Abstract

Little is known about how different types of engagement with social media (active vs passive) relate to body image in men. This study explored relationships between social media use (active and passive), body image and drive for muscularity in physically active men. A questionnaire containing measures of body image (appearance valence, appearance salience), drive for muscularity, and social media use was completed by 224 men aged 18-50. Results showed a negative relationship between active social media use and appearance valence. Active and passive social media use were positively associated with drive for muscularity and appearance salience. Passive social media use was predictive of higher appearance salience and drive for muscularity in linear regression models. These findings suggest social media may be linked to body image and muscularity concerns in men.

Keywords: Active Social Media, Passive Social Media, Drive for Muscularity, Men, Males

The relationship between active and passive social media use and body image in physically active men

Introduction

Body dissatisfaction rates are high, with one recent survey in the UK finding 61% of adults felt negatively about their body most of the time (Women and Equalities Committee, 2021). Despite historically being seen as a female problem (Harriger et al., 2023), 53% of men felt negatively and 14% of men felt very negatively about their body most of the time, a higher proportion than for women. In a recent YouGov survey in the US, 51% of adults said they felt a pressure to have a particular body type, including 42% of men (Ballard, 2021). Further to this, 56% of men felt the media promotes an unobtainable body image for them (Ballard, 2021). These findings pose potential health risks, with poorer body image associated with a range of negative outcomes including disordered eating, depression, and other mental and physical health problems (Turk and Waller, 2020). Body and appearance dissatisfaction appears to be worsening, with a growing body of research showing links between social media usage and body dissatisfaction (Saiphoo and Vahedi, 2019). The present study aims to investigate the relationship between different types of social media use (active and passive use) and body image (appearance valence and salience) in physically active men. This introduction will begin with an exploration of the psychological literature about body image in men, followed by an examination of previous work that explores the relationships between social media and body image in this population. The terms “Active” and “Passive” social media will then be discussed and research in this area reviewed. The introduction concludes by explaining the unique contributions of the present study to a growing body of literature in health psychology and cyberpsychology.

Body Image, Drive for Muscularity and Muscle Dysmorphia

Body image can be defined in several ways, with one classic definition by Slade (1988, p.20) describing it as “the picture we have in our minds of the size, shape and form of our bodies; and to

our feelings concerning the size, shape and form of our bodies, and its constituent parts". More recent definitions explain that body image comprises of the thoughts, feelings, perceptions, and behaviors associated with the lived experience of having a body (Cash and Smolak, 2011). Body image can be defined and assessed in different ways, with two important aspects of body image being *appearance valence* (the extent to which someone evaluates their appearance in a positive/negative way) and *appearance salience* (the extent to which appearance and physical self is brought into conscious awareness) (Moss and Rosser, 2012). Research has demonstrated that appearance valence and salience are conceptually independent and interdependent constructs (Moss et al., 2014). Whilst numerous scales have been developed for measuring variations of appearance valence or body satisfaction, appearance salience has received less attention. Cash et al. (2004) demonstrated the importance of appearance salience in the form of self-evaluative salience (the importance of how one looks to oneself) and motivational salience (the importance placed on how one appears to others) towards one's appearance. Men who scored more highly in these measures showed greater levels of appearance dissatisfaction, greater internalisation of media ideals and more frequent dysmorphic body image emotions.

Traditionally, body image research has focused more heavily on women, and whilst this has begun to change, a large discrepancy in the volume of literature remains (Sklar and Rokusek, 2018; Harriger et al., 2023). As a result of this historic incongruity in body image research populations, many of the tools used to measure body image have a female-centric focus, with a strong (and sometimes exclusive) emphasis on drive for thinness, without accounting for the nuances of muscularity that appear more salient for men (Cohane and Pope, 2001). This means that gender differences in body satisfaction derived from using the same methods must be treated with caution. Some research suggests there is relative parity between male and female body dissatisfaction (Fiske, 2014; Murray, 2013), further supporting the need for male specific research in this field. In addition to this, whilst physical activity has usually been associated with more positive body image (Sabiston et al,. 2019), physically active men may be at greater risk of body image threats, such as internalization of the

muscular ideal (Edwards et al., 2016), and particularly those training in “gym” environments (Stapleton et al., 2016).

