

MEN'S BALDNESS STIGMA AND BODY DISSATISFACTION

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Abstract

Introduction: Head hair forms a central component of the sociocultural male appearance ideal (e.g., mesomorphic, tall, young and not bald) and carries masculine connotations and stigma. Immense pressures to conform to this male appearance ideal gives rise to body dissatisfaction. Previous assessments of body dissatisfaction are too narrow, ignoring dissatisfaction beyond mesomorphy such as baldness dissatisfaction. Our study involved two research questions: (i) Do the facial expressions assigned to images of bald and non-bald men differ? and (ii) What forms of body dissatisfaction, including baldness dissatisfaction, do men have and are these related to men's wellbeing and muscularity behaviours?

Method: Eighty-six male participants aged 18–58 years (mean = 23.62; standard deviation = 7.80) were randomly exposed to 10 images of smiling men (half balding and half not) and were asked to rate the facial expression displayed. Participants also rated their body dissatisfaction and wellbeing.

Ethics statement: Institutional ethics approval was granted.

Results: We found that participants interpreted the facial expressions of images of bald men slightly more negatively than non-bald men. Most participants reported some form of body dissatisfaction correlated with wellbeing and muscularity enhancing behaviours, albeit weakly. Participants also disclosed a range of body dissatisfaction aspects (including surrounding muscularity, body fat, teeth alignment, skin tone and facial hair amount) though generally were not impacted heavily nor highly dissatisfied.

Conclusion: These findings underscore the complex challenge in producing a complete assessment of men's body dissatisfaction and the general resilience men experience with extant appearance pressures around their bodies and head hair.

Keywords: baldness; body dissatisfaction; experiment; men

MASCULINE APPEARANCE PRESSURES

A keyway masculinity is reinforced and conformed to is through its visual embodiment. In other words, men deemed masculine tend to conform to the “male appearance ideal”: such as, to be tall, mesomorphic, young, have symmetrical and unblemished faces and a head full of hair. For example, a content analysis¹ of almost 5000 images featured popular men's magazines (themselves promoters of hegemonic masculine values such as “Men's Health and FHM”²) found between just 4–11% of men explicitly differed

from this ideal. Similarly, few images of men explicitly departing from the ideal (3–8%) were on popular UK dating and porn websites.³ Indeed, in recent decades, there has been a distinct rise in the appearance pressure men face.^{4–6} This has culminated in an “appearance potent” context, where the majority of images of men in popular media closely conform to a narrow and unrealistic appearance ideal.^{1,3,7–10}

The impact of masculine appearance pressures

The appearance ideal impact men's health significantly. Meta-analyses of experimental exposure

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studies have empirically linked exposure to appearance-ideal media images to increased body dissatisfaction.^{11,12} The consequences of acute appearance pressures on men should be unsurprising. Body dissatisfaction, a dislike of one's appearance, is increasingly the normative experience for men today. Surveys, interviews and other forms of empirical evidence continually attest to this.^{13–16} Male body dissatisfaction can have serious consequences including eating disorders, depression, steroid usage, muscle dysmorphia and suicidal ideation.^{15,17–21} Beyond these clinical impacts, body dissatisfaction, can seriously affect men's day-to-day lives through their general wellbeing. For example, men with body dissatisfaction report avoiding situations where the body is undressed (e.g., swimming and sex), not participating in school or work activities, body surveillance, mirror checking and intrusive appearance-related thoughts.^{13,14,22,23}

Another impact of body dissatisfaction may be muscularity-building behaviours. These include performance enhancing substance usage, gym frequenting and other mesomorphic-promising behaviours which are seen as the most accessible, heavily promoted and (unlike other body change behaviours) distinctly masculine behaviours available to men.^{24–26} Whilst these behaviours in themselves can be healthy, if they are motivated by strict standards of mesomorphy, they are likely to become unrelenting and extreme.^{23,26}

Assessing body dissatisfaction holistically

Ironically, whilst masculinity may promote body dissatisfaction, it also acts as a barrier to disclosing it. Demonstrably, in focus groups with young Australian men,²⁷ researchers observed their male participants' reluctance to disclose their body dissatisfaction or allow other men to disclose it (despite revealing later in focus groups that they experienced it). This minimisation of body dissatisfaction by men is a pervasive problem in the research field.^{28,29} It appears to be related to masculine values of strength and stoicism²⁴ that would be infringed when men commit the “feminised” disclosure of having body dissatisfaction. Therefore, survey methodology, where men can answer in their own space and

time anonymously, without the presence of other participants or research, is critical.

