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Does medium matter? Investigating the impact of viewing ideal image or short-form video content on young women's body image, mood, and self-objectification

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ABSTRACT

There is a rising prevalence of short-form videos on social media, particularly since the advent of TikTok. Viewing appearance-ideal images has harmful effects on young women's body image. However, the impacts of viewing appearance-ideal short-form videos on body image are largely unknown. This study investigated the impact of viewing appearance-ideal short-form social media video content on young women's (M_{age} = 19.19, *SD* = 1.80) state appearance satisfaction, negative mood, self-objectification, and related constructs, compared to viewing appearance-ideal image content and appearance-neutral content. Young women (*N* = 211) were shown either: (1) appearance-ideal images, (2) appearance-ideal videos, (3) appearance-neutral images, or (4) appearance-neutral videos. Viewing appearance-ideal content regardless of the medium led to decreased appearance satisfaction, and increased negative mood, and self-objectification, and more state internalisation of appearance ideals compared to viewing appearance-neutral content. Further, if women perceived the appearance-ideal content they viewed to be unedited or unenhanced, they reported less appearance satisfaction after viewing video than image content. Thus, the impact of viewing ideal video and image content taken from social media may have similar effects on young women. However, when ideal content is low in perceived enhancement, viewing videos may be more harmful for appearance satisfaction than viewing images.

1. Introduction

Appearance dissatisfaction is frequently reported among adolescent girls and young adult women (Swami et al., 2010; Wang et al., 2019), which is concerning because it is associated with a host of negative outcomes, such as clinical eating disorders (Stice, 2002), and depressive episodes (Bornioli et al., 2021). One factor that has been linked to negative body image is social media use (de Valle et al., 2021). Social media are often described as appearance-focused environments because people tend to view and selectively present the most attractive versions of themselves and others on these platforms (Shafie et al., 2012; Siibak, 2009). In this way, social media can both perpetuate and make accessible societal appearance ideals to users.

Appearance ideals are usually narrowly defined and specific (e.g., toned and flat stomachs, large eyes, full lips, long legs; Bozsik et al., 2018; Harrar et al., 2018), making them only achievable to a small number of women who are genetically inclined to possess those body shapes and appearances (Brownell, 1991). Moreover, the appearance ideals disseminated on social media are often enhanced and edited using manipulation techniques (e.g., filters, applications, posing; Choi & Behm-Morawitz, 2018; Mills et al., 2018), further exacerbating the unattainability of these ideals and promoting unrealistic beauty expectations. The tripartite influence model of body image (Thompson et al., 1999) proposes that viewing content that promotes appearance ideals can negatively impact appearance dissatisfaction via the internalisation of the unattainable appearance ideals and by engaging in negative appearance comparisons with others who match the ideals (i.e., perceiving others to be more attractive than oneself). Support for these mechanisms has been found in correlational and longitudinal research (e.g., Jarman et al., 2021; Rodgers et al., 2011; Rodgers et al., 2015; Seekis & Barker, 2022).

A widely studied body image-related construct associated with appearance-focused social media use is self-objectification (e.g., Bell et al., 2018; Fardouly et al., 2017; Wang et al., 2020). Self-objectification occurs when women internalise and adopt a third-person perspective of their bodies and place greater value on their physical appearance over other aspects of themselves (Muehlenkamp &

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Saris–Baglama, 2002; Quinn et al., 2006). According to objectification theory (Fredrickson & Roberts, 1997), women are socialised to engage in self-objectification when they exist in patriarchal societies in which female bodies are perceived and regarded as objects predominately valued for their purpose to others. Social media provides a context that regularly attracts scrutiny to the female body, thereby providing increased opportunities for women to be both objectified and engage in self-objectification (Muehlenkamp & Saris–Baglama, 2002).

Most experimental research in the social media and body image field has focused on the impact of viewing social media *images* of women who match societal beauty ideals (i.e., appearance-ideal images) on young women's body image. Recent reviews and meta-analyses of that literature have found that viewing appearance-ideal social media images led to poorer body image than viewing appearance-neutral images (e.g., travel images or interior design images; de Valle et al., 2021; Fioravanti et al., 2022). Experimental research has also indicated that viewing appearance-ideal images of young women taken from social media results in increased negative mood and self-objectification in young women (e.g., Brown & Tiggemann, 2016; Robinson et al., 2017; Tiggemann & Zaccardo, 2015). Thus, viewing image content on social media that matches societal appearance ideals can be detrimental to young women's body image, mood, and self-objectification. However, it is currently unclear whether these effects translate to other visual mediums (e.g., videos) found on social media.

1.1. Video content on social media

Social media platforms are constantly changing. Social media offers a range of different platforms with various functions and features, from text and image-based content to more recently video-based content. The increasing dissemination of video-based social media content has been attributed to the unprecedented growth in popularity of the platform TikTok since its release in 2016 (Big 3 Media, 2020). Although TikTok is a relatively new social media platform, it has recently surpassed Google and Facebook to become the world's most accessed domain (Tomé & Cardita, 2021) with over one billion monthly active users (Wang, 2021). TikTok is a video-based social media platform, characterised by short-form, vertical-oriented videos traditionally between 3 and 60 s in length (although longer videos have recently been introduced by the platform; Malik, 2022) that are shared and generated by users. The platform can be an appearance-focused environment, as the viral trends and challenges that TikTok is so centrally characterised by frequently portray appearance ideals (Statista, 2022). Further, a substantial amount of TikTok content is music- and dance-oriented, thus increasing viewers' and creators' awareness of moving bodies (Bhandari & Bimo, 2022; Shutsko, 2020). TikTok's short videos distinguish it from other available video-based social media platforms that traditionally host lengthier videos of 10 min or more (e.g., YouTube; Wright, 2017). This may make TikTok preferable as shorter videos may be deemed to be more convenient and may also appeal to individuals with shorter attention spans (Vaterlaus & Winter, 2021).

The distinctive features of TikTok have been translated to other popular social media platforms, with short-form videos now featured on Instagram, Facebook, and YouTube. Evidently, short-form video content is becoming more widespread on social media and is increasing in popularity (Cyca, 2022). A recent survey of 1236 consumers in the United States found that 50% of social media users in 2020 and 66% of users in 2022 reported that they consider short-form video content to be the most appealing type of social media content (Sprout Social, 2022). Thus, in order to keep up with the changing social media environment, it is vital for research to investigate whether the effects found for viewing appearance-ideal static images on social media extend to appearance-ideal short-form video content.

1.2. The impact of ideal video content on body image and mood

At present, research investigating the impact of ideal video content on young women's body image and mood is limited and research has mainly focused on traditional forms of media (i.e., music videos on television). Overall, these studies suggest that appearance-ideal content expressed through video medium in traditional media may increase negative body image outcomes (i.e., appearance dissatisfaction, negative mood, and self-objectification; Bell & Dittmar, 2011; Bell et al., 2007; Prichard & Tiggemann, 2012; Quigg & Want, 2011; Tiggemann & Slater, 2004).