Male body image concerns place a high degree of importance on muscularity (Tylka, 2021), whilst still maintaining an awareness and concern with levels of body fat (Tylka, 2011). This may represent dual and, in some ways, conflicting pressures for the body to be larger from a muscularity perspective but smaller from an adiposity perspective (Grammas and Schwartz, 2009). This has been termed a “dual pathway” to body image problems and eating disorders in men (Tylka, 2011). Several studies have found muscularity to be the primary source of dissatisfaction in men (Heath et al., 2016; Pope et al., 2000), with extreme cases of this being defined under the term “Muscle Dysmorphia” (Tod et al., 2016). This is defined by a pathological pursuit of muscularity that includes preoccupation with weight training, supplement use, anabolic steroid and associated substance use (Grieve, 2007). This can have deleterious effects on individual’s wider life in conjunction with a belief that one is not sufficiently muscular (Mitchell et al., 2017).

Muscle Dysmorphia can be strongly predicted by “drive for muscularity” (Robert et al., 2009), a term used to describe the extent to which one’s attitudes and behaviors are driven towards being muscular (McCreary and Sasse, 2000). Whilst a moderate drive for muscularity may represent a dedication to weight training and may not necessarily be unhealthy, research continues to show higher drive for muscularity scores associated with a range of broadly negative outcomes. These include Muscle Dysmorphia (Robert et al., 2009), disordered eating practices (Eik-Nes et al., 2018), perfectionism and emotional dysregulation (Chaba et al., 2019), and unhealthy social comparisons (Edwards et al., 2016). The drive for muscularity concept was developed to represent the desire to increase one’s muscularity as a parallel to the previously well established “drive for thinness” (Edwards et al., 2016). The Drive for Muscularity Questionnaire (DMQ) contains both attitudinal (e.g. “I wish I were more muscular”) and behavioral (e.g. I lift weights to build up muscle”) components (Mcreary and Sasse, 2000). Drive for muscularity behavior is partly defined using variables relating to

physical exercise, and there exists a large body of literature showing positive effects of exercise on body image (Sabiston et al., 2019). However, it has also been found that whilst exercising for autonomous reasons (e.g., health, wellbeing, and enjoyment) is associated with more favorable body image, exercising for controlled reasons (e.g., appearance motives) is associated with lower body image (Panão and Carraça, 2020).

Body Image and Social Media

Whilst several factors affect men's drive for muscularity, and body image more generally, the dominant model of influence is the socio-cultural model (Veldhuis et al., 2020). The socio-cultural model of body image suggests that: 1) there exist societal ideals of beauty (within particular cultures) that are; 2) transmitted via a variety of socio-cultural channels which are then; 3) idealized by individuals so that; 4) satisfaction (or dissatisfaction) of appearance will be a function of to what extent these ideals are fulfilled by the individual (Tiggemann, 2011). One of the most frequently cited socio-cultural models for body image is the Tripartite Model (Thompson et al., 1999) that states there are three primary influences on body image from family, peers, and the media. This model has received support from a range of studies in a variety of populations and cultures (Tylka, 2021) and has been applied to men (Tylka, 2011). Of these three influences, media (both production and consumption) has changed considerably in recent decades, with the advent and proliferation of social media (Rajendran and Thesinghraja, 2014).