Typically, assessments of men's body dissatisfaction downplay it as they only concentrate on specific dissatisfied body parts (muscularity, weight or sometimes height) and leave out others.^{29–32} In response to this problem, Halliwell and Dittmar³⁰ have created the appearance-related self-discrepancy index (SDI), an idiographic measure of body dissatisfaction that allows participants to specify which, if any, areas of their appearance they are dissatisfied with. The authors have demonstrated this measure to be more predictive of health-related outcomes than nomothetic (fixed-item) measures among women,³⁰ though it is yet to be explored with men.

Baldness dissatisfaction and stigma

Idiographic assessments of body dissatisfaction are also advantageous over traditional measures of body dissatisfaction as they can allow participants to disclose their baldness dissatisfaction which others ignore. Here, baldness refers to male-patterned hair loss, which most men will develop over their lifetime.³³ Despite being natural and common, some research and organisations unequivocally state baldness is a highly distressing experience for men that leads to depression, low self-esteem and anxiety.^{32,34–36} However, this research study typically recruits biased samples of men (e.g., via dermatology clinics) who may be more distressed than most balding men.³⁷ Subsequently, more research with representative samples has found that many men can experience baldness unobjectionably.^{35,38} Baldness also relates to masculinity. In addition to being critically important to achieving the male appearance ideal,³⁹ a head full of hair may connote other masculine traits such as manhood, success and strength. Baldness websites typically represent balding men as not only failing to gain a conventionally attractive female partner but as being depressive, social outcasts, in general.⁴⁰ In deliberate contrast, men with full heads of hair are depicted as successful (wearing sharp suits, confidently facing the camera) and heterosexually victorious.⁴⁰ Qualitative research

also reveals potential “baldness stigma” showing it may be associated with premature ageing and a loss of sexual prowess.^{36,39} “Masculine” men rarely are featured without a full head of hair in popular media (just 6% across popular men’s magazines¹ and 3% across popular dating and porn websites).³ Experimental designs that manipulate participants’ exposure to degrees of baldness (e.g., using wigs and digital retouching of images);⁴¹ also speak to hair’s masculine connotations and baldness’ associated stigma. Such studies have typically found that men with baldness are rated as less attractive, unsuccessful and older.^{41–44} Although some studies offer conflicting findings showing neutral or even positive connotations with baldness (including increased perceived intelligence and honesty).^{41,45} For example, Mannes⁴⁴ found that participants rated bald men as more dominant, taller, muscular, older and less attractive than men with full heads of hair. Whilst useful, participants in these studies have typically rated the extent to which the images of the men convey pre-defined characteristics (such as aggression) on Likert response scales that might prompt responses in line with researcher expectations (i.e., the ratings are assessed nomothetically). In contrast, assessing these using more free-form, unprompted responses (i.e., idiographically) may be a superior assessment of baldness stigma. In addition, it is critical to judge stigma in more recent years where hair loss representations may have changed where the recent advent of social media advertising of balding commercial services (e.g., transplants) has increased.^{40,46}

The current research

Baldness and the appearance ideal’s entanglement with masculinity emphasises the importance of researching these issues. However, current research offers some conflicting findings partly because of the research designs employed that either fail to counter men’s minimisation of body dissatisfaction (acute in face-to-face research) or because they used clinical samples of men with potentially increased distress. These conflicting findings impede the construction of specific hypotheses. However, this study had the following research questions: (i) Do the facial expressions assigned to images of bald and non-bald men differ?

(ii) What forms of body dissatisfaction, including baldness dissatisfaction, do men have, and how do these relate to men’s wellbeing and muscularity behaviours?