Few studies in the body image field have examined appearance-ideal video-based content on social media. One recent longitudinal study of 12–18-year-old Belgian students found that neither self-reported overall Instagram nor TikTok use prospectively predicted the internalisation of appearance ideals or negative body image outcomes (Maes & Vandenbosch, 2022). The authors of that study speculate that their null results may be due to Instagram and TikTok exerting their negative influence on body image outcomes in a brief and momentary manner. Image use and video use were not distinguished on Instagram. Further, the study did not differentiate between general social media use and appearance-focused social media use, which may account for the lack of association between Instagram and TikTok usage and body image outcomes (de Valle et al., 2021; Saiphoo & Vahedi, 2019). Another recent study exposed young Australian women to seven-minute compilations of TikTok video content containing either beauty (appearance-ideal), self-compassion (non-appearance-ideal), or travel content (appearance-neutral; Seekis & Kennedy, 2023). Seven minutes of exposure to the appearance-ideal beauty videos (i.e., focused on skincare, makeup, baby Botox ™) increased appearance shame and anxiety, increased negative mood, and decreased self-compassion, relative to watching self-compassion or travel videos. Further, more upward appearance comparisons and thoughts were reported by the beauty group relative to the other two groups. The study provides preliminary evidence on the negative effects of appearance-ideal TikTok videos on certain body image outcomes.

Another study included a content analysis of comments attached to YouTube videos with "fitspiration" content. "Fitspiration" is a social media movement that has been argued to promote appearance ideals while being disguised as promoting health empowerment and wellbeing (Ratwatte & Mattacola, 2019). YouTube users frequenting fitspiration content habitually expressed dissatisfaction with their body size and appearance through comments left on those videos. Another recent study exposed young Australian women to 10 min of fitspiration videos or appearance-neutral art videos taken from TikTok and found that those who viewed the fitspiration videos reported more appearance comparisons and negative mood than those who viewed the art videos (Pryde & Prichard, 2022). However, that study found no differences between conditions for body dissatisfaction. This finding is in contrast to research examining fitspiration images on social media, which found negative effects on body dissatisfaction (e.g., Robinson et al., 2017; Tiggemann & Zaccardo, 2015), suggesting that the impact of social media content may differ by the medium. However, the existing studies did not explicitly measure any potential differences between image and video content on body image outcomes. Direct comparisons between appearance-ideal image and video content are needed to determine whether the evolving features of social media platforms to more video content could have implications for users' body image.

1.3. Potential differences between image and video content

While viewing content that promotes unattainable appearance ideals in any medium may negatively impact body image, it is possible that appearance-ideal image and video content may differ in the strength of their impact. It may be perceived to be easier to control how one appears in a static image, by using appearance-enhancing filters, poses, and applications, compared to a moving video. Anecdotal evidence reveals that this view holds true for many social media users who are reportedly surprised that editing faces and bodies in a moving video is possible (Lisitza, 2021; Mather, 2021). The tripartite influence model of body image suggests that if users *perceive* ideal content to be normative, realistic, and more attainable, they may be more likely to engage in negative social comparisons and internalise the appearance ideals being promoted (Thompson et al., 1999), which may negatively impact their body image. Indeed, a study with young women in the United States manipulated perceptions of photo editing on selfies (i.e., images of the self) taken from Instagram by adding photo-editing icons (indicating either Photoshop editing, Instagram filtering, or both) to the selfies (Vendemia & DeAndrea, 2018). They found that the more the participants perceived that some form of editing occurred in the images they were exposed to, the smaller the degree of internalisation of appearance ideals they experienced.

The idealised appearances of women in image and video content may also differ in how personally attainable they are perceived to be. If users perceive idealised appearances on social media to be more enhanced and less realistic, they may also perceive them to be less personally attainable. Politte-Corn and Fardouly (2020) found that viewing more personally attainable no-makeup images was less damaging for some aspects of body image concerns compared to viewing appearance-enhanced makeup images. Therefore, if ideal images are perceived to be more edited and enhanced and less personally attainable than videos, viewing ideal images may have a more harmful impact on young women's body image than viewing ideal videos on social media.

1.4. The present study

This study aimed to examine the impact of viewing appearance-ideal short-form video content on young women's state appearance satisfaction, negative mood, and self-objectification, compared to appearance-ideal image content and appearance-neutral content (i.e., content that does not contain people). A secondary aim of the study was to investigate the impact of viewing appearance-ideal video or image content on young women's state internalisation of appearance ideals, appearance comparisons, perceived attainability, and perceived appearance enhancement to test if any differences in these potential mechanisms were evident between mediums. Mediation analyses were not conducted for these potential mechanisms because those constructs were measured and not manipulated in the present study (see Pirlott & MacKinnon, 2016).

Based on the findings of previous research (de Valle et al., 2021; Tiggemann & Slater, 2004), it is predicted that exposure to appearance-ideal content (across both image and video conditions) would increase women's body image concerns, negative mood, and self-objectification but there would be no change in those variables for women exposed to appearance-neutral content (across both image and video conditions). No previous research has tested for any differences in the effect of viewing appearance-ideal images versus appearance-ideal video content taken from social media. Ideal image content may be perceived to be more appearance enhanced compared to ideal videos as it may be easier to control how one appears in a static image compared to a moving video, and appearances in ideal images on social media may be perceived to be less attainable than appearances in ideal videos on social media. However, given the lack of previous empirical research available, no firm predictions were made for any differences between appearance-ideal video and image content on any of the outcome variables and thus those analyses were examined in an exploratory manner.

2. Method

2.1. Participants

Participants were 211 female undergraduate psychology students aged 17–28 years old (M = 19.190, SD = 1.803) recruited via the University participant pool, who completed the study in exchange for course credit. According to GPower power analyses (Erdfelder et al., 1996), the study had more than 80% power to detect a relatively small effect size (Cohen's f = 0.012). This effect size is comparable to findings from the de Valle et al. (2021) meta-analysis, which found small to moderate effects of ideal social media images on body image compared to appearance-neutral control images. The majority of participants identified as Asian (n = 118; 55.924%), 54 (25.592%) as Caucasian, 14 (6.635%) as Middle Eastern, 13 (6.161%) as multiracial, 10 (4.739%) as "other", and 2 (0.948%) "preferred not to say". Participants' mean body mass index (BMI; kg/m^2) was 20.930 (SD = 2.560). There were no significant differences in age (F(3, 207) = 1.619, p = .186), ethnicity (χ^2(15) = 25.153, p = .048), BMI (F(3, 11) = 0.144, p = .933), pre-exposure state appearance satisfaction (F(3, 206) = 0.871, p = .457), pre-exposure state negative mood (F(3, 203) = 1.228, p = .301), or pre-exposure state self-objectification (F(3, 203) = 0.148, p = .931) between participants assigned to each experimental condition.