Social media may be defined as "internet-based channels that allow for self-presentation and interaction with others who derive value from user generated content (Carr and Hayes, 2015: 50). Social media use has continued to grow in popularity since its inception towards the beginning of the 21st century, both in terms of the number of people using these platforms and the time individuals spend on them (Ryding and Kuss, 2020). The effects of social media on wellbeing have been the subject of a growing body of research displaying mixed results, depending upon several factors including type, frequency, intensity of usage and the characteristics of individual users (Orben,

2020). These findings on broader wellbeing have been echoed by research into the relationships between social media use and body image (Holland and Tiggemann, 2016). One of the key distinctions that has begun to receive research attention is between *active* and *passive* use of social media. Passive social media use (or "social browsing") has been found detrimental to well-being in several studies due to the lack of active relatedness (engaging in pro-active communication) and the tendency for content and images viewed to be idealized (Weinstein, 2017). In contrast to this, active social media use (engaging with others on platforms) has often been reported as positive for wellbeing due to the higher levels of active relatedness and the social interactions it facilitates (Hancock et al., 2019). This also extends specifically to body image, and some evidence has suggested that passive social media use is predictive of social comparison in young males, that is also linked to decreased body satisfaction (Rousseau et al., 2017). The present study will examine the potential differing relationships between active and passive social media use and men's body image and drive for muscularity. Research exposing men to idealized social media body imagery in a passive fashion has demonstrated significant negative effects on body satisfaction (Tiggemann and Anderberg, 2020). Other work suggests passive social media use may be linked to drive for muscularity in men, through repeated exposure to muscular bodies (Ryding and Kuss, 2020).

However, a recent critical scoping review from Valkenburg et al., (2022) found that whilst this active/passive dichotomy is often quoted and discussed, most studies do not support these hypothesized associations. Recent meta-analyses on the effects of active and passive use on wellbeing have shown conflicting results in support and rejection of the dichotomous hypothesis (Liu et al., 2019; Yin et al., 2019). One of the primary reasons for this is a stark a-symmetry between the volume of active and passive use, with most social media use being passive (Erliksson et al., 2020). These conflicting results are also affected by varying definitions of well-being, a lack of universal questionnaires for social media use (Trifiro and Gerson, 2019), and different definitions of active and passive use.

A smaller volume of research has identified passive social media use as associated with body image dissatisfaction (Ryding and Kuss, 2020). However, more research is needed, particularly in male samples to further understand this link and explore whether the mixed results pertaining to wellbeing extend to body image specifically. In addition to this, social media usage has been associated with changes in appearance salience (Choukas-Bradley et al, 2020). The saliency of one's presentation on social media has been linked with poorer body image, disordered eating and depressive symptoms, due to the increased exposure to idealized body images and the pressures to adhere to such presentations (Choukas-Bradley et al, 2020). To the author's knowledge, no research has yet investigated the differing effects of active and passive social media use on drive for muscularity.

The Present Study

The present study aims to answer the following question: How are active and passive social media use related to body image in physically active men? Active social media use has been defined by any use that involves communicating with another individual or account, whilst passive use is defined by the consumption of content without any direct communication with others (Yang et al., 2021). Physically active men will be included as this group may be particularly vulnerable to idealized body ideals (Rossi and Tirapegui, 2018), higher drives for muscularity (Almeida et al., 2019), and are likely to engage with fitness-based social media (thus exposing them to more idealized body presentations) more so than sedentary men (Stollfuß, 2020). The study aims to expand the research in the psychology sub-discipline fields of cyberpsychology and health psychology by examining a range of ages (18-50) where previous literature has focused heavily on undergraduates (Fatt et al., 2019; Selvi and Bozo, 2020). More research is still required outside of female and adolescent samples and with more complex measures of social media use (Harriger et al., 2023), and the present study seeks to address some of these gaps. Based on the literature and rationale presented above, the following hypotheses are proposed:

H1: Active and passive social media use will be negatively associated with appearance valence.

H2: Active and passive social media use will be positively associated with appearance salience and drive for muscularity.

H3: Passive social media use will show stronger negative associations with appearance valence and stronger positive associations with appearance salience when compared to active social media use.

Method

Participants and Procedure

Inclusion criteria for the study required participants to identify as male, be aged 18-50, be physically active at least once per week, and use some form of social media. Participants were recruited on social media using a poster stating the inclusion criteria and the requirements of the study on professional accounts on Instagram and Facebook, in addition to snowball sampling. Instagram and Facebook were used as these represent the two most used social media platforms by adult men in the UK (Statista, 2023). In total, 224 participants were included in the study (*M* age = 32.76; *SD: 7.57)*. Institutional ethical approval was obtained prior to data collection. After reading the information section and consenting to participate, participants completed an online questionnaire created using the JISC (Bristol, UK) survey platform to collect the relevant variables. Recruitment and data collection took place over a two month period in January and February 2022.