METHOD

Participants

Men were invited to participate in an online survey promoted through posters, social media and an online psychology participation portal at the lead author’s university in Northern England. The final sample included 86 men aged, 18–58 years (mean = 23.62; standard deviation = 7.80). Most participants self-identified their ethnicity as White (N = 73; 84.9%), with fewer identifying as Asian (N = 7; 8.1%), Mixed (N = 5; 5.8%) and Black (N = 1; 1.2%). Of those who disclosed their sexuality (N = 76), the majority were heterosexual (n = 70; 92.1%), with fewer participants identifying as gay (n = 5; 6.6%) or bisexual (n = 1; 1.3%). All but one participant identified their nationality. The majority were British (n = 80; 93.0%), five participants were Australian (4.7%), and one participant was Chinese (1.2%).

MATERIALS

Exposure stimuli

The stimulus materials were five pairs of images. The second author collected the photos from a hairpiece company’s website as their “before” and “after” pictures. Each image pair featured the same headshot of a man, one with a hairpiece closely mimicking a full head of hair (non-bald) and the other without showing the man with either total or significant baldness (i.e., a bald head or hair only around the crown of the head). Unusually (given “before” and “after” pictures typically feature less flattering lighting and a dejected facial expression in the “before” pictures),⁴⁷ these pairs of images were almost identical on other photographic features including facial expression (i.e., smiling), background, clothing, distance to camera and lighting. Indeed, the only way to avoid the minor differences between the photographs would have likely been through airbrushing software. Instead, these were naturalistic photographs found through a hairpiece company that men might come across

“organically” themselves. Specific information about the male models in the images could not be found, but four appeared to be White, and one appeared to be Black. The models also appeared to be aged from their mid-twenties to their early sixties.

Measures

The following measures were selected based on several factors including (i) each measure's ability to answer the specific research questions, (ii) their psychometric validity, (iii) their use in prior, comparable, research and (iv) their conciseness (given participants might be time-poor or might experience survey-fatigue). For example, the second research question involved a holistic assessment of men's body dissatisfaction and its potential impact. Therefore, the most comprehensive but concise and reasonably well-established nomothetic measure of body dissatisfaction, the body parts satisfaction scale for men,⁴⁸ was deployed, along with the SDI,³⁰ the only previously established idiographic measurement that detailed any aspect of men's dissatisfied appearance.

Facial expression of the images

Participants were asked after each image to “Please describe as best as you can what facial expression the man in the image is displaying (e.g., anger, curiosity, warmth, happiness etc)?” This question was posed to answer the first research question by assessing any potential baldness stigma participants may hold. Participants gave their responses in a free-form format.

Appearance SDI

The SDI is an idiographic measure that focuses solely on discrepancies in an individual's appearance self-concept.³⁰ It consists of nine items designed to assess the differences between the current- and ideal- self involving aspects of an individual's appearance (this is important in answering the second research question involving a holistic assessment of men's body dissatisfaction). Participants were asked if there were any aspects of their appearance they would like to change: “Write any word, or words, to describe the first thing about your appearance that you would like to change”. They were later asked to rate the degree to which they would like this changed ranging from

1 (a little different) to 5 (extremely different) and how important this change is from 1 (not important) to 5 (extremely important) in the first instance (if participants left a question blank it was scored as 0). These three questions were repeated twice to assess the second and third appearance dissatisfaction region (if existent). Halliwell and Dittmar³⁰ advise scores for each of the first, second and third aspect should be multiplied and then totalled (range: 0–75). Higher scores indicate greater appearance-related self-discrepancy. This measure of self-discrepancy has been found to correlate significantly with other measures of body image, such as body image concerns, anxiety, and esteem.^{30,49} Internal consistency in the current study of the six quantitative items was good ($\alpha = 0.88$).

Body parts satisfaction scale for men (BPSS-M)

The BPSS-M is a 25-item measure that assesses men's dissatisfaction with various aspects of their appearance. Twenty of these items regarded muscularity, leanness and shape of the overall body or specific body parts (e.g., Item 17: “Overall body build”, Item 18: “overall leanness of body”, item 23: “Muscularity of upper legs”). The remaining five items (items 1–5) assess satisfaction with hair, complexion, leanness of face, overall face and weight. Although this measure is not idiographic, it is reasonably comprehensive, concise and well established as a measure in similar research. Thus, it was important to answer the second research question. Given the study's specific focus on baldness dissatisfaction, the measure was re-divided into two subscales. The first subscale included the 24 original items (items 2–25) that were not about head hair. Participants indicated how satisfied/dissatisfied they were on a scale of 1 (extremely dissatisfied) to 6 (extremely satisfied) for each of the body parts listed. Scores were summed with higher scores indicating higher levels of satisfaction (range: 24–144). The original BPSS-M is reliable and valid with undergraduate men.⁴⁸ Internal consistency of this 24-item subscale in the current study was excellent ($\alpha = 0.97$).

