

Isolating the effects of body size and sexualisation in social media images on body image-related constructs among young women

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ABSTRACT

This study systematically separated the effects of body size and sexualisation in social media images on women's body image. Young women (18–25 years, $N = 194$) viewed 10 social media images of either (1) sexualised women in larger bodies; (2) non-sexualised women in larger bodies; (3) sexualised women in smaller bodies; or (4) non-sexualised women in smaller bodies. Participants completed pre- and post-exposure measures of body image and related constructs. Thin ideal internalisation was examined as a moderator of those effects. The body size of the women in the images was more influential than how sexualized their bodies were presented. Regardless of sexualisation, viewing images of women with smaller bodies was negative for appearance satisfaction, negative mood, and body appreciation, and viewing women with larger bodies was positive for body appreciation and neutral for appearance satisfaction and mood. The impact of body size on appearance satisfaction was stronger for those high in thin ideal internalisation. Women with larger bodies were perceived more positively than those with smaller bodies. However, participants' self-objectification increased in all conditions. Thus, while viewing images of women with larger bodies provides promise for improving social media, further research is needed before it is recommended broadly.

1. Introduction

Young women are provided with vast opportunities to view other women's bodies on the highly visual social media platforms that are popular among their demographic (Statista, 2024). Due to selective self-presentation and people's desire to be seen as attractive on social media (Hollenbaugh, 2021), visual social media content can promote societal beauty ideals. Beauty ideals are narrowly defined, with one body type or look promoted as attractive (Buote et al., 2011; Dimitrov & Kroumpouzos, 2023), such as having a thin-and-toned body (Bozsik et al., 2018). Thus, beauty ideals are unattainable for most individuals (Brownell, 1991). Research consistently shows that, like traditional forms of media (e.g., magazines; Grabe et al., 2008; Groesz et al., 2002), viewing social media content containing women who match thin-and-toned beauty ideals can increase young women's body dissatisfaction and negative mood compared to viewing appearance-neutral content that does not contain people (de Valle et al., 2021; Gurtala & Fardouly, 2023). The body positivity and fat acceptance movements emerged partly as a reaction to these narrowly defined ideals

(Cwynar-Horta, 2016). The body positivity movement aims to challenge societal beauty ideals, promote the acceptance and respect of all bodies, and shift focus from the appearance of the body to its health and function (Cohen et al., 2020). Emerging research suggests that viewing body positive visual content on social media can be beneficial for young women's body image and mood (e.g., Fardouly et al., 2023; Rodgers et al., 2022). However, body positive content found on social media is highly diverse (Cohen, Irwin, et al., 2019; Harriger et al., 2023), and scholars have raised concerns about the potential for some content that gets promoted as "body positive" to be harmful for women (e.g., Cohen et al., 2020; Cwynar-Horta, 2016; Gill & Elias, 2014; Rodgers et al., 2022). Thus, it is vital to deconstruct body positive content into its elements to determine what aspects may be beneficial, neutral, or harmful to women's body image.

1.1. The impact of viewing different body sizes

For decades, scholars have argued for more diverse body sizes to be represented in media and advertising to broaden the bodies that society

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considers acceptable and beautiful (e.g., [Diedrichs & Lee, 2011](#); [Halliwell & Dittmar, 2004](#)). Content analyses of body positive social media posts suggest that the percentage of larger bodies (i.e., bodies that do not conform to the thin-and-toned ideal) present in posts varies according to the platform and whether the posts were found on influencers' accounts or under a relevant hashtag. For example, larger bodies were present in 60 % of posts by body positive influencers on Instagram ([Cohen, Irwin, et al., 2019](#)) compared to 43 % of posts found under body positive hashtags on Instagram ([Lazuka et al., 2020](#)). Further, only 32 % of posts coded from body positive hashtags on TikTok contained larger bodies ([Harriger et al., 2023](#)).

Research examining the effect of viewing larger versus smaller (thin-and-toned ideal) body sizes on women's body image is mixed. A recent systematic review of 86 experimental social and traditional media studies with 212 coded effects reported that most research found positive (46.70 %) or null (48.58 %) effects on women's body satisfaction, body appreciation, and mood after viewing images of women with larger body sizes (also described as average-sized bodies or plus-sized bodies) compared to thin/smaller body sizes ([de Lenne et al., 2023](#)). Very few studies (4.72 %) reported negative effects of viewing images of women with larger bodies ([de Lenne et al., 2023](#)). Further, a meta-analysis of 13 experimental studies focused on social media content found that viewing images of women with larger body sizes was less harmful to women's body image than viewing images of women with smaller (thin-and-toned ideal) body sizes ([de Valle et al., 2021](#)). Taken together, this research suggests there may be benefits for women's body image from viewing images of women whose bodies do not conform to the thin-and-toned ideal. However, the variability in results suggests other aspects of the images of larger women may determine how beneficial they are for body image. One such aspect may be the extent to which the larger women's bodies are sexualised.

1.2. The impact of viewing sexualised bodies

Sexualised visual content is common on social media and has been found to attract more positive feedback (e.g., likes) from viewers than non-sexualised content ([Bell et al., 2018](#); [Ramsey & Horan, 2018](#); [Suárez-Álvarez et al., 2023](#)). Sexualised content can contain women wearing revealing clothing and/or with provocative facial or bodily poses ([Bell et al., 2018](#)). Scholars have raised concerns about the sexualised portrayals of women in body positive content, including those with larger body sizes (e.g., [Cwynar-Horta, 2016](#)). Content analyses find some evidence of sexual objectification in body positive posts, especially on Instagram (around 35 % of posts on Instagram were sexually objectifying ([Cohen, Irwin, et al., 2019](#); [Lazuka et al., 2020](#)) compared to only 6 % of posts on TikTok ([Harriger et al., 2023](#))). According to objectification theory, viewing sexualised portrayals of other women can lead to self-objectification, in which the viewer prioritises their physical appearance over other aspects of themselves and comes to view their own body from a third-person perspective ([Fredrickson & Roberts, 1997](#)). Indeed, a meta-analysis of 54 studies (mainly correlational) found a moderate effect of viewing sexualised media content on self-objectification ([Karsay et al., 2018](#)). Experimental research in this area is more mixed, with some studies finding similar levels of state self-objectification after viewing both sexualised and non-sexualised images of women ([Di Michele et al., 2023](#); [Prichard et al., 2023](#); [Vendemia et al., 2021](#)), and others finding higher rates of self-objectification after viewing sexualised than non-sexualised images ([Biefeld & Brown, 2022](#); [Vendemia & Fox, 2024](#)). These studies did not include pre-exposure measures of state self-objectification, so whether participants' self-objectification changed in response to the images they viewed is unknown.