Demographic information was collected to better understand the characteristics of participants. The sample comprised participants who identified as White (81.8%) Black (6.1%), Asian (4.0%), South Asian (3.0%). Mixed Race (2.5%), Middle Eastern (2.5%) and Participants identified themselves as heterosexual (69.1%), homosexual (26.6%) and bisexual (4.3%). Furthermore, 80.8% of the sample had an undergraduate degree or higher.

Measures

Demographic information including Age, Ethnicity, Sexual Orientation, Education and Occupation were collected and are reported above. This data was collected to understand the characteristics of the sample but was not used in the main analyses.

Social Media Use

Due to the lack of a universal social media use questionnaire (Trifiro and Gerson, 2019), social media use was collected using original questions. Passive social media use was measured by four questions pertaining to browsing friends, influencers, newsfeeds, and search/explore functions. Active social media use was measured using two questions pertaining to messaging and engaging with others through features such as likes and comments. The questions used to measure these were novel, but based on previous research, crucially distinguished between active "doing" on social media and passively browsing and reflected elements of social media use that make up "Active" and "Passive" use (Escobar-Viera et al., 2018; Valkenburg et al., 2022; Liu et al., 2019). Active use was measured with the following items: "How often do you engage with other's content with features such as likes and comments?" "How often do you message and/or communicate with others on Social Media?". Passive use used: "How often do you browse the profiles of friends?" "How often do you browse the profiles/content of celebrities and/or influencers?" "How often do you browse your own newsfeed?" "How often do you browse using search/explore features?". Answers were given on a Likert scale from "Never" to "Very Often" (scored 1-5). Total scores for active and passive use were calculated by adding scores from the 2 active and 4 passive questions respectively, with higher scores indicating more engagement.

Appearance Salience

Appearance salience was measured using the Centre for Appearance Research Salience Scale (CARSAL) which is a 5-item questionnaire with answers on a Likert scale (from "Strongly Disagree" to "Strongly Agree", scored 1-6). The questionnaire measures the salience of appearance to individuals and includes items such as "I am often aware of the way I look to other people". Total appearance

salience scores were calculated by adding scores from each item with a higher total score indicating higher levels of appearance salience. The questionnaire showed good internal consistency in the sample (Cronbach Alpha .891).

Appearance Valence

Appearance valance was measured using The Centre for Appearance Research Valance Scale (CARVAL) which is a 7-item questionnaire with answers on a Likert scale (from "Strongly Disagree" to "Strongly Agree", scored 1-6). The questionnaire measures appearance valence in individuals with five positive items (e.g., "The way I look makes me feel good about myself"), and two negative items (e.g., "I don't like the way I look") which were reverse scored. Total appearance valence was then calculated by adding scores for each item with a higher total score indicating higher levels of appearance valence. The questionnaire showed good internal consistency in the sample (Cronbach Alpha .938).

Drive for Muscularity

Drive for muscularity was measured using the Drive for Muscularity Questionnaire (DMQ) which has 15 items answered on a Likert scale (from "Never" to "Always", scored 1-6). This includes seven items pertaining to drive for muscularity attitude (e.g., "I wish that I were more muscular") and eight items relating to drive for muscularity behavior (e.g., "I life weights to build up muscle"). Drive for muscularity was calculated by adding scores for all 15 questions. The questionnaire showed good internal consistency in the present sample (Cronbach Alpha .917).

Statistical Analysis

Statistical Analysis was conducted using the software IBM SPSS Statistics 26. Descriptive statistics were calculated for questionnaire responses. Pearson Correlations were conducted on types of social media (active, passive and their subcomponents) and body image variables (appearance valence, appearance salience and drive for muscularity).