Head hair satisfaction subscale for men

The second subscale was designed to assess head-hair satisfaction specifically. Item 1 from the original

measure was amended to “overall head hair”. In addition, three new items were added including “amount of head hair”, “thickness of hair” and “shape of your hairline”. Response scales and scoring was identical to the BPSS-M (range, 4–24). The internal consistency of this constructed four-item subscale was excellent ($\alpha = 0.93$).

Drive for muscularity behaviours

The engagement in muscularity enhancing behaviours subscale of the eight-item drive for muscularity scale (DMS)⁵⁰ was administered. This concise and popular measure was important in assessing a potential impact of men's body dissatisfaction as specified in the second research question. Responses are rated on a six-point scale from 1 (never) to 6 (always). After reversal of all items, higher scores indicated more engagement in the drive for muscularity behaviours (range: 1–6). The DMS has been shown to demonstrate excellent internal consistency, as well as criterion-related and concurrent validity.⁵¹ It also showed good internal consistency in the current study ($\alpha = 0.88$).

World Health Organization (WHO)-5 wellbeing index

This index⁵² is a five-item measure that assesses participants' global physical and psychological wellbeing. This concise and popular measure was critical in assessing another potential impact of men's body dissatisfaction as specified in the second research question. Participants were asked to “Please indicate for each of the five statements which is closest to how you have been feeling over the last two weeks”, with “last 2 weeks” emboldened to ensure it was not missed. Participants then responded to five statements, for example, “I have felt cheerful and in good spirits”. Each of the five items are rated on a six-point Likert scale from 0 (not present) to 5 (constantly present). Scores were summed and then multiplied by four. Higher scores meant better wellbeing (range, 0–100). The WHO has noted that scores under 50 could indicate some impaired wellbeing and scores under 28 indicate possible clinical depression. The WHO-5 has shown good internal and external validity.^{53,54} The internal consistency in the current study was good ($\alpha = 0.89$).

Procedure

After giving online consent and completing some demographic questions, participants were randomly assigned to view the two image sets embedded in the questionnaire. After viewing each image, they were asked to describe the man's facial expression. Participants then answered the four measures used to assess body image indices and wellbeing before accessing the debrief. Data collection occurred between January 2016 and November 2017.

Ethics

Institutional ethics approval was granted for this study (AW19JAN15). Participants were debriefed and provided contact details of specific male body dissatisfaction or related support organisation. They were thanked for their time, and those recruited via the institution's internal participation system were granted participation credits.

Body image and wellbeing statistical analysis

Data preparation and analyses were undertaken using SPSS 20.0 (SPSS, Chicago, IL, USA). Missing data were apparent throughout the dataset. Those responses that included more than 50% missing data were deleted ($N = 18$) in line with guidance.⁵⁵ Other participants whose responses were non-sensical or inappropriate ($N = 2$) or did not rate either set of images ($N = 1$) were also deleted. The remaining missing data were minimal, and thus listwise deletion was employed in the total and average scores calculation. The pairwise deletion was employed in analyses that required this (e.g., the multivariate analysis of variance). Correlation strength guidelines were also used (weak, 0.01–0.29; moderate, 0.3–0.59 and strong, >0.6).⁵⁶

RESULTS

Demographic equivalence of samples

The mean scores, correlations, and standard deviations for each of the body image and wellbeing measures for both conditions are shown in Table 1. Bivariate correlations were conducted for treating age as a confounding variable. Baseline demographics and outcome equivalence of conditions were calculated using chi-square goodness of fit tests and analysis of variances for categorical and continuous variables,

Table 1. Means (M) and standard deviations (SDs) for body image and wellbeing variables across each condition indicating demographic equivalence.