2.2. Stimulus materials

For the two appearance-ideal conditions (i.e., appearance-ideal image condition, appearance-ideal video condition), images and videos were selected from young female social media creators' public Instagram and TikTok profiles, respectively. Thus, the same women were presented in the ideal image and ideal video conditions. These social media creators matched the contemporary societal beauty ideals, featuring attractive faces (i.e., large eyes, full lips, small noses) and thin and toned bodies (Buote et al., 2011). The appearance-ideal images and videos depicted only the individual and contained either the individual's face, neck and torso, or their entire body. The content was matched as closely as possible for each woman between the image and video conditions for the amount of clothing worn, the amount of makeup worn, and the place setting. The women were portrayed in bikinis, fitness apparel, or form-fitting clothing. The images and videos depicted the women at various locations (e.g., at the beach, pool, or indoors) and the videos showed the women dancing and lip-syncing (although sounds were muted during the study). The appearance-ideal images and videos did not depict any other people, animals, food, or text other than the target woman.

A pilot study was conducted using 15 independent 18- to 25-year-old (M = 21.533, SD = 1.959) female raters to select the stimuli for the appearance-ideal conditions in this study. An initial pool was selected comprising of 20 images and 20 videos, containing one image and one video each of 20 female social media creators. The 40 images and videos were presented randomly to participants in the pilot study. Pilot participants rated each image and each video on 100-point visual analogue scales (VAS) for the attractiveness of the target woman's overall appearance (−50 = *very unattractive*, 50 = *very attractive*), the extent to which the woman's appearance seemed sexualised (0 = *not at all*, 100 = *very much*), and the extent to which the woman's appearance seemed to be edited and enhanced (0 = *not at all*, 100 = *very much*).

Based on responses to those questions, a final set of 10 images and 10 videos of 10 social media creators was selected for the

appearance-ideal conditions. This number of stimuli is consistent with prior body image experimental studies examining exposure to appearance-ideal content (e.g., Fardouly & Holland, 2018; Giorgianni et al., 2020; Livingston et al., 2020). The selected 10 social media creators were of varying ethnicities. Paired samples t-tests for the selected stimuli of the 10 women revealed no significant differences between images and videos for overall attractiveness, $t(14) = -0.107$, $p = .916$, extent of perceived sexualisation, $t(14) = 0.661$, $p = .520$, and extent of perceived editing and enhancement, $t(14) = -0.626$, $p = .541$. The final 10 target women selected for the appearance-ideal conditions were rated as being highly attractive in their images ($M = 19.553$, $SD = 17.899$) and videos ($M = 19.353$, $SD = 20.026$), and moderately sexualised in their images ($M = 54.853$, $SD = 26.184$) and videos ($M = 56.600$, $SD = 24.296$). The target women's appearance was also perceived to be moderately enhanced and edited in their images ($M = 56.720$, $SD = 20.126$) and videos ($M = 54.980$, $SD = 24.568$).

The control appearance-neutral images and videos were sourced from public interior design accounts on Instagram and TikTok, respectively. The images portrayed aesthetic living rooms and the videos portrayed aesthetic house tours. The appearance-neutral images and videos did not depict any people, animals, food, or text.

All study stimuli (i.e., both images and videos) were presented to participants for 10 s each. This length of exposure was chosen because it has been utilised in prior body image experimental research using appearance-ideal image content (Cohen et al., 2019; Politte-Corn & Fardouly, 2020) and because short-form videos tend to be of a similar length on TikTok (Safavinia, 2022). Videos longer than 10 s were reduced in length by extracting the first 10 s of the videos. For both the experimental and control conditions, the stimulus materials were presented without the Instagram or Tiktok format (i.e., no Instagram or TikTok borders, usernames, captions, "like" buttons, or comment threads). The format was removed to avoid confounding effects of social media platform, the number and type of likes, and/or comments received on the post (Tiggemann & Anderberg, 2020). Sound was also removed from videos to avoid any confounding effects of music or language on the outcome variables. All stimulus materials (i.e., both images and videos) were of identical dimensions (i.e., Width: 400 pixels x Height: 500 pixels). Stimulus materials were presented individually and randomly within each condition to control for order effects.

2.3. Measures

2.3.1. State appearance satisfaction and negative mood

Following Heinberg and Thompson (1995), computer-based VAS were used to measure participants' state appearance satisfaction and negative mood both before and after exposure to experimental stimuli. Participants were asked to indicate how they feel "right now" for each item by moving a vertical marker to a suitable location along each horizontal line with endpoints labelled 0 (*not at all*) and 100 (*very much*). Following Politte-Corn and Fardouly (2020), state appearance satisfaction was calculated by averaging the items "satisfied with your body weight", "satisfied with your body shape", "satisfied with your overall appearance", "satisfied with your facial appearance", and "satisfied with your facial complexion". Higher scores indicated greater state appearance satisfaction. State negative mood was calculated by averaging the items "happy" (reverse coded), "confident" (reverse coded), "depressed", "anxious", and "discouraged". Higher scores indicated greater state negative mood. The items "satisfied with your social life", "satisfied with your financial status", "satisfied with your relationship status", "satisfied with your housing situation", and "satisfied with your occupation/study" were included as filler items to disguise the true purpose of the study and decrease the prominence of the appearance-related items in the measure. The 15 items were presented in a randomised order. In the current study, the state appearance satisfaction scale exhibited excellent internal reliability at pre- ($\alpha = 0.901$) and post-exposure ($\alpha = 0.947$). The state negative mood scale exhibited acceptable internal reliability at pre-exposure ($\alpha = 0.760$), and good internal reliability post-exposure ($\alpha = 0.812$).

2.3.2. State self-objectification

State self-objectification was measured before and after exposure to the study stimuli using a modification of the Twenty Statements Test (Fredrickson et al., 1998). The Twenty Statements Test was modified by instructing participants to generate 10 statements instead of 20. Participants were asked to generate 10 different statements about themselves commencing with "I am". Participants were instructed to complete the statements according to how they would describe themselves to themselves, rather than to another individual. Two independent coders (i.e., the first author and a student) who were blind to participants' assigned experimental conditions coded participants' responses into one of two categories: (1) physical appearance-related (e.g., "I am fat", "I am ugly"; coded as 1), and (2) other non-physical appearance related (e.g. "I am funny", "I am a good listener"; coded as 0). Only responses that corresponded to the first category were operationalised as a response indicating state self-objectification. Larger scores demonstrated higher levels of state self-objectification, with scores ranging from 0 to 10. There was high inter-rater agreement for the "physical appearance-related" and "other non-physical appearance related" categories (Cohen's $\kappa = 0.918$). Any outstanding inconsistencies were dispelled through discussion between the coders until accord was achieved. The modified Twenty Statements Test is a widely used measure that has been utilised in prior experimental research assessing state self-objectification in young women (e.g., Calogero, 2013; Cohen et al., 2019; Tiggemann & Barbato, 2018).