Due to levels of collinearity between the subcomponent variables of active and passive use, multiple linear regressions were conducted to predict appearance valence, appearance salience and drive for muscularity using total active and passive social media use scores. Active and Passive use were significantly positively correlated (r =-.509, p<0.01). Variables were entered using the "enter"/simultaneous method.

Results

Descriptive Analysis

Descriptive statistics of the sample's responses to the questionnaires can be seen in Table 1.

Insert Table 1 here

Inferential Statistics – Correlational Analysis

Pearson Correlations between social media usage and measures of body mage were conducted, the results of which can be seen in Table 2. Appearance valence was significantly negatively correlated with liking and commenting (r =-.148, p<0.05) and overall active social media use (r =-.136, p<0.05) but was not significantly correlated with any other measures, demonstrating partial support for hypothesis 1 but no support for hypothesis 3. Appearance salience was significantly positively correlated with all aspects of social media use except for browsing search functions and liking and commenting (all r≤.143 all p≥0.05) and drive for muscularity was significantly positively correlated with all aspects of social media use (all r≤.193 all p≥0.01) showing support for hypothesis 2.

Insert Table 2 here

Multiple Linear Regressions

Multiple linear regressions were conducted using active and passive social media use to predict appearance valence, appearance salience and drive for muscularity, the results of which can be seen in Tables 3, 4, and 5 respectively. Neither active nor passive social media use were significant

predictors of appearance valence R^2=.018, *F(2,223)*=2.08, *p*=.091(active), *p*=.910(passive)), thus not supporting hypothesis 1. Higher scores for passive, but not active social media use, were predictive of higher appearance salience (R^2=.052, *F(2,223)*=6.06, *p*=.182(active), *p*=.038(passive))in support of hypothesis 3. Higher scores for passive, but not active social media use, were predictive of higher drive for muscularity (R^2=.116, *F(2,223)*=14.015, *p*=.173(active), *p*=<.001(passive)) in support of hypothesis 3.

Insert Table 3 here

Insert Table 4 here

Insert Table 5 here

Discussion

The present study aimed to examine the relationship between different types of social media use (active and passive) and different aspects of body image (appearance valence, appearance salience and drive for muscularity) with an understudied sample of physically active men aged 18-50 years old. The study found that men who reported more active and passive social media use behaviours also reported higher appearance salience (the extent to which appearance and physical self is brought into conscious awareness) and drive for muscularity scores, with passive social media use predictive of higher appearance salience and drive for muscularity in linear regression models. Furthermore, those who reported more active social media use usually reported lower appearance valence (the extent to which the respondent evaluates their appearance in a positive/negative way). Significant positive correlations were found between all measured aspects of social media use and drive for muscularity.

Social Media and Appearance Valence

The finding that higher active social media use was associated with lower appearance valence suggests individuals who engage in social media in more active ways are more likely to evaluate their

appearance in negative ways. Liking and commenting behaviours were the only social media behaviour significantly negatively correlated with appearance valence, suggesting increased liking and commenting on social media may be linked to evaluating appearance in a negative way. In a linear regression model, neither active nor passive use were significant predictors of appearance valence though, suggesting neither form of social media use were related to men's feelings towards their bodies. Active social media use showed a non-significant trend towards lower appearance valence (*p=.09)*. These results thus demonstrate only partial support for hypothesis 1 that active and social media use would be negatively associated with appearance valence.

This somewhat contrasts with the zeitgeist and generally accepted view that social media is having a negative effect on body image (Fardouly and Vartanian, 2016). This view appears too simplistic and social media can have varying effects on body image depending on the type of content users engage with (Saiphoo and Vahedi, 2019). Previous research that has demonstrated a negative effect of social media on men's body image has involved specific exposure to idealised bodies (Tiggemann and Anderberg, 2020), whereas the present study looked at social media use more generally, further helping to explain this difference. This was also evident in a recent experimental study by Sumter et al. (2022) who found that passive Instagram usage resulted in lower body esteem in their sample of young men, but only when this took the form of exposure to muscular male bodies.