		Bald images	Full head of hair images	All conditions	Correlations				
	Scale range	M (SD)	M (SD)	M (SD)	Wellbeing	Appearance self-discrepancies	Muscularity behaviours	Body part satisfaction	Head hair satisfaction
Wellbeing	0.00–100.00	75.18 (19.30)	74.88 (20.90)	75.04 (19.94)	1	0.000	0.200	0.405**	0.081
Appearance self-discrepancies	0.00–75.00	22.36 (13.77)	25.92 (17.68)	24.07 (15.76)		1	0.353**	−0.280*	−0.328**
Muscularity behaviours	1.00–6.00	2.19 (0.99)	2.04 (1.10)	2.12 (1.04)			1	0.172	−0.054
Body Part satisfaction	24.00–144.00	84.10 (21.13)	81.22 (21.28)	82.72 (21.11)				1	0.593**
Head Hair satisfaction	4.00–24.00	18.69 (5.36)	18.08 (4.38)	18.40 (4.89)					1

* $P < 0.05$; ** $P < 0.001$.

respectively. Participants in the control condition did not significantly differ from those in the experimental on body images or wellbeing variables (see Table 1) or any demographic variables (i.e., age, ethnicity, nationality and sexuality; $P \geq 0.239$).

Blind coding of the facial expressions

There were 405 responses across both conditions. Forty-one participants rated the five images of bald men and forty rated the five images of men with full heads of hair. Many of the same (e.g., “happy”) or clearly similar (e.g., “happy” and “happiness”, “confused” and “confusion”) expressions were identified. Once these duplicates were standardized, 118 relatively distinct expressions were then ordered separately and alphabetically. Blind coding could then proceed. Facial expressions were initially coded according to the proposed seven human universal facial expressions: “Anger”, “Contempt”, “Disgust”, “Fear”, “Joy”, “Sadness” and “Surprise”.⁵⁶ A further category was also created: “Other”. Participants who described the images as having multiple facial expressions (e.g., “happiness and warmth”, “happiness but fairly neutral expression. Also, slightly unsure”) were coded into the apparent dominant expression described (e.g., in this case: “Joy”).

These initial eight categories, however, had too few data points per cell meaning the expected cell count assumption of the chi-square was violated and the comparison between conditions could not be conducted. Thus, the facial expressions were coded a second time. “Negative” expressions were subsequently collapsed into one category: “Negative” which included “Anger”, “Contempt”, “Disgust”, “Fear” and “Sadness” leaving four categories of expressions: “Negative”, “Joy”, “Surprise” and “Other”. The chi-square assumption of expected cell counts was still violated. Thus, the “Surprise” and “Other” categories were coded a third time. Three of the nine “Surprise” expressions (“Bemused”, “Curious” and “Intrigued”) were added to the “Joy” expressions to create a new category: “Positive”. The remaining six of the “Surprise” expressions (“Confused”, “Puzzled”,

“Shocked”, “Uncertain”, “Unsure” and “Curious, slight[ly] distressed”) were added to the “Negative” category. Similarly, four of the twelve “Other” expressions were recoded into the “Positive” category (“Confident”, “Interest”, “Thinking”, “Thoughtful”). Five of the “Other” category were recoded into the “Negative” category (“Bored”, “Dishonest”, “Indifferent”, “Serious” and “Suspicion”). This left just three expressions that could not be coded into categories (“Neutral”, “Pointed concentration” and “Concentrated”). Two of these participants viewed bald images and one viewed non-bald images. These three expressions were excluded from the final analysis leaving just “Positive” and “Negative” expressions for the analysis ($N = 402$). The chi-square assumption of expected cell counts was met, and the analysis could then proceed.

Positive and negative facial expressions by image type

Across both conditions, there were more “positive” ($N = 321$) than “negative” ($N = 81$) expressions attributed to the images of men. A chi-square analysis was conducted to compare both groups of participants’ identifications for the displayed image expressions. Cramer’s V statistic, a chi-square effect size was also calculated.