The effects of viewing sexualised social media content on women's body image and mood are also unclear. Research suggests that viewing sexualised and idealised media content is more harmful to women's body image and mood than viewing content that does not contain people

([Ward, 2016](#)). However, findings from research that manipulated the level of sexualisation of the women in the images are mixed. Two experimental studies that focused only on women with smaller (thin-and-toned ideal) bodies found that exposure to sexualised images of those women resulted in more body dissatisfaction ([Guizzo et al., 2021](#)), and negative mood ([Prichard et al., 2023](#)) than exposure to non-sexualised images of those women. Two other studies included images of women with larger body sizes. One study exposed young women to either sexualised images or videos of women with thin-and-toned bodies, sexualised images/videos of women who did not have idealised bodies (including larger body sizes and those with disabilities) or non-sexualised images/videos of women who did not have idealised bodies or who were pointing out aspects of their bodies that did not meet ideals ([Di Michele et al., 2023](#)). They found that body satisfaction and positive mood decreased in the sexualised thin ideal condition. Body satisfaction but not mood increased in the sexualised non-ideal condition, but there was little change in the non-sexualised non-ideal condition ([Di Michele et al., 2023](#)). The other study exposed participants to two images of women with either smaller or larger body sizes that were sexualised or non-sexualised and then measured their trait body esteem (post-exposure only), finding no main effects or interactions, perhaps unsurprisingly given that a trait rather than state outcome measure was used ([Biefeld & Brown, 2022](#)). Further research is needed using factorial designs that independently manipulate both the body size and level of sexualisation of the women in the images using pre-exposure and post-exposure state measures of body image and mood to more clearly disentangle these effects.

1.3. Appearance comparisons and attainability

Appearance comparisons are potential mechanisms explaining why viewing idealised content can be harmful to body image. Social comparison theory proposes that people have an innate desire to determine their standing in relevant domains, which can drive them to compare themselves to others ([Festinger, 1954](#)). When viewing images of other women, the frequency of appearance comparisons made may be influenced by the body size of the women being viewed and how sexualised they are. For example, [Prichard et al. \(2023\)](#) found that young women reported more frequent appearance comparisons when thin women were sexualised than non-sexualised, perhaps because their appearance was more salient and/or there was more of their body visible, allowing for more comparisons to be made. Further, experimental research suggests that young women may make more frequent appearance comparisons when exposed to images of women with smaller rather than larger body sizes (e.g., [Clayton et al., 2017](#); [Di Michele et al., 2023](#); [Tiggemann et al., 2020](#)).

Comparisons can be made in different directions: upward (i.e., perceptions that others are better than oneself), lateral (i.e., perceptions that others are similar or the same as oneself), and downward (i.e., perceptions that others are worse than oneself). Viewing content containing people who match beauty ideals often leads to upward appearance comparisons (e.g., [Gurtala & Fardouly, 2023](#); [Politte-Corn & Fardouly, 2020](#)). Further, longitudinal research suggests that upward appearance comparisons on social media can increase body image concerns over time ([Jarman et al., 2024](#)). Women may make more frequent comparisons to women with smaller rather than larger bodies due to what [Festinger \(1954\)](#) described as a 'unidirectional drive upward' in which people may be more motivated to compare themselves to those seen as better than them (e.g., more aligned with thin-and-toned beauty ideals) to inspire them to improve in that domain. Indeed, [Di Michele et al. \(2023\)](#) found that young women reported making upward appearance comparisons to the idealised (thin) content and downward appearance comparisons to the non-idealised (bodies with larger sizes, disabilities, or perceived flaws) content. Some scholars have argued that differences in comparison direction may partially explain why viewing body positive content can be more beneficial to body image than

viewing idealised content (Rousseau, 2023).

The appearance of women with larger body sizes may also be seen as more personally attainable or as promoting a more realistic ideal than the appearance of women with smaller bodies. Previous research found that women rated non-idealised images of other women wearing no makeup as more personally attainable than idealised images of those women wearing makeup (Politte-Corn & Fardouly, 2020). That study also found that viewing the non-idealised images was less harmful to some aspects of women's body image than viewing the idealised images. Similarly, judging an upward comparison target's appearance as more personally attainable was correlated with higher body satisfaction in young women's everyday lives (Fardouly et al., 2021). Thus, the frequency and direction of appearance comparisons and perceived attainability of the ideals are important to consider when examining the effects of exposure to women with varying levels of sexualisation and body sizes on young women's body image and mood.

1.4. Perceptions of the women in the images

Social media users usually want others to form a positive impression of them based on their online profile and activities. Thus, it is important to consider the impressions that young women form of those who post content that varies in sexualisation and body size. Morality, warmth, and competence are three core components of person perception (Goodwin et al., 2014; Haslam et al., 2008). Research focused on body size and weight stigma suggests that those with larger bodies are judged to be less competent and moral than those with smaller (thin) bodies, while judgements of warmth are mixed (e.g., Ringel & Ditto, 2019; Vartanian & Silverstein, 2013). Research also suggests that women who are presented in a sexualised manner are perceived to be less moral, warm, and competent than those presented in a non-sexualised manner (Ward, 2016), including in diverse body positive posts (Brathwaite et al., 2023; Vendemia et al., 2022). One study used a factorial design to independently manipulate the body size and sexualisation of women in images and found that body size stereotypes had a stronger effect on person perception than sexualisation stereotypes (Biefeld et al., 2021). In contrast to previous research, they found that women with larger bodies were considered nicer (a component of warmth) and smarter (a component of competence) than women with smaller (thin) bodies (Biefeld et al., 2021). The authors proposed that their findings may be due to thinness being seen as synonymous with sexualised bodies and larger bodies being seen as synonymous with non-sexualised presentations, thus aligning with previous research on stereotypes of sexualised bodies. However, more research is needed to determine the robustness of those effects.

1.5. Moderation by thin ideal internalisation

Viewing women's bodies that differ in body size and sexualisation may not have the same effect on everyone. In their systematic review, de Lenne et al. (2023) found that thin ideal internalisation was the most common moderator examined in experimental literature on the effect of body size on women's body image and mood. The results were mixed in the 10 studies they examined, with 4 finding no effects, 4 finding more positive effects from viewing larger bodies relative to smaller bodies for those *high* in internalisation, and 2 finding that viewing larger bodies was more beneficial for those *low* in internalisation. Theoretically, it makes sense that the extent to which a person has internalised the thin ideal may influence their reactions to viewing images of women who do or do not meet that ideal. However, further research is needed to determine the direction of the effects and to determine whether thin ideal internalisation influences women's reactions to sexualised content.

1.6. Current study

The aim of the present study was to (1) examine the independent and

combined effects of viewing images of women with smaller or larger body sizes that were sexualised or non-sexualised on women's appearance satisfaction, mood, body appreciation, self-objectification, appearance comparisons, perceived attainability, and perceptions of the women, and (2) examine whether trait internalisation of the thin ideal moderated any effects. Based on previous research (discussed above; e.g., de Lenne et al., 2023; de Valle et al., 2021), it was predicted that viewing images of women with larger bodies would result in more positive body image outcomes (body satisfaction, mood, body appreciation), less frequent and less upward appearance comparisons, and higher judgements of personal attainability than viewing images of women with smaller bodies. Thus, time by body size interactions were predicted for variables measured pre- and post-exposure to the stimuli and main effects of body size were predicted for variables only measured post-exposure. Based on previous research (Guizzo et al., 2021; Prichard et al., 2023), viewing sexualised smaller bodies was also expected to lead to worse body image outcomes than viewing non-sexualised smaller bodies. However, given the lack of research on sexualised larger bodies, it was unclear if similar results for sexualisation would be found for both body sizes or if body size by sexualisation interactions would emerge. All other effects were examined in an exploratory manner, given the mixed results in the field. Mediation analyses were not conducted for potential mechanisms (i.e., appearance comparison frequency/direction or perceived attainability) because those constructs were measured and not manipulated in the present study (see Pirlott & MacKinnon, 2016).

