagery, and the control images as predicted. In relation to the second aim, we found that trait self-esteem moderated the impact of the images on state BI, but that age did not. This is the first study to determine

the moderating role of self-esteem and to show that viewing “thin-ideal” images reduces BI (vs. robust controls) and that this effect holds across a wide age range (18–60 years).

Previous research has shown that exposure to “thin-ideal” imagery can result in poorer BI but has been limited to young student samples and/or lacked robust controls (Rodgers et al., 2022). For example, Brown and Tiggemann (2016) demonstrated this effect but used a young undergraduate sample and did not have conditions for “average” images, or a mood control. In this study, we add to the literature by showing that this effect is apparent when compared to three control groups (“average” body, mood, and neutral controls) and holds for females aged 18–60 years. The age range is important as females of all ages are exposed to this kind of imagery and the literature consistently shows that the experience of poor BI persists across the lifespan (Peat et al., 2008) and eating disorder symptoms are becoming more prevalent in females over 50 years of age (Samuels et al., 2019). Furthermore, the inclusion of an “average” body comparison condition as well as mood and neutral control conditions are an important addition to the literature, as this allows us to confidently conclude that the effects were driven by viewing the “thin-ideal” imagery. It is important to note here that the age of the models in the thin-ideal and average body condition were judged to be in their 20s and 30s. This was done in order to control for the effects of age across conditions. We acknowledge, however, that social comparison theory suggests that comparisons are most likely to be made with those similar to ourselves. This similarity is likely to include age group. This decision was made as it was felt that, given the focus on youth as a beauty ideal, including older females in the thin-ideal condition would possibly move away from the typical “ideal” we were aiming to recreate. The societal push toward youth and the thin-ideal has been suggested to influence BI and the development of disordered eating, with older females often making comparisons to their younger selves (Peat et al., 2008). However, it would be advisable for future studies to parse out these questions and examine the effects of varying the age of the model, as well as the participants, in this kind of research.

Surprisingly though (and not included in our original predictions), the significant moderation by self-esteem was not driven by the negative effects of viewing the “thin-ideal” imagery, but by the positive effects of viewing the “average” body imagery—all participants, regardless of self-esteem scores, were negatively impacted by viewing the “thin-ideal” imagery. For those low in self-esteem, viewing the “average” imagery significantly increased their state BI (vs. those high in self-esteem). In terms of social comparison theory (Festinger, 1954), we could infer that the impact of an upward social comparison (viewing the thin-ideal imagery) is detrimental to BI regardless of self-esteem, but that downward social comparison (average body imagery) is beneficial for BI in those with lower self-esteem. This finding relates strongly to the body positivity movement which promotes diversity and

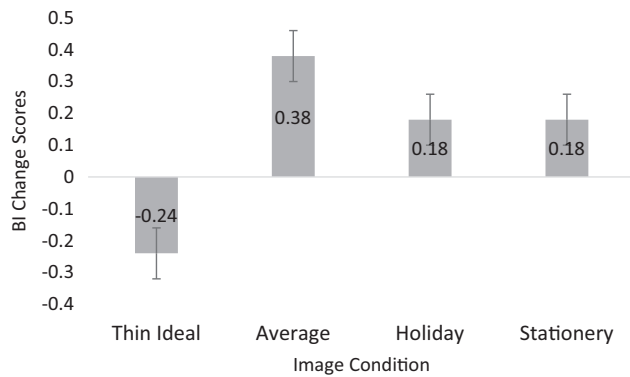
Table 3
Mean (and Standard Deviation) for Each Condition for Potential Covariates

| Condition | Thin-ideal | Average | Holiday scenery | Stationery |
|-----------|---------------|-----------------|-----------------|-----------------|
| Age | 37.24 (12.63) | 37.04 (12.30) | 36.93 (12.51) | 36.28 (12.0) |
| BMI | 31.41 (7.95) | 31.19 (7.98) | 30.95 (8.12) | 31.56 (8.58) |
| POMS | -4.88 (79.15) | -11.43 (112.31) | -15.16 (124.73) | -16.86 (129.14) |
| SRHI | 5.15 (1.45) | 5.19 (1.44) | 5.19 (1.33) | 4.04 (11.81) |

Note. BMI = body mass index; POMS = profile of mood state change score; SRHI = self-report habit index for social media use.