The chi-square analyses showed a significant difference between the image types on expressions listed $\chi^2(1) = 10.61$; $P = 0.001$. More specifically, the results revealed there were more images of non-bald men ($N = 172$; 65.2%) than images of bald men ($N = 149$; 46.4%) rated with positive expressions. Similarly, there were fewer images of non-bald men ($N = 27$; 33.3%) than images of bald men ($N = 54$; 66.7%) rated with negative expressions. The strength of this association was weak (Cramer’s $V = 0.16$). In other words, participants slightly more often associated baldness with a negative facial expression (e.g., “anger, depressed, or stern”) and a head full of hair with a positive expression (e.g., “pleased, very happy or excited”). Despite both images being of the same man with the same facial expression.

Baldness-, body- satisfaction and wellbeing scores

Table 1 details the scale ranges, means (M), standard deviations (SD) and bivariate correlations of the variables used in this study. In general, participants reported high levels of wellbeing (M = 75.04; SD = 19.94) and body part satisfaction (M = 82.72; SD = 21.11). Similarly, few (N = 8; 4.2%) participants described baldness as the first, second or third most important aspect of their appearance they wished to change. In addition, participants exhibited relatively high satisfaction levels on the hair loss dissatisfaction sub-scale across both conditions (range, 4.00–24.00; M = 18.40; SD = 4.89).

Appearance self-discrepancies were significantly correlated with body part satisfaction ($r(72) = -0.28$; $p = 0.016$), head hair satisfaction ($r(72) = -0.33$; $p = 0.004$) and muscularity behaviours ($r(72) = +0.35$; $p = 0.002$). Body part satisfaction was significantly correlated with wellbeing ($r(72) = +0.41$; $p < 0.001$) and head hair satisfaction ($r(72) = +0.59$; $p < 0.001$). No other correlations were significant ($p > 0.5$). All correlations were calculated with age as a covariate.

In other words, as participants' appearance self-discrepancies increased, their body part- and head hair-satisfaction decreased (the magnitude of this decrease was weak). In addition, as participants' appearance self-discrepancies increased, muscularity behaviours (the extent of this decrease was moderate) also elevated. Finally, as participants' body part satisfaction increased, their wellbeing and head hair satisfaction (the magnitude of these increases was average) increased. All changes occurred regardless of participants' ages. Table 2 details the participants' ratings for body dissatisfaction according to various appearance aspects. Baldness was not the first, second, or third most important aspect of their appearance they wished to change. Instead, muscularity and body fat were the most common areas of body dissatisfaction reported. Other regions reported included head- and facial- features, height and clearer skin.

DISCUSSION

The first research question assessed baldness stigma, where men rated the facial expressions of bald- and

non-bald -men. We found that despite the pairs of images belonging to the same man, images of the balding men were slightly, but significantly, more often rated as having a negative facial expression compared to images of the same man not bald. The strength of this association was weak. We feel these findings are still notable; however, as men were only exposed to five images each and were only asked a single and specific question about facial expressions (i.e., instead of vague and/or multiple questions that could have influenced responses to baldness). These findings complement previous research that has also shown bald men to be negatively stereotyped relative to their non-bald counterparts^{41–44} even when it comes to interpreting their facial expressions.

Baldness stigma resistance

It is pivotal to note that numerous conflicts of interest between business and previous studies including those on body dissatisfaction^{58,59} and baldness dissatisfaction, exist.^{37,40} Hence these studies may be potentially biased by businesses that wish to depict baldness as a distressing experience that only pharmaceutical or commercial products can alleviate.⁴⁰ Indeed, this may explain the discrepancy between our findings of low reported levels of baldness distress when compared with previous studies reporting higher distress (studies that businesses selling baldness “treatments” have often funded).^{60,61} We, therefore, stress an alternative view of baldness' impact. Specifically, that whilst baldness is stigmatised, this stigma might only be slight. Baldness might be a concern only for some men. Previous studies have found^{43,62} that those who are balding can and do develop positive perspectives on baldness (e.g., by comparing it with terminal medical conditions). As mentioned, the research on baldness' impact tends to have only studied biased samples of balding men who may be more likely to be distressed than other balding men (e.g., those recruited via a hair loss clinic³⁷). In addition, some websites and forums about baldness, which are the most popular sources of baldness information have

Table 2. Number and percentages of ranked body dissatisfaction according to appearance based on the responses to self-discrepancy index. ³⁰