2. Method

2.1. Participants

Participants were 194 women aged 18-to-25 years old ($M = 22.28$, $SD = 2.17$) living in the United Kingdom ($n = 173$, 89.18 %), Australia ($n = 11$, 5.67 %), and the United States ($n = 10$, 5.15 %), and recruited via the online survey platform Prolific. They were reimbursed 1.88 GBP for 15 minutes of their time, which was the recommended rate by Prolific at the time of data collection. GPOWER (Erdfeider et al., 1996) power analyses indicated that this sample size provided more than 80 % power to detect relatively small effects (Cohen's $f = 0.012$) with an alpha set at .05. Most participants ($n = 159$, 81.86 %) identified as White, with 19 (9.79 %) identifying as Asian, 6 (3.09 %) as Black or African, 3 (1.55 %) as Hispanic, 6 (3.09 %) as Mixed ethnic groups, and 1 (0.52 %) preferring not to say. The mean body mass index (BMI; kg/m^2) of participants was 24.97 ($SD = 7.16$). Most participants reported spending between 1 and 4 hours (75.3 %) on social media on a normal day, with the median being 2–3 hours (35.1 %). Most participants reported viewing posts related to body positivity on social media occasionally ($n = 131$, 67.53 %), with the remaining participants reporting viewing the posts never ($n = 27$, 13.92 %), about half of the time ($n = 23$, 11.86 %), and several times a day ($n = 13$, 6.70 %).

There were no significant differences between participants randomly assigned to each of the study conditions on age ($F(3190) = 1.52$, $p = .21$), ethnicity ($\chi^2(15) = 16.78$, $p = .33$), country ($\chi^2(6) = 4.34$, $p = .63$), BMI ($F(3178) = 0.34$, $p = .80$), time spent on social media ($F(3190) = 0.34$, $p = .80$), or frequency of viewing body positivity on social media ($\chi^2(9) = 16.14$, $p = .06$). There were also no significant differences between participants in each of the study conditions on pre-exposure state measures of appearance satisfaction ($F(3190) = 1.71$, $p = .17$), negative mood ($F(3189) = 1.56$, $p = .20$), body appreciation ($F(3190) = 1.27$, $p = .28$), or self-objectification ($F(3180) = 1.07$, $p = .36$).

2.2. Stimulus materials

All the images used in the study were sourced from the public Instagram accounts of young female social media influencers. Both a sexualised and non-sexualised image was selected from each woman's account. Images were deemed to be sexualised if the woman was

wearing lingerie or revealing swimwear (e.g., bikini) and posing her body (e.g., pulling on her clothing or sticking out her buttocks) and/or face (e.g., pouting her lips or directly gazing at the camera) in a sexualised manner (Bell et al., 2018). Images were deemed to be non-sexualised if the woman was wearing clothes covering most of her body (e.g., jeans or a long dress) and was smiling and/or posing her body in a non-sexualised manner (e.g., hand on her hips or by her side). Image pairs (i.e., one sexualised and one non-sexualised) were selected of 15 women with larger bodies (i.e., with visible body fat) and 15 women with smaller bodies (i.e., no visible body fat) for pilot testing. All the images only contained one woman, and there were no other people in the image. The whole or majority of the woman's body was visible in each image, and the woman was the primary focus of the image. All 30 women had faces that met beauty ideals (e.g., large lips, clear skin; Dimitrov & Kroumpouzos, 2023).

The 30 image pairs were pilot tested to select a subset of stimuli that (1) were equal between all the study conditions on facial attractiveness, (2) had levels of sexualisation that were equivalent between the smaller and larger body conditions but different between the sexualised and non-sexualised conditions, and (3) the perceived body size of the women was larger in the larger than smaller body conditions. Pilot participants were 40 young women ($M_{age} = 22.25$, $SD_{age} = 2.50$) recruited from Prolific living in the United Kingdom ($n = 32$, 80.00 %), Australia ($n = 5$, 12.50 %), and the United States ($n = 3$, 7.50 %). Half of the pilot participants were randomly assigned to rate the images of women with larger bodies, and the other half rated the images of women with smaller bodies to reduce participant burden and to prevent comparisons between body sizes impacting ratings of attractiveness. Images were randomly presented to participants one at a time. They were asked to rate each image on 100-point visual analogue scales for facial attractiveness ($-50 = \text{very unattractive}$, $50 = \text{very attractive}$), extent of sexualisation ($0 = \text{not at all}$, $100 = \text{very much}$), and body size/weight ($0 = \text{very small}$, $100 = \text{very large}$).

A final set of images was selected based on the results of the pilot study, including 10 pairs of images (one sexualised, one non-sexualised) of women with larger bodies and 10 pairs of images (one sexualised, one non-sexualised) of women with smaller bodies. The women in the final sets of images did not significantly differ in facial attractiveness ($M_s = 24.05\text{--}26.95$, $SD_s = 12.24\text{--}16.79$) between sexualised conditions ($F(1,38) = 1.35$, $p = .25$) or between body size conditions ($F(1,38) = 0.01$, $p = .78$). There was also no difference in the perceived extent of sexualisation between the larger ($M = 38.00$, $SE = 4.32$) or smaller body conditions ($M = 43.15$, $SE = 4.32$; $F(1, 38) = 0.71$, $p = .40$). Consistent with our study manipulations, there was a significant difference in the perceived extent of sexualisation between the sexualised images ($M = 60.67$, $SD = 26.84$) and non-sexualised images ($M = 20.48$, $SD = 15.91$; $F(1, 38) = 135.60$, $p < .001$). There was also a significant difference in the perceived body size/weight of women in the larger body size condition ($M = 59.19$, $SE = 2.63$) than the smaller body condition ($M = 23.37$, $SE = 2.63$; $F(1,38) = 92.82$, $p < .001$).

Following recommendations by de Lenne et al. (2023), the women's body size in each condition was coded based on a 10-point female photographic figure rating scale (Swami et al., 2010). The women in the smaller body condition had an average rating of 3.7 (range = 3–4), which corresponded to a BMI of around 18.45. The women in the larger body condition had an average rating of 8.5 (range = 8–10), corresponding to a BMI between 29.26 and 35.92. In the smaller and larger body conditions, 7 women appeared White, and 3 appeared Mixed Race.

2.3. Measures

2.3.1. State appearance satisfaction and negative mood

Following previous research (e.g., Heinberg & Thompson, 1995; Politte-Corn & Fardouly, 2020), computer-based visual analogue scales (VAS) were used to measure participants' state appearance satisfaction and mood pre-exposure and post-exposure to the study stimuli.