2.3.3. State internalisation of appearance ideals

All items from the Internalisation-Thin/Low Body Fat, Internalisation-Muscular, and Internalisation-General Attractiveness trait subscales of the Sociocultural Attitudes Toward Appearance Questionnaire–4-Revised (SATAQ-4R; Schaefer et al., 2017) were modified to create a state measure of internalisation of appearance ideals. The adaptation from a trait-based measure to a state-based measure was achieved by slightly altering the wording for each item (e.g., from "I want my body to look very thin", to "I wanted my body to look very thin") and explicitly instructing participants to make ratings according to how they felt when "viewing the posts earlier". Using a 5-point scale, participants rated the extent to which they agreed (1 = *definitely disagree*, 5 = *definitely agree*) with 15 statements regarding their state desire to be thin (e.g., "I wanted my body to look very thin"), muscular (e.g., "I thought a lot about looking muscular"), and attractive (e.g., "I wanted to be good looking"). These 15 items were presented in a randomised order. Participants' responses to all 15 items were summed to create an overall score of the extent to which participants internalised appearance ideals while viewing the study's stimuli. Higher scores indicated a greater internalisation of appearance ideals. In the current study, the state internalisation of appearance ideals measure exhibited excellent internal reliability ($\alpha = 0.921$).

2.3.4. State appearance comparison

Participants in the appearance-ideal image and video conditions (only) were assessed on the frequency and direction of appearance comparisons made to the target women in the social media posts. The State Appearance Comparison Scale (SACS; Tiggemann & McGill, 2004) was utilised to assess the extent of social comparisons made by participants to the study stimuli. Using a 7-point scale, participants rated the extent to which they thought about their appearance when viewing the social media posts (1 = *no thought about my*

appearance, 7 = *a lot of thought about my appearance*), the extent to which they compared their overall appearance to the women in the posts (1 = *no comparison*, 7 = *a lot of comparison*), and the extent to which they compared specific body parts to the women in the posts (1 = *no comparison*, 7 = *a lot of comparison*). A measure of state appearance comparison frequency was calculated by summing the total scores of the responses to all three items. Higher scores were indicative of greater appearance comparison frequency. In the present study, the scale had good internal reliability (α = 0.897).

Similar to previous research (Politte-Corn & Fardouly, 2020), the direction of appearance comparisons made by participants to the target women in the social media posts was assessed by asking participants to rate whether they thought the women in the posts were *much less attractive than them* (1), *slightly less attractive than them* (2), *just as attractive as them* (3), *slightly more attractive than them* (4), or *much more attractive than them* (5). Higher scores were indicative of greater upwards comparisons, suggesting that participants with higher scores for this item perceived the target women to be superior to them in the context of physical appearance. The comparison direction question was examined independently of the comparison frequency measure.

2.3.5. Perceived attainability

To determine the perceived attainability of the appearance ideals being promoted in the appearance-ideal social media posts, participants in the appearance-ideal conditions were asked how achievable or attainable they viewed different aspects of the target women's attractiveness. Items were taken from Politte-Corn and Fardouly's (2020) perceived attainability measure but we also included a third item focused on weight and shape-related aspects of physical appearances. Using a 7-point scale (1 = *not at all attainable*, 7 = *very attainable*), participants rated how attainable they viewed the target women's (1) overall attractiveness, (2) the attractiveness of their facial features, skin, and hair, and (3) the attractiveness of their weight and shape. A measure of perceived attainability was calculated by averaging responses to all three items. Higher scores were indicative of greater perceived attainability. This scale exhibited acceptable internal reliability (α = 0.754).

2.3.6. Perceived appearance enhancement

To determine whether there are differences in the extent of perceived appearance enhancement that social media users attribute to appearance-ideal image content and appearance-ideal video content on social media, participants in those conditions were asked to rate how enhanced they believed the target women in the posts were. Using 7-point scales (1 = *not at all*, 7 = *a lot of enhancement*), participants rated the extent to which they thought the women's appearance in the posts they viewed were enhanced using (1) filters, (2) applications, (3) posing, (4) makeup and styling, and (5) good lighting. Scores were averaged across the five items to create an overall score of perceived appearance enhancement for the assigned content medium (e.g., participants in the appearance-ideal *image* condition had an overall score of their perceptions regarding how enhanced the appearance of the target women were in the *images* they viewed). Higher scores were indicative of greater perceived appearance enhancement. In the current study, this scale showed good internal reliability (α = 0.873).

Participants in the appearance-ideal image and video conditions (only) were also presented with two questions to determine which techniques they perceived to be commonly used to enhance physical appearances in images and videos posted on social media. Specifically, they were asked to select which techniques people usually use to enhance their physical appearances in (1) images (*filters, apps, posing, makeup and styling, good lighting,* or *images are not enhanced by any of the above options*), and (2) videos posted on social media (*filters, apps, posing, makeup and styling, good lighting,* or *videos are not enhanced by any of the above options*). Participants were able to select multiple options.

Participants in the appearance-ideal image and video conditions were also asked two separate questions about the extent to which they thought images and videos posted on social media can be enhanced, using 7-point scales (1 = *not at all*, 7 = *a lot of enhancement*). Higher scores were indicative of a stronger belief that people's appearances in images and videos can be enhanced. The two questions were examined independently of each other.

2.3.7. Social media usage

To determine participants' social media habits, all participants were asked questions regarding their social media usage. Participants were asked which social media platforms they used (*Instagram*, *TikTok*, *Facebook*, *Snapchat*, *YouTube*, *Twitter*, *Reddit*, and *Other*) and were able to select multiple options. There were three separate questions asking how long participants spent on a normal day on (1) social media generally, (2) Instagram, and (3) TikTok. The first question was presented to all participants while the latter two questions were only presented to participants who indicated use of the respective platforms. Response options ranged from: *no time* (0), *less than 5min* (1), *5–30min* (2), *30min–1h* (3), *1–2h* (4), *2–3h* (5), *3–4h* (5), *4–5h* (6), *5–6h* (7), *6–7h* (8), *7–8h* (9), *8–9h* (10), *9–10h* (11), or *10h or more* (12). Participants who indicated that they used Instagram were also asked two separate questions regarding how long they spent viewing (1) image content and (2) video content on Instagram on a normal day. Response options were: *I do not have Instagram* (0), *less than 5min* (1), *5–30min* (2), *30min–1h* (3), *1–2h* (4), *2–3h* (5), *3–4h* (5), *4–5h* (6), *5–6h* (7), *6–7h* (8), *7–8h* (9), *8–9h* (10), *9–10h* (11), or *10h or more* (12).

2.4. Procedure

The study was approved by the University Human Research Ethics Advisory Panel and pre-registered on the Open Science Framework (https://osf.io/zj3nm/?view_only=7a48b8b372e9448fa65444cca401a475) before commencing data collection. Undergraduate female psychology students voluntarily signed up on the university recruitment platform to participate in an online study presented as evaluating posts on social media. After giving informed consent, participants were instructed to complete the study on a desktop or laptop computer. All participants completed pre-exposure measures of state self-objectification, appearance satisfaction, and negative mood. Participants were then randomly allocated to one of four conditions using the randomisation function in the Qualtrics survey software. Participants were randomly exposed to a set of either: (1) 10 appearance-ideal images (n = 52), (2) 10 appearance-ideal videos (n = 54), (3) 10 appearance-neutral images (n = 52), or (4) 10 appearance-neutral videos (n = 53), according to their assigned condition. All stimuli (both images and videos) were displayed on the screen for 10 s before a button appeared allowing participants to continue to the next page. For the video conditions, videos were 10 s in length and were automatically played once before a button for the next page appeared.