Ranking	Muscularity ^a	Body fat/ weight ^b	Head and facial features ^c	Mesomorphy ^d	Height ^e	Clearer skin ^f	Smile and teeth ^g	Body hair and facial hair ^h	Hair ⁱ	Other ^j	Skin tautness and complexion ^k	Skin colour ^l	Total
First	14 (21.9%)	19 (26.0%)	7 (9.6%)	8 (9.8%)	5 (6.8%)	5 (6.8%)	3 (4.1%)	3 (4.1%)	4 (5.5%)	1 (1.4%)	–	–	73 (100 %)
Second	14 (21.9%)	5 (7.8%)	7 (10.9%)	9 (14.1%)	9 (14.1%)	5 (7.8%)	7 (10.9%)	2 (3.1%)	3 (4.7%)	2 (3.1%)	1 (1.6%)	–	64 (100 %)
Third	14 (25.9%)	5 (9.3%)	11 (13.4%)	3 (5.6%)	3 (5.6%)	4 (7.4%)	2 (3.7%)	4 (7.4%)	1 (1.9%)	2 (3.7%)	2 (3.7%)	3 (5.6%)	54 (100 %)
Total	46 (24.1%)	29 (15.2%)	25 (13.1%)	20 (10.5%)	17 (8.9%)	14 (7.3%)	12 (6.3%)	9 (4.7%)	8 (4.2%)	5 (2.6%)	3 (1.6%)	3 (1.6%)	191 (100%)

Dashes indicate no participant ranked this appearance aspect as their first or second ranked dissatisfaction area.

^aAspects of muscularity: bigger calves and legs; ^b Aspects of body fat/weight: thinner, flatter stomach, leaner face or leanness; ^c Aspects of head and facial features: jaw, nose, eyebrow, eyes, forehead or head shape; ^d Aspects of mesomorphy (the combination of high muscularity and low body fat so muscular shapes are visible): better abs, body/muscle definition or muscular appearance; ^e Aspects of height: height; ^f Aspects of clearer skin: less spotty, birthmarks, skin spots or stretchmarks; ^g Aspects of smile and teeth: teeth alignment, teeth whiteness and smile; ^h Aspects of body and facial hair: facial/chest hair, more facial hair or better beard; ⁱ Aspects of hair: hair thickness or fuller hairline; ^j Aspects of other: posture, hands and gait; ^k Aspects of skin tautness and complexion: smooth looking skin and skin tone; ^l Aspects of skin colour: Tan and colour of the skin.

been found to deliberately depict balding men as profoundly and irreversibly distressed.⁴⁰ Thus, our finding that baldness stigma was slight can be reassuring. Further, most men re-reported high wellbeing and low body dissatisfaction, including baldness dissatisfaction, which suggests resilience to seemingly, unrelenting, extant and significant appearance pressure exists.^{1,2,8} This is promising for the future of men's health.

Body dissatisfaction

Our second research question was to explore what forms of body dissatisfaction including baldness dissatisfaction, men may have and how this links to men's wellbeing and muscularity behaviours. We deployed an idiographic measure of body dissatisfaction: the SDI.³⁰ This allowed participants to specify any areas of appearance they were dissatisfied with (e.g., including dissatisfaction with jaw, nose, eyebrows, eyes, forehead, head shape and skin colour). To gain muscularity, lose body weight or both were the most common areas (50%) of body dissatisfaction men had, in line with much previous research.^{32,63} Nonetheless, participants' body dissatisfaction also concerned other areas of appearance beyond mesomorphy or the other typically measured region of men's body dissatisfaction: height (9%^{29,31}; MBAS-R⁶⁴).

Almost 42% of participants indicated different aspects they were dissatisfied with including their jaws, noses, eyebrows, head shapes, teeth (alignment and colour), facial hair, hand size and skin (blemishes, tone and -colour). Previous research has indicated that body dissatisfaction concerns a wide range of appearance aspects with a parallel broad range of impacts.^{32,39} The other measure of body dissatisfaction, the BPSS-M,⁶⁴ was nomothetic, and one of the more comprehensive measures of body dissatisfaction available. Nonetheless, it too is dominated by items relating to mesomorphy dissatisfaction.