Participants indicated how they felt at that moment regarding five items that measured appearance satisfaction ("satisfied with your body weight", "satisfied with your body shape", "satisfied with your overall appearance", "satisfied with your facial appearance", "satisfied with your facial complexion") and five items measuring negative mood ("happy" (reverse coded), "confident" (reverse coded), "depressed", "anxious", "discouraged"). Participants responded by moving a vertical marker to their desired location along a horizontal line for each item with endpoints labelled 0 (*not at all*) and 100 (*very much*). Five filler items were also included in the measure (e.g., "satisfied with your social life") to disguise the purpose of the study and reduce the prominence of the appearance-related items. All 15 items were presented in a randomised order. Mean scores were calculated independently for the appearance satisfaction items and negative mood items. There was good internal consistency for the appearance satisfaction (pre-exposure $\omega = .920$, post-exposure $\omega = .948$) and negative mood (pre-exposure $\omega = .823$, post-exposure $\omega = .842$) measures in the present study.

2.3.2. State body appreciation

As described in Cohen, Fardouly, et al. (2019), a modified version of the State Body Appreciation Scale-2 (Homan, 2016) was used to measure body appreciation pre-exposure and post-exposure to the study stimuli. Participants were asked to report how they felt in the current moment regarding four items measuring body appreciation (e.g., "At this moment, I feel love for my body") and four filler items (e.g., "At this moment, I feel good about my life"). Items were presented in a random order. Responses to the items were made on VAS with endpoints labelled 0 (*not at all*) and 100 (*very much*). Mean scores were calculated for the four items, with higher scores indicating greater body appreciation. Internal consistency for the state body appreciation measure in the current study was excellent (pre-exposure $\omega = .959$, post-exposure $\omega = .971$).

2.3.3. State self-objectification

The Twenty Statements Test (Fredrickson et al., 1998) was modified to measure state self-objectification pre-exposure and post-exposure to the study stimuli. Participants were asked to write 10 different statements about themselves and their identity, starting with "I am...". The first two authors coded participants' responses as being related to physical appearance (coded as 1; e.g., "I am chubby", "I am beautiful") or not (coded as 0; e.g., "I am caring", "I am loyal"). The coders were blind to the participants' assigned conditions. There was high inter-rater agreement (Cohen's $\kappa = 0.969$), with any discrepancies discussed and agreed upon by the coders. Scores were summed, with higher scores indicating higher levels of self-objectification.

2.3.4. State appearance comparison

Participants' frequency and direction of appearance comparisons to the women in the study stimuli were measured post-exposure. Appearance comparison frequency was measured with the State Appearance Comparison Scale (SACS; Tiggemann & McGill, 2004). The SACS includes three items regarding the extent to which participants compared their appearance to the women in the images (e.g., "To what extent did you compare your overall appearance to the women in the images?"). Responses were made on a 7-point scale with endpoints labelled 1 (*no comparison/no thought about my appearance*) and 9 (*a lot of comparison/a lot of thought about my appearance*). Scores were summed with higher scores representing higher appearance comparison frequency to the study stimuli. Internal consistency for the SACS in the current study was excellent ($\omega = .937$). Following previous research (Politte-Corn & Fardouly, 2020), appearance comparison direction was measured by asking participants to indicate whether the women in the study images looked *much less attractive than you* (1), *slightly less attractive than you* (2), *just as attractive as you* (3), *slightly more attractive than you* (4), or *much more attractive than you* (5). A higher score on that item represented more upward appearance comparison to the study stimuli.

2.3.5. Perceived attainability

The Perceived Realism measure from Slater et al. (2012) was adapted to measure the extent to which participants thought the women's appearance in the study images was realistic and attainable. Participants responded to three items (e.g., "The women's appearance in the images was attainable for the average woman") on a 7-point scale with endpoints labelled 1 (*strongly disagree*) and 7 (*strongly agree*). Scores were averaged, with higher scores indicating greater perceived attainability of the women's appearance in the study stimuli. Internal consistency for the perceived attainability measure in the current study was acceptable ($\omega = .766$).

2.3.6. Perceptions of the Instagram users

Similar to Livingston et al. (2020), participants rated their perceptions of the people in the study stimuli based on 17 traits drawn from research on person impression formation (Goodwin et al., 2014). Responses were made on VAS with endpoints labelled 0 (*not at all*) and 100 (*very much*). Averages were calculated for traits related to morality (i.e., "honest", "fair", "principled", "trustworthy", "righteous", "sincere"), warmth (i.e., "friendly", "happy", "likeable", "kind", "helpful", "cooperative"), and competence (i.e., "efficient", "capable", "skillful", "intelligent", "competent"). In the current study, internal consistency was excellent for the measures of morality ($\omega = .925$), warmth ($\omega = .928$), and competence ($\omega = .927$).

2.3.7. Willingness to follow similar accounts

Participants rated how likely they would be to follow accounts that posted similar content to the images they viewed in the study. Responses were made on a 5-point scale (1 = *very unlikely*, 5 = *very likely*).

2.3.8. Trait thin ideal internalisation

The Thin/Low Body Fat subscale of the Sociocultural Attitudes Towards Appearance Scale- 4 R (Schaefer et al., 2017) was used to measure participants' internalisation of the thin ideal. Participants rated their level of agreement with 4 items (e.g. "I think a lot about looking thin") on a 5-point scale (1 = *definitely disagree*, 5 = *definitely agree*). Mean scores were calculated with higher scores indicative of greater thin ideal internalisation. The measure had good internal consistency in the present study ($\omega = .802$).

2.4. Design and Procedure

This study was approved by the University Human Research Ethics Advisory Panel. Participants were recruited via Prolific and signed up for an online study evaluating social media posts. Only women aged 18–25 years old were eligible to participate in the study. The study was conducted using Qualtrics. Informed consent was obtained from participants prior to their involvement in the study.

The study employed a 2 (body size of women in the study images: larger body size, smaller body size; between-subject) $\times$ 2 (level of sexualisation in the study images: non-sexualised, sexualised; between-subject) $\times$ 2 (time: pre-exposure, post-exposure; within-subject) mixed design. Participants were randomly assigned to one of four conditions in which they viewed 10 images of women with sexualised larger bodies ($n = 46$), non-sexualised larger bodies ($n = 49$), sexualised smaller bodies ($n = 49$), or non-sexualised smaller bodies ($n = 50$). Images were presented individually for a minimum of 10 seconds each.

Participants completed state measures of self-objectification, appearance satisfaction, negative mood, and body appreciation (in that order) pre-exposure and post-exposure to their assigned stimuli. Post-exposure (only), participants also completed measures of appearance comparisons, perceived attainability, perceptions of the users, willingness to follow similar accounts, and trait thin ideal internalisation. Demographic information was then obtained from participants, including their age, gender, height, weight, identifying ethnic group, and country of residence. They were then asked to specify the amount of

time spent on social media per day and how frequently they view body positive content on social media. Three attention check items were embedded in VAS measures (e.g., "Please select '0' for this specific item"). Participants also responded to a manipulation check question asking if there were people in the images they viewed and the genders of those people. All participants were debriefed at the end of the study and paid for their time.