Another factor that may help to explain the lack of association between many aspects of social media use and appearance valence in the present study, is a growing body of literature suggesting men may be quicker to bolster their self-esteem in the face of body image threats (Voges, 2019). For example, Franzoi et al. (2012) found that men were more self-hopeful in the face of appearance comparisons whereas women were more commonly self-critical. This may have contributed to the more pronounced relationships between social media and drive for muscularity and appearance salience when compared to appearance valence in the present sample. Furthermore, other research has indicated that males are more likely to use active coping strategies and exhibit greater agency

over their bodies in response to social media threats toward body image, for example by believing they could attain such physiques if they applied the appropriate amount of time and effort (Mahon and Hevey, 2021). Research has also shown that there is often a social desirability for men to appear strong and to retain self-belief, that can also lead to a rejection of negative body image or body image threats (Gattario and Frisén, 2019).

Despite the lack of association between passive social media use and appearance valence in the present study, engaging in the active social media behaviour of liking and commenting was still associated with, lower appearance valence. This suggests that when individuals engage in more liking and commenting behaviours, they were more likely to evaluate their appearance negatively. This supports similar work by Kim and Chock (2015) who termed actions such as liking and commenting as "social grooming behaviors" and found them to be predictive of drive for thinness in their sample of mostly female students using Facebook. Tiggemann et al. (2018) also found that investment in likes and comments was associated with appearance comparison and facial dissatisfaction in their sample of female undergraduate students. This may also help to explain the association seen in the present study, although here the frequency of engaging in likes and comments was measured, rather than the receipt of them. To the author's knowledge, this is the first study to investigate the link between social media likes and comments and body image in men.

Social Media and Appearance Salience

The effects of social media on appearance salience are less well-studied and to the author's knowledge, this was the first study to use the CARSAL tool in the context of social media use. The positive associations found between appearance salience and active and passive social media use suggest that when individuals engage in more active and passive social media behaviours they are more likely to bring appearance into conscious awareness. This provides support for hypothesis 2 that social media use would be positively associated with appearance salience. This suggests that whilst most social media use was not associated with participant's evaluation of their bodies, it was

more consistently associated with appearance being more salient to them, or in other words, social media was making men more aware of their appearance without making them feel more or less positively about it. This would support previous research identifying links between social media and appearance preoccupation in teenagers (Hawes et al., 2020) and adult women (Cohen et al., 2020), and adds novel findings in this regard using adult male participants. Passive, but not active social media use was found to be a significant predictor of higher appearance salience in a linear regression model. This suggests that the passive consumption of social media content may be related to men's appearance becoming more salient to them, possibly due to the exposure to body salient content that is commonplace on social media (Tiggemann and Anderberg, 2019). Previous research has found that repeated exposure to idealised body content on social media resulted in increased appearance salience (Casale et al., 2021). This may help to support the findings here, however given the associations are small and specific types of content usage were not measured in the present study, these findings must be interpreted with caution.

Social Media and Drive for Muscularity

Drive for muscularity showed the strongest and most consistent associations with all measurements of social media use in support of hypothesis 2, suggesting social media use was contributing to increased drive for muscularity in men. All social media measurements were most strongly associated with drive for muscularity when compared with appearance valence and salience. This may indicate that men were being exposed to muscular bodies on social media as has been detailed in other studies (Tiggemann and Anderberg, 2011). This is consistent with numerous previous studies linking social media use with drive for muscularity in men (Ryding and Kuss, 2020). In addition to this, the present study required participants to be regularly physically active (at least once per week) and the sample was very active with over 40% exercising 5 or more times per week and 85% exercising at least 3 times per week. This suggests many of the participants are likely to be interested in sports and fitness which, whilst not synonymous with muscularity, has links to it,

particularly in the way active men are portrayed on social media (Gültzow et al., 2020). The rise in portrayals of lean, toned, muscular male bodies in traditional media in recent decades has been noted in several studies (DeCarlo, 2012; Frederick et al., 2007), and this appears to have continued in recent years on social media (Gültzow et al, 2020). This may help to further explain the present findings, with previous research showing evidence of this link (Sai et al., 2020), however as the present study did not investigate specific types of content usage, this must be interpreted with caution.