Approximately 26% of participant responses to the SDI concerned forms of body dissatisfaction that the BPSS-M could not capture (such as jawline and nose shape dissatisfaction). In support, both subscales of the BPSS-M (body parts- and head

hair- satisfaction) were only weakly correlated with the other measure of body dissatisfaction (the SDI). In addition, body dissatisfaction measures typically calculate a single, total, score (participants in the study rated their satisfaction on average around the midpoint of this scale). Hence, participants who were completely dissatisfied with their nose size or "face", happy with their height and satisfied with other aspects of their appearance would not be distinguishable to those generally content with their entire appearance. This outcome is counterintuitive because extreme dissatisfaction with even one aspect of appearance can have a profound impact on an individual's life.^{39,65} Head hair and body part satisfaction were moderately correlated. These results support the existence of a comprehensive appearance ideal of mesomorphy and other aspects of appearance including a full head of hair etc. Men reported low to moderate body dissatisfaction (on both measures), low head hair dissatisfaction, relatively high wellbeing and low uptake of muscularity enhancing behaviours. The BPSS-M and the SDI were weakly correlated with wellbeing and muscularity behaviours. These results are encouraging. They suggest men are managing to resist the powerful male appearance pressures that have been documented.^{1,4} Nonetheless, much of the variance in participants responses were not related, and our body dissatisfactions measures were only partly correlated. This result underscores the complexity of men's body dissatisfaction experiences, the difficulty in capturing them in research and the continual disjunction that exists between body dissatisfaction accounts and related behaviours/ outcomes.⁶⁶

Baldness dissatisfaction

To answer our second research question, we were particularly keen to include baldness as a site of body dissatisfaction given head hair's centrality to the male appearance ideal.^{39,40} In our sample, baldness dissatisfaction appeared to be minimal across both measures. Only eight (4.2%) participants described baldness as the first, second or third most important aspect of their appearance they wished to change. In addition, participants exhibited relatively high satisfaction levels on the baldness dissatisfaction

subscale across both conditions (range, 4–24; $M = 18.40$; $SD = 4.89$). As participants in the sample were young ($M = 23.62$, $SD = 7.80$) most are not likely bald. Evidence suggests between 20 and 30% of men experience baldness at this age.^{33,67} Alternatively, it might have been that men were balding in our study but that they were not dissatisfied with it; this contradicted some, though not all, of the previous literature.^{32,36,68} Indeed, some studies have found men can avoid psychological distress with baldness,^{61,69} specifically if they accept it.³⁸ Perhaps participants in our study were doing this.

Strengths

One strength of our study was the design which involved minimal researcher influence (e.g., an online questionnaire) that may have helped counter masculine-driven barriers to disclosure. Second, by being independent (not commercially funded), this study goes toward building a distinct and more trustworthy analysis of baldness' stigma.

Limitations

Whilst the sample was practical, our study might have meant baldness was less prominent for them compared with other men. In addition, our study was limited by failing to assess baldness extent, which means we cannot say whether distress was low because prevalence was low or not. Future research could replicate these findings in representative samples of men that assess baldness extent. The categorisation of the facial expressions, whilst practical, was also imperfect (i.e., some expressions may be both positive and negative), and future research should develop more sophisticated and robust assessments of baldness connotations. Validated and brief assessments of the impacts of male body dissatisfaction effects (apart from muscularity behaviours) are rare. Thus, we were limited in only assessing this outcome. Future research deploying validated measures assessing other impacts including cosmetic surgery consideration, makeup use, etc., are needed. Indeed, the SDI could be adapted so that participants can self-generate the areas of body dissatisfaction they have and the impacts body dissatisfaction has on themselves.

CONCLUSION

Men reported a range of body dissatisfaction aspects, though generally were not impacted heavily nor highly dissatisfied. We found that men attach more negative meanings onto images of bald men than those without, among a sample of men with low levels of baldness dissatisfaction. These findings underscore the complexity of men's body dissatisfaction and the challenges in capturing these in research.

CONFLICTS OF INTEREST

No potential conflict of interest was reported by the authors.

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Int J Mens Com Soc Health Vol 4(1):e68–e82; June 6, 2021.

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