2.5. Data analysis

Participants who did not meet our eligibility criteria for age (i.e., 18–25 years old) and gender (i.e., women) were removed from the study, as were those who incorrectly completed two or more attention check questions or the manipulation check question. The data were then screened for missing values and outliers. Means and standard deviations for participants in each condition on each measure pre- and post-exposure to the study stimuli were examined and reported in Table 1.

Mixed factorial analyses of variance (ANOVAs) were then conducted to examine any main effects of time or two-way or three-way interactions between the body size of women in the study images (larger body size, smaller body size; between-subject), level of sexualisation in the study images (non-sexualised, sexualised; between-subject), and/or time (pre-exposure, post-exposure; within-subject) separately for the appearance satisfaction, negative mood, body appreciation, and self-objectification measures (see Table 2 for results). Mixed factorial ANOVAs were conducted because they are considered robust to non-normal data (Blanca et al., 2017). Post-hoc simple effects analyses were conducted for any significant interactions. A visual representation of the change in scores from pre-exposure to post-exposure for participants in each study condition can be found in Fig. 2. Separate univariate analyses of variance (ANOVAs) were then conducted to examine any main effects or interactions between the body size conditions and the sexualisation conditions on participants' appearance comparison frequency and comparison direction to the women in the study images, participants' perceived attainability of the beauty ideals being promoted in the images, their perceptions of the women's morality, warmth, and competence, and their willingness to follow similar accounts (see Table 3 for results). As recommended by Cohen (1988), partial eta squared values (η^2_p) of 0.01, 0.06, and 0.14 were considered small, medium, and large effect sizes, respectively.

Moderation analyses were then conducted using Model 3 of the PROCESS macro for SPSS (Hayes, 2022) to examine any two-way or three-way interactions between the body size conditions (x), sexualisation conditions (w), and trait thin ideal internalisation (z; continuous variable) separately for each outcome measure (y) controlling for pre-exposure scores (if available for that measure). A visualisation of the conceptual model can be found in the supplemental materials. It is important to note that the x and w variables are interchangeable in the model. Given the large number of comparisons in the current article, significance levels were adjusted to account for a paper-wide 5 % false discovery rate using Benjamini and Hochberg (1995) procedure. The first raw p -value to exceed the Benjamini–Hochberg-adjusted p -value corresponding to a false discovery rate of 5 % was $p = .016$. Correlations between all the study variables can be found in the supplemental materials. The dataset is available on request via the Open Science Framework (<https://osf.io/92vuu6>).

3. Results

3.1. Preliminary analyses

A total of 201 participants completed the study. One participant answered two of the three attention check questions incorrectly and another participant responded to the manipulation check question incorrectly. Five participants did not identify as women. Those seven participants were excluded from further analyses. This left a final sample

Table 1

Mean (standard deviation) scores for each measure pre- and post-exposure to the stimuli for participants in each condition.

Measure	Sexualised Small Body	Non-Sexualised Small Body	Sexualised Large Body	Non-Sexualised Large Body
T1 Appearance satisfaction	46.29 (24.23)	51.01 (25.69)	48.09 (20.41)	56.62 (25.19)
T2 Appearance satisfaction	42.06 (27.91)	47.72 (28.48)	49.66 (21.12)	59.22 (26.70)
T1 Negative mood	38.55 (20.55)	36.57 (20.83)	40.24 (19.80)	32.03 (16.77)
T2 Negative mood	41.67 (22.92)	39.70 (23.91)	39.06 (19.80)	28.87 (19.02)
T1 Body appreciation	44.84 (27.69)	50.54 (29.68)	46.04 (24.77)	54.64 (28.10)
T2 Body appreciation	41.81 (29.74)	45.30 (29.60)	49.27 (23.22)	59.17 (28.94)
T1 Self-objectification	0.69 (0.83)	0.54 (0.80)	0.44 (0.77)	0.44 (0.62)
T2 Self-objectification	1.42 (1.47)	1.06 (1.37)	1.78 (1.59)	1.25 (1.15)
T2 Comparison frequency	4.68 (1.74)	4.12 (1.91)	4.91 (1.65)	3.79 (1.82)
T2 Comparison direction	4.61 (0.64)	4.56 (0.64)	3.70 (0.99)	3.76 (0.94)
T2 Perceived attainability	2.93 (1.24)	3.67 (1.13)	4.91 (1.19)	4.65 (0.94)
T2 Morality	45.63 (20.28)	49.21 (20.48)	60.17 (16.86)	62.57 (19.44)
T2 Warmth	54.52 (19.99)	56.90 (19.62)	65.05 (17.58)	69.80 (18.35)
T2 Competence	55.34 (20.29)	56.50 (20.02)	62.97 (16.52)	67.84 (18.48)
T2 Willingness to follow	2.20 (1.10)	2.64 (1.31)	2.78 (1.44)	3.20 (1.46)

Note. T1 = pre-exposure to the study stimuli. T2 = post-exposure to the study stimuli.

Table 2

Results from mixed factorial ANOVAs for appearance satisfaction, negative mood, body appreciation, and self-objectification.

	Main Effect of Time			Sexualisation X Time Interaction			Body Size X Time Interaction			Sexualisation X Body Size X Time Interaction		
	<i>F</i>	<i>p</i>	η^2p	<i>F</i>	<i>p</i>	η^2p	<i>F</i>	<i>p</i>	η^2p	<i>F</i>	<i>p</i>	η^2p
Appearance satisfaction	1.557	.214	.008	0.543	.462	.003	19.108	<.001	.091	0.001	.973	<.001
Negative mood	0.465	.496	.002	0.370	.544	.002	12.061	<.001	.060	0.377	.540	.002
Body appreciation	0.020	.888	<.001	0.067	.796	<.001	20.677	<.001	.098	0.994	.320	.005
Self-objectification	84.848	<.001	.324	3.194	.076	.018	3.397	.067	.019	1.040	.309	.006

Note. **Bold** values represent significance at $\alpha < .016$.**Table 3**

Results from univariate ANOVAs for appearance comparison frequency and direction, perceived attainability, perceptions of the Instagram users, and willingness to follow similar accounts.