Immediately after viewing their assigned stimuli, participants completed post-exposure measures on state self-objectification, appearance satisfaction, and negative mood. To help mask the purpose of the study, all participants then made ratings on their impressions of the people who posted the content they viewed in the study. Responses to that measure, in addition to the filler items included in the VAS measure, were not included in data analyses and they were purely used to help disguise the purpose of the study to participants. Participants who viewed appearance-ideal content (either in the image or video condition) subsequently completed measures that evaluated their level of comparison to the target women, the perceived attainability of the women's appearance, and their level of perceived appearance enhancement of the stimuli

Table 1
Means (standard deviations) scores for each outcome variable, separated by conditions.

Outcome variables	Appearance-Ideal Images		Appearance-Ideal Videos		Appearance-Neutral Images		Appearance-Neutral Videos	
	Pre-exposure	Post-exposure	Pre-exposure	Post-exposure	Pre-exposure	Post-exposure	Pre-exposure	Post-exposure
Appearance satisfaction	48.196 (24.816)	44.577 (24.276)	53.478 (22.242)	46.578 (26.818)	51.077 (25.740)	51.796 (28.089)	55.262 (21.814)	54.319 (24.192)
Negative mood	41.669 (19.229)	43.365 (19.800)	37.619 (17.014)	41.038 (19.677)	41.706 (18.292)	39.361 (20.625)	36.141 (18.981)	35.216 (21.290)
Self-objectification	0.452 (0.670)	0.929 (0.867)	0.326 (0.598)	0.761 (1.037)	0.471 (0.758)	0.353 (0.559)	0.500 (0.789)	0.540 (0.862)
Internalisation	-	48.400 (9.116)	-	48.333 (10.068)	-	33.635 (13.866)	-	36.774 (14.300)
Comparison frequency	-	14.135 (4.740)	-	14.093 (4.908)	-	-	-	-
Comparison direction	-	4.630 (0.658)	-	4.630 (0.623)	-	-	-	-
Perceived attainability	-	3.981 (1.384)	-	4.173 (1.394)	-	-	-	-
Perceived enhancement	-	5.728 (0.891)	-	5.078 (1.104)	-	-	-	-

Note: State internalisation of appearance ideals, state appearance comparison frequency, state appearance comparison direction, perceived attainability, and perceived appearance enhancement were only measured post-exposure to the study stimuli. State appearance comparison frequency, state appearance comparison direction, perceived attainability, and perceived appearance enhancement were only measured for the appearance-ideal conditions.

mediums. These three measures were presented in a randomised order. Finally, all participants completed a measure on state internalisation of appearance ideals and were asked questions regarding their social media usage. Participants reported their gender, age, ethnicity, height, and weight. Self-reported height and weight were used to calculate BMI (kg/m^2). Manipulation checks were included at the end of the study (e.g., "Please describe the content of the posts that you viewed in this study"). Attention check items were also added to the end of several measures (e.g., "Please select '0' for this specific item" from the impression VAS). Participants who did not comply with the attention check items or answered any of the manipulation checks incorrectly were excluded from data analyses (see Results section for the number of participants excluded). All participants were debriefed online at the conclusion of the study.

3. Results

3.1. Preliminary analyses

A total of 215 participants consented and completed the study. Four participants answered two or more of the three attention checks incorrectly. Those four participants were excluded from further analyses. All remaining participants correctly answered the manipulation check questions. The final sample consisted of 211 participants. Due to the large number of comparisons conducted in this study, the Benjamini and Hochberg's (1995) procedure was utilised to adjust the significance levels to account for a paper-wide 5% false discovery rate. The first raw *p*-value to surpass the Benjamini–Hochberg-adjusted *p*-value corresponding to a false discovery rate of 5% was $p = .019$. Thus, *p*-values greater than or equal to.019 were categorised as not significant.

The study variables were all non-normally distributed (Shapiro-Wilk $ps < 0.003$), except for the variables measuring perceived attainability ($p = .190$) and negative mood at pre-exposure ($p = .044$) and post-exposure ($p = .050$). There were less than 4% of missing data for all the variables of interest in the present study. A Little's MCAR test illustrated that the data were missing completely at random ($\chi^2 = 34.608$, DF = 38, $p = .627$). Missing data were managed with pairwise deletion. Using the outlier labelling rule (Hoaglin et al., 1986), data were checked for outliers by multiplying the interquartile range (IQR) by 2.2. A total of 13 outliers were identified for BMI scores, 15 outliers were identified for the self-objectification measures (i.e., one at pre- and 14 at post-exposure), and two outliers were identified for the perceived appearance enhancement measure. These outlier scores were removed from further analyses. There were 25 participants who recognised and correctly named one or more of the women in the study images or videos. There were no significant differences in target recognition for the appearance-ideal image and appearance-ideal video conditions, $F(1, 104) = 0.014$, $p = .905$. The pattern and significance of results did not change when excluding for target recognition and thus those participants were retained in the final analyses.

3.2. Social media usage

The most widely used social media platform reported by participants was Instagram ($n = 195$; 91.417%), followed by YouTube ($n = 160$; 75.829%), TikTok ($n = 146$; 69.194%), and Facebook ($n = 126$; 59.716%). On average, participants reported spending two to three hours on social media per day ($M = 5.67$; $SD = 1.952$). Participants who use Instagram reported spending, on average, 30 min to one hour a day on the platform ($M = 3.78$; $SD = 1.508$). Participants who use TikTok reported spending, on average, one to two hours a day on the platform ($M = 4.62$; $SD = 1.956$). On average, participants who use Instagram report spending similar amounts of time (i.e., 5 – 30 min a day) viewing image ($M = 2.89$; $SD = 1.391$) and video content ($M = 2.76$; $SD = 1.611$) on Instagram.

3.3. Main analyses

Means and standard deviations for participants in each condition for each of the study variables are reported in Table 1. Mixed analyses of variance (ANOVAs) were conducted for the state appearance satisfaction, state negative mood, and state self-objectification measures to test for any two-way time (pre-exposure, post-exposure) by content (appearance-ideal, appearance-neutral) or time by medium (image, video) interactions and to test for any three-way time by content by medium interactions. Main effects for the mixed ANOVAs were not relevant to the study aims and thus not reported. Mixed ANOVAs were utilised because of their robustness to non-normal data (Blanca et al., 2017). Post-hoc simple effects analyses were conducted for any significant interactions.

Univariate ANOVAs were conducted for outcome variables that were only measured post-exposure to the study stimuli. Main effects of medium or content and medium by content interactions were analysed for state internalisation of beauty ideals. For the appearance-ideal conditions (only), main effects of medium condition (i.e., image versus video) were analysed for state appearance comparison frequency and direction, perceived attainability, and perceived appearance enhancement.