Passive social media use was also a significant predictor of higher drive for muscularity scores in a linear regression model. Most previous literature linking social media use and drive for muscularity in men has involved passive usage, and the effect of exposure to muscular bodies on this phenomenon (Ryding and Kuss, 2020). Viewing "fitspiration" content on social media has been found to directly predict higher drives for muscularity (Seekis et al., 2021) and whilst the present study did not investigate "fitspiration" exposure, it would lend support to the influence of social media on men's drive for muscularity.

Active and Passive Social Media Use and Body Image

The positive associations between appearance salience and both active and passive social media use suggest that social media was having an influence on bringing appearance into conscious awareness. Appearance valence showed only a significant negative association with active social media use through liking and commenting. Passive social media use did not show stronger relationships with body image when compared to active use. This suggests that social media was having a larger effect on bringing appearance into the conscious awareness of participants in comparison to changing their evaluation of their appearance. Passive, but not active, use did significantly predict higher drive for muscularity and appearance salience in linear regression models. Neither were significant predictors of appearance valence, although active use did show a non-significant trend toward predicting lower appearance valence. These results demonstrate partial support for hypothesis 3 (that passive social

media use will show stronger negative associations with appearance valence and stronger positive associations with appearance salience when compared to active social media use).

The relationship between passive social media use and body image has produced mixed findings with several studies pointing to negative effects of passive use on wellbeing and body satisfaction (Holland and Tiggemann, 2016; Ryding and Kuss, 2020; Weinstein, 2017), whilst other studies have failed to find a difference (Valkenburg et al., 2022; Vornholt, 2018). In addition, it is possible that the concept of men's propensity to be more self-hopeful when presented with idealised images (Franzoi et al., 2012), may also have contributed to the lack of differences seen between active and passive social media use and appearance valence here.

The results of the present study would support more recent analyses of active/passive social media use finding no significant differences on wellbeing (Valkenburg et al., 2022; Liu et al., 2019; Yin et al., 2019) and specifically on body image (Vornholt, 2018). Other variables including the type of content consumed (Tiggemann and Zaccardo, 2018) and individual personality differences (Sumter et al., 2022) are likely to have more significant effects than passive and active use (Valkenburg et al., 2022). Despite the lack of difference in evaluating one's appearance, the present study does suggest passive use may be more influential in making appearance a more salient concern for men, along with playing a role in increasing their drive for muscularity. Previous research has shown exposure to idealised bodies can increase both measures (Ryding and Kuss, 2020; Hawes et al., 2020). This occurs from passive browsing rather than communicating with others on social media and this may help to explain the differences seen here.

Strengths and Limitations

This study contains several strengths and limitations. The use of a non-student sample adds to a field that is currently dominated by samples of undergraduate students. This is important because social media use is prevalent in a wide range of age groups and its effects on body image are less known in other groups of adults. In addition, the use of novel questions to measure active and passive social

media use enables this variable to be investigated in a more detailed way than in many previous studies (Valkenburg et al., 2022). This is important because we are beginning to understand that it is in the nuances of how social media is used that effects on phenomena such as body image are consequential. The inclusion of a range of body image measures, including drive for muscularity alongside appearance valence and salience allowed for a more complex and multifaceted measurement of male body image than in much of the previous research on the topic, which is crucial when working with male populations who's experience of body image is likely to differ from that of female samples (Tylka, 2021).

The results of the present study must be considered in the light of some limitations. Firstly, the exploratory design and correlational nature of this research do not allow for clear cause and effect conclusions to be drawn. This is a common theme amongst cross sectional research in social media (de Valle et al., 2021), and whilst this study provides new insights into male body image and social media, experimental and longitudinal research would be required to establish cause and effect relationships.