	Main Effect of Sexualisation			Main Effect of Body Size			Sexualisation X Body Size Interaction		
	<i>F</i>	<i>p</i>	η^2p	<i>F</i>	<i>p</i>	η^2p	<i>F</i>	<i>p</i>	η^2p
Comparison frequency	10.334	.002	.052	0.033	.855	<.001	1.151	.285	.006
Comparison direction	0.001	.976	<.001	53.809	<.001	.221	0.227	.635	<.001
Perceived attainability	1.927	.167	.010	72.086	<.001	.275	8.317	.004	.042
Morality	1.155	.284	.006	25.150	<.001	.117	0.045	.832	<.001
Warmth	1.719	.191	.009	18.545	<.001	.089	0.189	.664	.001
Competence	1.225	.270	.006	12.175	<.001	.060	0.464	.496	.002
Willingness to follow	5.016	.026	.026	15.814	.003	.045	0.001	.870	<.001

Note. **Bold** values represent significance at $\alpha < .016$.

of 194 participants. There was less than 1 % missing data for all the variables of interest in the present study, except for self-objectification, which had 5.2 % missing data at pre-exposure and 3.1 % at post-exposure. A Little's MCAR test did not show that the data were not missing completely at random ($\chi^2 = 87.028$, $DF = 67$, $p = .051$). None of the study variables were normally distributed (Shapiro-Wilk $ps < .026$), except for morality judgements ($p = .057$). Data were checked for outliers using the outlier labelling rule, which multiplies the interquartile range (IQR) by 2.2 (Hoaglin et al., 1986). Six outliers were identified for the self-objectification measures and those data were removed from further analyses. There were 12 participants who recognized and correctly named a woman in the study images. The pattern and significance of the study results did not change when controlling for target recognition. Thus, for simplicity, the results reported below did not control for target recognition.

3.2. Main analyses

3.2.1. Appearance satisfaction

As seen in Table 2, there was a significant time by body size condition interaction for appearance satisfaction. Post hoc simple effects analyses revealed that participants' appearance satisfaction decreased from pre-

exposure to post-exposure in the smaller body size conditions, $F(1, 190) = 16.128$, $p < .001$, $\eta^2p = .078$, but there was no significant change in the larger body size conditions, $F(1, 190) = 4.777$, $p = .030$, $\eta^2p = .025$. All other interactions and main effects were non-significant for appearance satisfaction in the mixed factorial ANOVAs (see Table 2). Thin ideal internalisation moderated the effect of body size conditions on

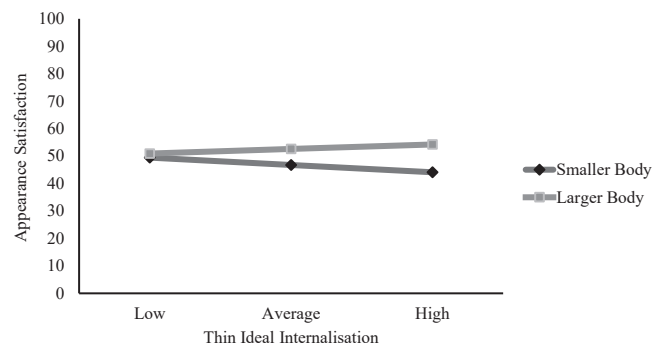


Fig. 1. The effect of body size conditions on appearance satisfaction and low (-1SD), average, and high (+1SD) thin ideal internalisation.

appearance satisfaction scores, $t(185) = 2.460$, $p = .015$. As seen in Fig. 1, as thin ideal internalisation increased, appearance satisfaction scores decreased in the smaller body conditions and increased in the larger body conditions. There was no significant difference between body size conditions on appearance satisfaction scores for those low (-1 SD) in thin ideal internalisation, $b = 1.485$, $SE = 1.852$, $t(189) = 0.802$, $p = .424$. The difference between body size conditions on appearance satisfaction was significant and increasing for those with average thin ideal internalisation, $b = 5.806$, $SE = 1.306$, $t(189) = 4.446$, $p < .001$, and high thin ideal internalisation, $b = 10.128$, $SE = 1.842$, $t(189) = 5.498$, $p < .001$. However, the simple slope was only significant for those in the smaller body condition, $t(189) = -2.877$, $p = .005$, not the larger body condition, $t(189) = 1.684$, $p = .094$. Thin ideal internalisation did not moderate any other effects for appearance satisfaction ($ps > .871$).

3.2.2. Negative mood

There was a significant time by body size condition interaction for negative mood (see Table 2). Post hoc simple effects analyses revealed that participants' negative mood increased from pre- to post-exposure for those in the smaller body size conditions, $F(1, 189) = 8.861$, $p = .003$, $\eta_p^2 = .045$, but there was no significant change in mood for those in the larger body size conditions, $F(1, 189) = 3.797$, $p = .053$, $\eta_p^2 = .020$. No other interactions were significant for negative mood. Thin ideal internalisation did not moderate any of the effects for negative mood ($ps > .033$).

3.2.3. Body appreciation

As seen in Table 2, there was a significant time by body size condition interaction for body appreciation. Post hoc simple effects analyses revealed that, from pre-exposure to post-exposure, participants' body appreciation decreased in the smaller body size conditions, $F(1, 190) = 11.224$, $p < .001$, $\eta_p^2 = .056$, and increased in the larger body size conditions, $F(1, 190) = 9.508$, $p = .002$, $\eta_p^2 = .048$. No other interactions were significant for body appreciation. Thin ideal internalisation did not moderate any of the effects for body appreciation ($ps > .184$).

3.2.4. Self-objectification

There was a significant main effect of time (see Table 2), with self-objectification increasing from pre-exposure to post-exposure for participants in all conditions. No interactions were significant for self-objectification. Thin ideal internalisation did not moderate any of the effects for self-objectification ($ps > .101$).

3.2.5. Appearance comparisons

There was a significant main effect of sexualisation on appearance comparison frequency scores (see Table 3), with participants reporting more appearance comparisons to the sexualised rather than non-sexualised women (see Table 1). There was a significant main effect of body size on appearance comparison direction (see Table 3), with participants making more extreme upward comparisons to the women with smaller bodies than those with larger bodies (see Table 1). However, it should be noted that the mean scores for all conditions suggested that, on average, participants made upward (rather than lateral or downward) comparisons to women with smaller and larger bodies. No other main effects or interactions were significant for appearance comparison frequency or direction (see Table 3), and thin ideal internalisation did not moderate any of the effects ($ps > .100$).

3.2.6. Perceived attainability

There was a significant main effect of body size on the perceived attainability of the women's appearance in the images (see Table 3). As seen in Table 1, participants perceived the bodies of the larger-sized women to be promoting a more attainable ideal than the smaller-sized women. There was also a significant sexualisation by body size condition interaction. Post hoc simple effects analyses revealed that participants rated the appearance of the smaller-bodied women to be more attainable if the bodies were non-sexualised than sexualised, $F(1, 190) = 9.322$, $p = .003$, $\eta_p^2 = .047$. There was no significant difference in ratings for the larger-bodied women based on their level of sexualisation, $F(1, 190) = 1.095$, $p = .297$, $\eta_p^2 = .006$. Thin ideal internalisation did not moderate any effects for perceived attainability ($ps > .115$).