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Figure 1
Body Image Change Scores Across the Four Conditions

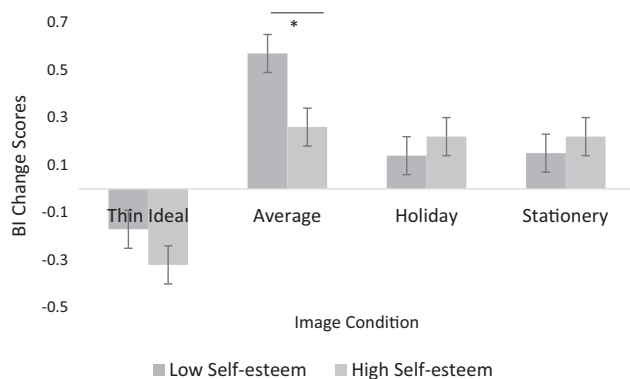


Note. BI = body image.

inclusivity in the media to better represent the whole population (#BoPo on Instagram). By including #Bodyconfidence in our search criteria for images to include in the “average” body condition, we used positive imagery of average-sized females as promoted by the #BoPo movement. Therefore, our findings provide considerable support for the body-positivity movement and underscore the value of representing average-sized females in a positive light across social media, especially for those who are vulnerable to low self-esteem. In a recent review, Rodgers et al. (2022) commented that although evidence to date suggests that body positive imagery is beneficial, the research has been mostly correlational and lacked robust controls. Although it was not our intention to directly measure the positive influence of viewing “body-positive” images, the inclusion of such has allowed us to address this issue.

As with any study of this nature, there are some limitations to note. In this study, we only examined short-term exposure to social media imagery and acute effects. It is unknown whether the findings generalize to longer-term exposure and prolonged effects on BI and this should be explored in longitudinal studies. Although the females included in this study did not differ significantly by self-reported habitual use of social media (and so we may assume that typical

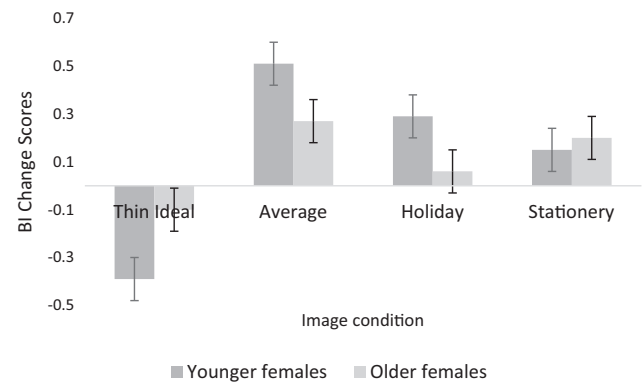
Figure 2
Body Image Change Scores in Those With Low Versus High Self-Esteem (± 1 SD) Across the Four Conditions



Note. BI = body image.

* $p < .05$.

Figure 3
Body Image Change Scores in Younger Versus Older Females (± 1 SD) Across the Four Conditions



Note. BI = body image.

daily exposure was controlled for across conditions), this cannot inform us of the effects of longer-term exposure. In addition, although social comparison theory provides a good explanation of the current findings, we cannot conclude that the mechanism driving the changes in BI is an upward or downward comparison. Future research should explore the mediating role of these directional comparisons in order to confirm this.

Strengths of this study include the large sample with a wide BMI and age range, and the inclusion of a mood and neutral control group. However, there is a need now to examine the effects of viewing such images on BI in other understudied groups, in particular to include males in this research, as they have been neglected in the literature despite becoming increasingly vulnerable to the detrimental effects of having a poor BI (Pink et al., 2022; Rodgers & Rousseau, 2022).

In conclusion, our findings highlight that the negative impact of “thin-ideal” imagery on BI is consistent across a wide age range of females, regardless of self-esteem. Importantly, we find that the positive impact of “average” imagery on BI is particularly helpful to those with lower self-esteem. This supports the value of the growing body positivity movement and evidences its potential for improving BI in adult females at a population level.

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