A Related-Samples Wilcoxon Signed Rank test was conducted for the appearance-ideal conditions to test if there were any significant group differences between the extent to which they thought images versus videos posted on social media can be enhanced. McNemar chi-square tests were used to examine any significant differences in

Table 2
Number and percentage of participants in the appearance-ideal conditions (only) that endorsed techniques perceived to enhance physical appearances on images and videos posted on social media.

Appearance enhancement techniques	Medium			
	Images		Videos	
	n	%	*n*	%
Filters	99	93.4[a]	91	85.8[a]
Applications	88	83.0[a]	66	62.3[b]
Posing	100	94.3[a]	92	86.8[a]
Makeup and styling	102	96.2[a]	97	91.5[a]
Good lighting	98	92.5[a]	99	93.4[a]
Not enhanced by any of the above techniques	4	3.8[a]	2	1.9[a]

Note. Only participants in the appearance-ideal image (n = 52) and video (n = 54) condition were provided with these questions. Percentages within a row with different superscript letters significantly differed at $p < 0.019$.

the likelihood of selecting different techniques perceived to be used to enhance physical appearances in images or videos.

3.3.1. Appearance satisfaction

There was a significant time by content interaction for appearance satisfaction, $F(1, 206) = 18.674$, $p < .001$, $\eta_p^2 = .083$. Consistent with our hypotheses, post hoc simple effects analyses indicated that participants' appearance satisfaction significantly decreased from pre- to post-exposure in the appearance-ideal conditions, $F(1, 208) = 39.30$, $p < .001$, but there was no change in appearance satisfaction scores for those in the appearance-neutral conditions, $F(1, 208) = 0.02$, $p = .896$. There was no significant time by medium interaction, $F(1, 206) = 4.303$, $p = .039$, $\eta_p^2 = .020$, or time by medium by content interaction for appearance satisfaction scores, $F(1, 206) = 0.462$, $p = .498$, $\eta_p^2 = .002$.

3.3.2. Negative mood

There was a significant time by content interaction for negative mood, $F(1, 203) = 9.257$, $p = .003$, $\eta_p^2 = .044$. Consistent with our hypotheses, post hoc simple effects analyses indicated that participants' negative mood significantly increased from pre- to post-exposure in the appearance-ideal conditions, $F(1, 205) = 7.06$, $p = .009$, but there was no change in negative mood scores for those in the appearance-neutral conditions, $F(1, 205) = 2.79$, $p = .097$. There was no significant time by medium interaction, $F(1, 203) = 1.300$, $p = .256$, $\eta_p^2 = .006$, or time by medium by content interaction for negative mood scores, $F(1, 203) = 0.012$, $p = .913$, $\eta_p^2 < .001$.

3.3.3. Self-objectification

There was a significant time by content interaction for self-objectification, $F(1, 185) = 12.274$, $p < .001$, $\eta_p^2 = .062$. Consistent with our hypotheses, post hoc simple effects analyses indicated that participants' self-objectification significantly increased from pre- to post-exposure in the appearance-ideal conditions, $F(1, 187) = 19.58$, $p < .001$, but there was no change in self-objectification scores for those in the appearance-neutral conditions, $F(1, 187) = 0.17$, $p = .680$. There was no significant time by medium interaction, $F(1, 185) = 0.170$, $p = .681$, $\eta_p^2 = .001$, or time by medium by content interaction for self-objectification scores, $F(1, 185) = 0.498$, $p = .481$, $\eta_p^2 = .003$.

3.3.4. State internalisation of appearance ideals

There was a significant main effect of content on participants' state internalisation of appearance ideals, $F(1, 205) = 62.062$, $p < .001$, $\eta_p^2 = .232$. Post hoc analyses indicated that participants who viewed appearance-ideal content reported significantly more state internalisation of appearance ideals compared to participants who viewed appearance-neutral content ($p < .001$). There was no significant main effect of medium, $F(1, 205) = 0.845$, $p = .359$, $\eta_p^2 = .004$, or content by medium interaction, $F(1, 205) = 0.920$, $p = .339$, $\eta_p^2 = .004$, for state internalisation scores.

3.3.5. Appearance comparisons

There was no significant main effect of medium on participants' state appearance comparison frequency, $F(1, 104) = 0.002$, $p = .964$, $\eta_p^2 < .001$. There was also no significant main effect of medium on the direction of participants' appearance comparisons to the women in the stimuli, $F(1, 104) = 0.002$, $p = .968$, $\eta_p^2 < .001$. Participants compared their appearance to the women just as frequently and were equally likely to make an upward appearance comparison when the women were portrayed in image or video medium.

3.3.6. Perceived attainability

There was no significant main effect of medium on participants' perceived attainability scores, $F(1, 104) = 0.506$, $p = .478$, $\eta_p^2 = .005$. As seen in Table 1, the women's appearances were perceived to be moderately attainable for participants who viewed the videos, and for participants who viewed the images.

3.3.7. Perceived appearance enhancement

There was a significant main effect of medium on participants' perceived appearance enhancement scores, $F(1, 102) = 10.814$, $p = .001$, $\eta_p^2 = .096$. As seen in Table 1, participants in the image condition perceived the women's appearance to be more enhanced than those in the video condition. Participants in the appearance-ideal conditions (regardless of medium) also reported that images posted on social media ($M\ dn = 7.000$) can be more enhanced than videos posted on social media ($M\ dn = 6.000$) and a Related-Samples Wilcoxon Signed Rank test revealed that this difference was significant, $z = -5.358$, $p < .001$. As seen in Table 2, makeup and styling, posing, and filters were reported by participants in the appearance-ideal conditions to be the most common techniques that can be used to enhance physical appearances in images posted on social media. Similarly, good lighting, makeup and styling, and posing were reported by participants in the appearance-ideal conditions to be the most common techniques that can be used to enhance physical appearances in videos posted on social media. As seen in Table 2, participants were significantly more likely to select applications as a technique used to enhance images than videos. There were no other differences in the likelihood of selecting the other techniques between images and videos.

3.4. Post hoc moderation analyses

Although not part of our original analysis plan, as post hoc analyses we examined whether the extent to which participants in the ideal conditions perceived the women's appearances to be enhanced would moderate the effect of medium (i.e., image versus video) on any of the outcome variables (appearance satisfaction, negative mood, self-objectification, internalisation of appearance ideals, comparison frequency, comparison direction, perceived attainability). Moderation analyses were conducted using Model 1 of the PROCESS macro in SPSS (Hayes, 2022). Non-parametric bootstrapping is used in the PROCESS macro by resampling and replacement (in this case, 5000 resamples) so that an approximation of the sampling distribution is created without the assumption of normally distributed variables. Only participants in the appearance-ideal conditions were included in these analyses. Medium (image, video) was entered as the independent variable (x), perceived appearance enhancement in the posts viewed in the study was entered as the moderator (w), and each post-exposure outcome variable was separately entered as the dependent variable (y) with any corresponding pre-exposure measure entered as a covariate. There was a significant interaction between medium and perceived appearance enhancement for appearance satisfaction scores ($b = -5.820$, t