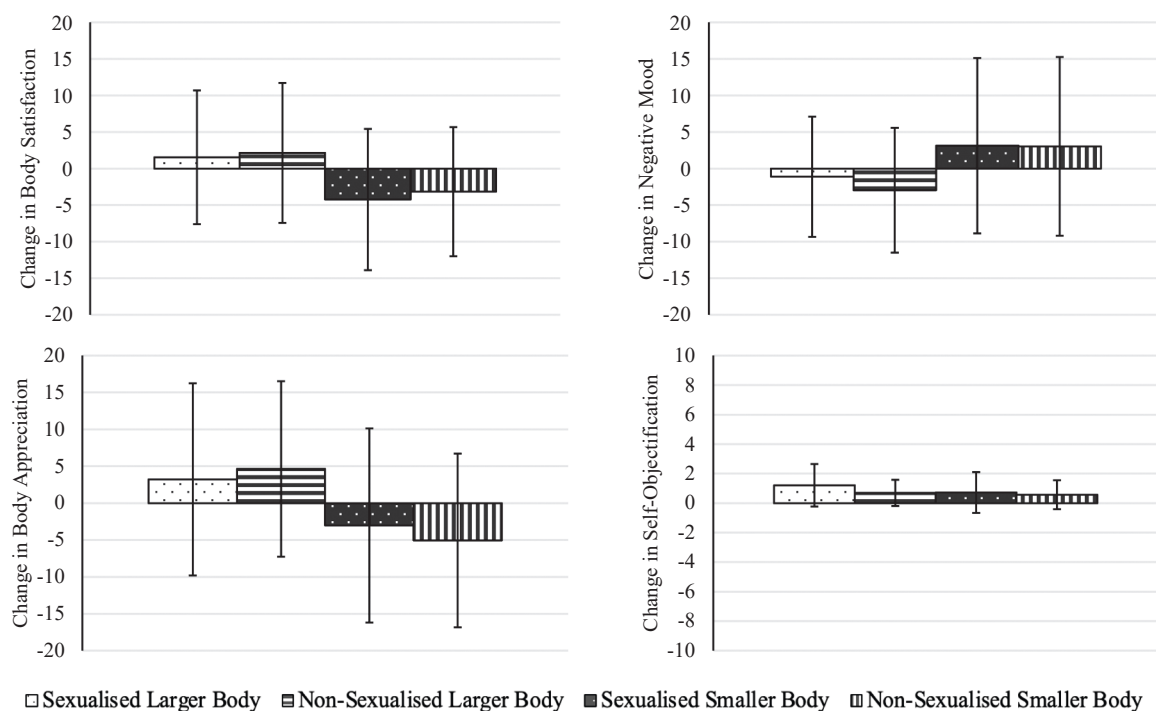


Fig. 2. Mean change scores for body satisfaction, negative mood, body appreciation, and self-objectification from pre-exposure (T1) to post-exposure (T2) to the study stimuli separated for each condition. Error bars represent scores 1 standard deviation above and below the mean.

3.2.7. Perceptions of the Instagram users

As seen in Table 3, there were significant main effects of body size on morality, warmth, and competence judgements. Participants rated the women with larger bodies to be more moral, warm, and competent than the women with smaller bodies (see Table 1). There were no other significant effects for impression formation measures (see Table 3), and thin ideal internalisation did not moderate any of the effects ($ps > .030$).

3.2.8. Willingness to follow similar accounts

There was a significant main effect of body size on participants' willingness to follow similar accounts to those they viewed in the study (see Table 3). Participants who viewed images of women with larger bodies were more likely to report wanting to view those accounts in the future than those who viewed images of women with smaller bodies. No other effects were significant in the univariate ANOVA, and thin ideal internalisation did not moderate any effects ($ps > .094$).

4. Discussion

This study aimed to examine the independent and combined effect of viewing images of women with different body sizes and levels of sexualization on young women's body image and related outcomes. Overall, the results of the study suggest that the body size of the women in the images was more influential (medium to large effect sizes) than how sexualized their bodies were presented (small effect sizes). Viewing images of women with larger body sizes had a more positive impact and impression on young women than viewing smaller body sizes, regardless of how sexualised they were. However, women in all study conditions reported increases in their state self-objectification after viewing images of other women, regardless of their size or level of sexualisation. Thus, while viewing larger bodies on social media leads to primarily positive or neutral effects on body image, it may also increase women's focus on their own appearance. In the sections below, we discuss the research findings in relation to previous research, theory, and/or practice.

4.1. Positive outcomes from viewing larger bodies

Consistent with the findings of systematic reviews and meta-analyses (de Lenne et al., 2023; de Valle et al., 2021), we found that viewing smaller (thin ideal) bodies in images found on social media decreased young women's appearance satisfaction and body appreciation and increased their negative mood. The effect on appearance satisfaction was stronger for those higher in thin ideal internalization. These results provide further evidence for the harm to body image from viewing social media content with women who match societal beauty ideals. In contrast, but consistent with most research in the de Lenne et al. (2023) review, we found that viewing larger bodies increased women's body appreciation and did not affect their appearance satisfaction or mood. Thin ideal internalization moderated the effect of body size conditions on women's appearance satisfaction. For those low in internalization of the thin ideal, the women's body size in the images had no effect on their appearance satisfaction. The discrepancy in appearance satisfaction scores between the body size conditions emerged and increased for those with average and high levels of thin ideal internalization. These findings provide the potential for young women to improve their experience on social media by increasing the proportion of content they view containing larger body sizes (not conforming to the thin-and-toned ideal).

Unlike previous research (e.g., Clayton et al., 2017; Di Michele et al., 2023; Tiggemann et al., 2020), women in the current study reported making a similar frequency of appearance comparisons to women with smaller and larger body sizes. Further, participants in both body size conditions reported making *upward* appearance comparisons (i.e., rated the women to be more attractive than themselves) to the women in the images, perhaps because women in both body size conditions were judged to have equally and highly attractive faces. Thus, following comparison theory (Festinger, 1954), the similar frequency of

comparisons found in the current study may be due to women looking to improve their perceived physical attractiveness and seeking out upward comparisons to do so. However, participants in the current study reported making more extreme upward comparisons to women with smaller than larger body sizes. Further, the appearance of women with larger bodies was rated to promote a more attainable beauty ideal than the appearance of women with smaller bodies, which may explain the more positive effects on body image from viewing larger body sizes. However, further qualitative and longitudinal research is needed to better understand why and when young women make upward appearance comparisons to different targets, including those that vary in body size, and when they are most harmful to body image.

4.2. Attitudes towards women with larger bodies

Similar to the findings of Biefeld et al. (2021), but in contrast to most research on stereotypes of those with larger body sizes (e.g., Ringel & Ditto, 2019; Vartanian & Silverstein, 2013), we found that participants in the present study perceived women with larger bodies to be more moral, warm, and competent than those with smaller bodies. Participants were also more willing to follow accounts featuring women with larger than smaller body sizes. The discrepancy in findings may be partly due to the way the women were presented in the images. In both the current study and Biefeld et al. (2021), the women with larger body sizes were rated to be highly attractive, with images taken from popular social media influencers in the current study and clothing catalogues in the Biefeld et al. (2021) study. Images of women with larger bodies in research focusing on weight/obesity stereotypes may have used less idealized images. Nevertheless, the findings of the current study add to other research (e.g., Biefeld et al., 2021; Vartanian & Silverstein, 2013) suggesting that negative stereotypes of women with larger bodies may evade some contexts. It is also possible that women's positive impressions of women with larger bodies result from young women broadening their conceptualization of acceptable bodies, perhaps due to the body positive movement and/or larger models being used in advertisements. The positive impressions formed of those with larger body sizes could encourage more brands to include more diverse body sizes in their advertisements.