Limitations also exist regarding some of the measurement tools chosen. Whilst active and passive use were measured in novel ways, the type of content being engaged with on social media is unknown. Future research should look to ascertain in greater detail the type of content participants engage with on social media. This is difficult to achieve in a study of this nature and a qualitative research design may be more suitable.

Furthermore, the results must still be interpreted in the context of this sample being disproportionately educated (85% of the sample had an undergraduate degree or higher and 40% had postgraduate degrees), white, and based in the U.K., limiting their extrapolation to other demographics. The sample was also highly physically active, which may have led to higher mean scores on body image variables when compared to a less active sample. Future research should focus on other ethnic groups and social classes to further investigate these results.

Conclusion

Male body image concerns have risen in recent decades, particularly since the advent and proliferation of social media, and the present study provides greater detail on how this relationship may work in adult men. Results showed active and passive social media use to be associated with higher drives for muscularity and appearance salience (the extent to which appearance and physical self is brought into conscious awareness). Furthermore, liking and commenting was associated with lower appearance valence (the extent to which the respondent evaluates their appearance in a positive/negative way). These results demonstrate that social media may be influencing men to be more aware of their appearance and more driven to be muscular. In addition, engaging in liking and commenting on social media may be linked to lower appearance satisfaction. This study provides novel findings on how social media may be affecting male body image and provides insights into how male social media use may be contributing to negative body image and body related behaviours.

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Tables

Table 1

Means, standard deviations, and ranges of the assessed social media, body image, and drive for muscularity variables

	Mean (Standard Deviation)	Range
Celebs Browse	2.71 (1.10)	1-5
Newsfeed Browse	3.42 (1.27)	1-5
Search Browse	3.09 (1.14)	1-5
Friends Browse	2.72 (.88)	1-5
Passive Use Total	11.91 (3.23)	4-20
Messaging	3.71 (1.15)	1-5
Likes and Comments	3.42 (1.17)	1-5
Active Use Total	7.21 (2.02)	2-10
Appearance Valence	27.56 (7.42)	7-42
Appearance Salience	23.09 (4.84)	6-30
Drive for Muscularity	47.90 (16.16)	16-83

Table 2

Pearson Correlations for Social Media Usage and Body Image Measures

		Appearance Valence	Appearance Salience	Drive for Muscularity
Passive Use	Friends Browse	-.095	.178**	.193**
	Celebs Browse	-.066	.143*	.250**
	Newsfeed Browse	-.038	.179**	.271**
	Search Browse	-.012	.107	.216**
	Passive Use Total	-.076	.210**	.329**
Active Use	Messaging	-.085	.194**	.197**
	Likes and Comments	-.148*	.127	.214**
	Active Use Total	-.136*	.183**	.237**

Note: *$p < 0.05$ **$p < 0.01$ (DM: Drive for Muscularity)

Table 3

Multiple Linear Regression to predict Appearance Valence using Active and Passive Social Media use

Appearance Valence			95% CI			
Variable	Beta	*SE*	*LL*	*UL*	β	P
Active Social Media Use	-.482	.284	-1.042	0.78	-.131	.091
Passive Social Media Use	-.020	.178	-.371	.331	-.009	.910

R^2=.018

F=2.082

Note: **p* < 0.05 ***p* < 0.01

Table 4

Multiple Linear Regression to predict Appearance Salience using Active and Passive Social Media use

Appearance Salience			95% CI			
Variable	Beta	*SE*	*LL*	*UL*	β	P
Active Social Media Use	.244	.182	-.115	.603	.102	.182
Passive Social Media Use	.238	.114	.013	.462	.159	.038*

R^2=.052

F=6.061

Note: *$p < 0.05$ **$p < 0.01$

Table 5

Multiple Linear Regression to predict Drive for Muscularity using Active and Passive Social Media use

Drive for Muscularity			95% CI			
Variable	Beta	*SE*	*LL*	*UL*	β	P
Active Social Media Use	.814	.595	-.359	1.986	.101	.173
Passive Social Media Use	1.432	.377	.688	2.175	.280	<.001**

R^2=.116

F=14.015

Note: *$p < 0.05$ **$p < 0.01$