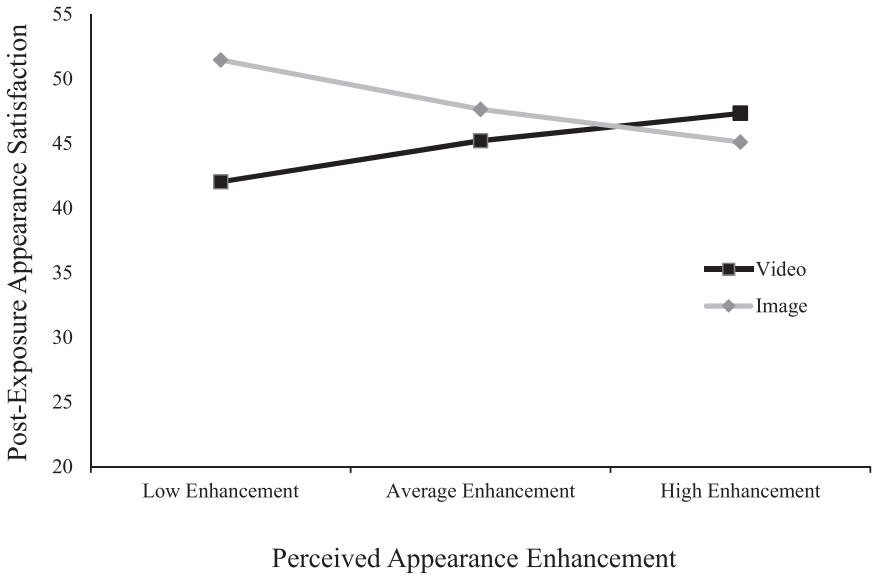

Fig. 1. Post-Exposure Appearance Satisfaction Scores for Participants in the Appearance Ideal Image and Video Conditions at Different Levels of Perceived Appearance Enhancement.

(99) = −3.062, p = .003). Simple slopes analyses suggested there was a significant difference between medium conditions for those low in perceived appearance enhancement (16th percentile; b = 9.420, t (99) = 3.287, p = .001) but not those with average (50th percentile; b = 2.436, t(99) = 1.255, p = .213) or high perceived enhancement (84th percentile; b = −2.219, t(99) = −0.865, p = .389). As seen in Fig. 1, if participants perceived the women's appearances in the posts to be low in appearance enhancements, they reported less state appearance satisfaction if they viewed the ideal videos than if they viewed the ideal images. There were no other significant medium by perceived enhancement interactions for any of the other outcome variables (ps > 0.031).

4. Discussion

The primary aim of the present study was to examine the impact of viewing appearance-ideal short-form videos on young women's appearance satisfaction, negative mood, and self-objectification compared to viewing appearance-ideal images, and appearance-neutral images and videos. Viewing appearance-ideal videos and images led to an increase in appearance dissatisfaction, negative mood, and self-objectification compared to viewing appearance-neutral videos and images. There were no differences between the impact of appearance-ideal images or videos on any of the primary outcome measures. A secondary aim of the present study was to test for any differences between the appearance-ideal conditions on potential mechanisms (i.e., appearance comparisons, internalisation, perceived attainability, perceived enhancement) explaining any harm on body image as proposed by the tripartite influence model (Thompson et al., 1999). No differences were found between appearance-ideal images or videos in regard to participants' appearance comparison frequency and direction, the extent to which they internalised the ideals, or their perceived attainability of the target women's appearances. Thus, overall, the findings suggest that viewing ideal video or image content taken from social media may have similar effects on young women's body image and related constructs.

The finding that viewing appearance-ideal images heightened appearance dissatisfaction, negative mood, and self-objectification is consistent with the findings of previous studies and reviews (e.g., Cohen et al., 2019; de Valle et al., 2021; Fioravanti et al., 2022), and provides further support for the damaging effects of viewing appearance-ideal images on social media on young women's body image concerns. The finding that viewing appearance-ideal short-form videos taken from TikTok increased appearance dissatisfaction, negative mood, and self-objectification is consistent with body image research in the video-based traditional media domain (i.e., television; Prichard & Tiggemann, 2012; Quigg & Want, 2011) and a recent study on TikTok beauty videos (i.e., focused on skincare, makeup, or baby Botox ™; Seekis & Kennedy, 2023). The findings for negative mood were consistent with that of Pryde and Prichard (2022) who focused on viewing fitspiration videos from TikTok. However, in contrast to their null results, viewing appearance-ideal videos in the present study decreased women's appearance satisfaction. This difference in findings may be due to the different content viewed in each study. The videos used by Pryde and Prichard (2022) contained women wearing activewear who were mainly engaging in exercise and the videos used in the present study mainly contained women wearing bikinis who were dancing and lip-syncing. Further research is needed to test whether the impact of viewing ideal videos on body image differ based on the clothing worn and the type of movement the women are engaging in.

The present study was the first to specifically test for any differences between image and short-form videos when viewing appearance-ideal social media content. We found that appearance-ideal content, regardless of the medium in which it is presented, can have adverse effects on young women's body image concerns. These findings suggest that emerging platforms that only host short-form videos, like TikTok, may be just as harmful to body image as platforms that also host images (e.g., Instagram, Facebook) if users are viewing appearance-ideal content. Further, young women who viewed the appearance-ideal videos made upwards appearance comparisons and internalised appearance ideals to a similar extent to the women who viewed the appearance-ideal images. Thus, as proposed by the tripartite influence model (Thompson et al., 1999), the underlying mechanisms potentially causing an increase in appearance dissatisfaction when viewing appearance-ideal videos may be similar to viewing appearance-ideal images. However, further experimental research *manipulating* these potential mechanisms is needed to determine any causal pathways.

The use of algorithms within the social media domain may compound these negative effects (Harriger et al., 2022) by increasing

users' engagement and time spent on social media through the dissemination of personalised content (Smith, 2021). TikTok's algorithm has been argued to be particularly aggressive and less closely monitored (Harriger et al., 2022), and this has been attributed to the "mindless scrolling" that TikTok users anecdotally report frequent engagement in on the platform (Gabrielle, 2022). Indeed, the present study found that although more participants reported using Instagram ($n = 195$; 92%) compared to TikTok ($n = 146$; 69%), users spent more time on TikTok compared to Instagram (i.e., an average of one to two hours a day on TikTok, compared to 30 min to one hour a day on Instagram). It is evident that more research is needed to understand the effects of short-form videos more clearly, both as a medium in itself, and also within the contexts of the different social media platforms that offer this medium.