4.3. Concerns for self-objectification

Consistent with previous research with body positive and thin ideal content (Cohen, Fardouly, et al., 2019; Di Michele et al., 2023; Prichard et al., 2023; Vendemia et al., 2021), we found that viewing images of other women regardless of their size or level of sexualisation increased young women's state self-objectification. These effects are inconsistent with objectification theory (Fredrickson & Roberts, 1997), suggesting that there may be nuances regarding the type and amount of exposure to sexualised content that may drive any effects on self-objectification. While the non-sexualised content used in the present study was judged to be significantly less sexualised than the sexualised content, it was still rated to be slightly sexualised (20/100 for sexualisation) by pilot participants. It was difficult to find content on social media that was not judged to be sexualised to any extent (i.e., ratings of 0/100). Thus, the minimally sexualised appearance of women in the non-sexualised conditions may have been salient enough to drive increases in self-objectification. However, it is also possible that viewing any content containing other women, or those judged to be attractive in any way, may increase women's focus on their own appearance. Further research is needed to determine under what conditions viewing other women's bodies does and does not influence women's self-objectification.

It is unclear from the present study and previous experimental research how fleeting or long-lasting the effects of viewing images of other women on women's self-objectification may be. Further research is needed to examine the cumulative and longer-term effects of viewing attractive images of other women on women's self-objectification.

Objectification theory and most research on self-objectification focuses on negative attitudes towards one's appearance and body shame. Cohen, Fardouly, et al. (2019) found that participants who viewed body positive posts reported more positive comments about their appearance in the measure of state self-objectification. Further research is needed to determine the impact of self-objectification on women's wellbeing when they feel satisfied or unsatisfied with their appearance. Nevertheless, given the negative outcomes found from self-objectification in the current literature on aspects such as depression (Jones & Griffiths, 2015), disordered eating (Schaefer & Thompson, 2018), and cognitive functioning (Winn & Cornelius, 2020), caution should be taken when encouraging women to view more images of attractive larger bodied women on social media as part of the body positivity movement.

4.4. Limited role of sexualisation

In contrast to the concerns raised about the sexualised portrayal of women in body positive content on social media (e.g., Cwynar-Horta, 2016; Rodgers et al., 2022), in the current study, the level of sexualisation had little impact on the body image outcomes or impressions formed from viewing women with larger body sizes. Similarly, in contrast to our prediction and unlike two previous studies (Guizzo et al., 2021; Prichard et al., 2023), the negative effects found from viewing smaller bodies in the current study did not differ based on how sexualised their bodies were presented. It is possible that the body size of the women is a more important factor driving women's body image outcomes and their perceptions of other women than how sexualised their bodies are presented. Viewing sexualised portrayals of other women may be normalised for young women, which may make that aspect of the image less salient to them. Further, women may perceive highly sexualised images as performative and directed towards men, making the level of sexualisation less relevant and influential for women's body image. Future experimental research could determine under what conditions the level of sexualisation present in social media content can impact women's body image and their impressions of other women.

One effect found for sexualization in the present study was that the appearance of the smaller bodied women was judged to portray a more attainable ideal if they were non-sexualised rather than sexualised, perhaps because less of the muscle definition on their abdomen was visible in the non-sexualised images. Further, consistent with previous research (Prichard et al., 2023), participants in the current study reported making more frequent appearance comparisons to the women whose bodies were sexualised rather than those who were non-sexualised, regardless of body size. Again, these results may be due to more of the women's bodies being visible and thus available for comparison in the sexualised rather than non-sexualised images. However, further research is needed to understand why women make more frequent appearance comparisons to sexualised images.

4.5. Limitations and future directions

There are several limitations to the present study that should be noted. First, all the women in the images used in the present study were rated to have attractive faces. The study's results may differ if other aspects of the women's appearance, other than their body size, were not idealised, which could be tested in future experimental research. Second, to isolate the effects of body size and sexualisation, images were taken from social media but out of the context in which they are usually viewed on those platforms. In everyday life, those images are accompanied by likes, comments, and other features that may change the way that young women perceive and are impacted by that content. Future research could examine whether the effect of viewing images of women with varying body sizes and levels of sexualisation differs when other features, such as likes or comments, are also present. Research could also examine the effects of viewing larger body sizes on social media over

time in women's everyday lives as a form of body image micro-intervention. Third, although filler items and a cover story were used to distract participants from the purpose of the study, the body image items in the pre-exposure measures may have primed body image constructs. This priming could lead to some socially desirable responding. However, participants would be unaware of the other study conditions in which the level of sexualization and body size of the women in the images vary. Thus, it is unlikely that any priming would meaningfully change the pattern of results found in the study. Nevertheless, future research could attempt to reduce the possibility of socially desirable responses, for example, by using implicit measures of body image. Finally, the sample used in the present study was from White, educated, industrialized, rich, and democratic (WEIRD) countries, and most of the images contained White women. The results of the present study may not generalize to other demographic groups or stimuli. Future research is needed with more diverse samples to better understand these effects at a population level.

4.6. Conclusions

This was the first experimental study to systematically separate the effects of body size from sexualization in social media images. Overall, the results of the study suggest that viewing images of women with larger body sizes that do not conform to the thin-and-toned ideal may be beneficial to some aspects of young women's body image. Women with larger body sizes were also rated more positively and young women reported being more willing to follow them on social media than those with smaller (thin-and-toned ideal) body sizes. The effects did not differ if women in the images were presented as highly or minimally sexualised. These effects suggest that viewing larger body sizes may be one aspect of body positive social media content that could provide positive or at least neutral effects on body image. However, like other research on body positive content (e.g., Cohen, Fardouly, et al., 2019), we found that viewing any images containing other attractive women, regardless of body size or sexualisation, increased young women's self-objectification. Thus, it may be more beneficial for young women to view appearance-neutral posts that do not contain people (Fardouly et al., 2023; Rodgers et al., 2021), as although they may not be as effective at improving women's body image, they are unlikely to cause any harm. However, there are situations where bodies cannot easily be removed from images, such as content in the fashion and beauty industry, for which the inclusion of larger body sizes could be promoted. Further research is needed before this content is recommended for social media users on a broad scale.

CRedit authorship contribution statement

Ronald M. Rapee: Writing – review & editing, Conceptualization. **Lenny R. Vartanian:** Writing – review & editing, Conceptualization. **Talia Levin:** Writing – original draft, Project administration. **Jasmine Fardouly:** Writing – original draft, Project administration, Methodology, Funding acquisition, Formal analysis, Conceptualization.

Declaration of Competing Interest

The authors declare that they have no known competing financial interests or personal relationships that could have appeared to influence the work reported in this paper.

Appendix A. Supporting information

Supplementary data associated with this article can be found in the online version at [doi:10.1016/j.bodyim.2024.101800](https://doi.org/10.1016/j.bodyim.2024.101800).

Data availability

We have uploaded the data on the osf and provided a link in the paper (<https://osf.io/92vu6>).

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