4.1. Editing and enhancement

The only difference found between the appearance-ideal conditions in the present study was that the target women's appearances in the images were perceived to be more enhanced than their appearances in the videos. These findings were interesting given that the same women in the images and videos were matched as closely as possible for the place setting, and amount of clothing and makeup worn. Additionally, in the pilot test conducted, the women were rated to be equally edited and enhanced when presented in the images and videos. The difference in findings may be related to the pilot participants viewing both the images and videos in tandem, compared to the study's participants who viewed the women's appearances in only one medium (i.e., images only or videos only). It may be that appearances in videos are perceived to match an offline reality more closely, which converges with the present study's finding that more generally, participants in the appearance-ideal conditions believed that appearances in images posted on social media can be more edited and enhanced than in videos posted on social media. The perceived difference in enhancing techniques between the mediums may be specific to using applications to edit one's content given that participants' perceptions of how people edit appearances were similar across image and video mediums (i.e., the use of filters, posing, makeup and styling, and good lighting) except for the use of applications. It is important to note that since the stimuli were taken from public profiles on Instagram and TikTok, the amount of editing and enhancement applied to these stimuli is unknown. Future research could create image and short-form video stimuli that are equal in editing and enhancement to control for any confounding effects in terms of differing enhancements in appearances between mediums.

Given the difference in perceptions regarding editing practices in each medium, we conducted post hoc analyses to test if the perceived level of enhancement in the posts moderated the effect of the ideal conditions on any of the outcome variables. We found that among those who thought the content they viewed was low in editing and enhancement, viewing appearance-ideal videos led to less appearance satisfaction than viewing appearance-ideal images. Thus, young women may be more negatively influenced by ideal videos than images if they perceive the content to be realistic and largely unedited or unenhanced, perhaps because the moving body in the video may make the ideals more salient. Given that these analyses were not part of our original plan, and this finding was not replicated among the other outcome variables examined in the present study, caution should be taken when interpreting these results. A review of research examining self-disclaimer labels and captions (i.e., text accompanying a post that signals the use of editing and enhancement; McComb et al., 2021) suggests that being explicitly told about the use of editing and enhancement in an idealised image does not protect young women from increased appearance dissatisfaction and negative mood when viewing idealised content and does not change how realistic the person's appearance is perceived to be in the image (Tiggemann, 2022). Thus, young women's preconceived perceptions of the extent of appearance enhancement techniques used on social media may be more influential than labels designed to educate women on such practices. Future research is needed to examine the impact of perceived appearance enhancement via different mediums and whether that changes the impact of viewing idealised content on body image.

4.2. Limitations and future directions

The present study had several limitations which should be considered. First, the majority (56%) of the study's participants identified as Asian and although images and videos of women with varying ethnicities (e.g., Caucasian, European, North American) were utilised in the present study, none of them appeared to be of Asian descent. The findings of the present study were similar to previous research using images or videos of women with similar ethnicities to participants (de Valle et al., 2021, Seekis & Kennedy, 2023). Nevertheless, it is possible that participants may respond differently to viewing idealised women of similar ethnicity. Therefore, future research could investigate whether the findings of the present study replicate when using appearance-ideal target women that are ethnically matched to participants.

Second, the stimulus materials were presented without the Instagram or TikTok format (i.e., no Instagram or TikTok borders, usernames, captions, 'like' buttons, or comment threads) to avoid confounding effects of social media platform, the number and type of likes, or comments received on the post (Tiggemann & Anderberg, 2020). The removal of Instagram or TikTok formatting allows the present study's findings to be more applicable to a wide range of platforms that host these mediums, rather than the respective platforms from which the stimuli were taken. Research has shown that components of the social media domain (e.g., idealising comments, and a greater number of "likes") have a small negative influence on the effects of viewing appearance-ideal images (de Valle et al., 2021). Future research could examine the effects of comments and likes accompanying appearance-ideal short-form videos on social media and determine under which circumstances these contextual features may be helpful or harmful for young women's body image concerns. Additionally, the videos used in the present study did not include text, and the sound was removed from the videos to avoid any confounding effects of music or language. Many short-form videos on social media display individuals lip-syncing or dancing to popular music (McGlew, 2020) and are able to incorporate some form of text in their videos (Kendall, 2021). Other than the dynamic nature of short-form videos, accompanying sounds and text in videos are additional features that set short-form videos apart from static images. Sounds and text may reduce the prevalence of appearance ideals that are presented in the ideal videos as viewers' attention may be divided between listening to the sounds, reading the text, and viewing the idealised appearance. Future research could examine the effects of music and text accompanying appearance-ideal short-form videos on social media and determine under which circumstances these contextual features may be helpful or harmful for body image concerns.

Third, the present study did not measure whether participants engaged in photo-enhancing or video-enhancing behaviours on social media themselves. It may be that users have greater experience in editing and enhancing appearances in one medium over another, which may translate to a greater awareness that appearances can be manipulated in that specific medium. Future research could measure participants' engagement with photo-enhancing or video-enhancing behaviours on social media.

Fourth, the study utilised some non-validated measures, such as the Modified Twenty Statements Test (Fredrickson et al., 1998) and the state internalisation of appearance ideals measure that was modified from a validated trait measure for the purposes of this study (i.e., SATAQ-4R; Schaefer et al., 2017). The Modified Twenty Statement Test (Fredrickson et al., 1998) does not allow for internal consistency to be calculated, which makes it difficult to determine how items related to one another can capture "self-objectification". In the state internalisation of appearance ideals, the wording of the instructions to participants to make ratings according to how they felt when "viewing the posts earlier" may prompt responses based on a recollection of the stimuli (i.e., in the past), rather than a reflection on their current feelings and thoughts. Future research could create validated state measures for studies investigating similar outcomes.

Finally, the present study was administered online. Although efforts were made to ensure participants were appropriately attending to the study stimuli (i.e., timers and attention check questions), the study may not have been undertaken in an unobtrusive setting absent from disturbances. Future studies could examine the impact of viewing appearance-ideal short-form videos in a laboratory environment to reduce any potential distractions that may draw participants' attention away from the study stimuli.

4.3. Conclusions

This study was the first to experimentally examine the impact of viewing appearance-ideal short-form social media videos compared to appearance-ideal images on young women's appearance dissatisfaction, negative mood, and self-objectification. Viewing appearance-ideal short-form videos was found to be just as harmful to young women's body image as viewing ideal images on social media. The findings suggest that viewing appearance-ideal content on social media should be avoided regardless of the medium in which it is presented. We also found that if women perceived the content they viewed to be unedited or unenhanced, they reported less appearance satisfaction after viewing ideal video than image content. Thus, for some people (i.e., those low in perceived enhancement), viewing ideal video content may be more harmful than viewing ideal image content. Given the increasing popularity of short-form videos on social media (Sprout Social, 2022), more research is needed to examine the impact of viewing different appearance-ideal short-form video content on young women's body image and mood and investigate potential mechanisms responsible for any effects. Further research is also needed on the potential positive effects of body positive content (e.g., content containing unedited diverse bodies) in short-form videos given that social media content is diverse and does not always have harmful effects on users. These findings can be utilised to provide informed recommendations for young women's social media use and to adapt current social media and body image intervention programs that focus on appearance-ideal image content (e.g., Gordon et al., 2020) to the ever-changing social media environment.

CRediT authorship contribution statement

Jade Gurtala: Conceptualization, Methodology, Investigation, Project administration, Formal analysis, Writing – original draft. **Jasmine Fardouly**: Conceptualization, Methodology, Investigation, Supervision, Writing – review & editing.

Data availability

Data will be made available on request.

Declaration of Competing Interest

none.

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