

Research Article

Physical Attraction Measured Through a Body Figure Scale in an Age of Changing Body Ideals

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• Attraction; Body image; Fittspiration; Muscularity, BMI

Abstract

There is a substantial body of research that uses figure rating scales for personal body image assessment and satisfaction. The aim of this research was to determine the difference in attractiveness of physical body image by age of men and women. 460 participants who were representative of the population of a major Australian regional city were sampled using face-to-face interviews and a computer-based figure rating scales survey tool. Women were found likely to identify thin images of women as more attractive to men; and men were found likely to identify more muscular images of men as more attractive to women. These findings replicate similar studies and have implications for clinical treatments related to body image, eating disorders, and compulsive exercise.

INTRODUCTION

Like all species that reproduce sexually, humans have adopted evolutionary strategies to select a mate with high genetic quality. Women select potential mates using two major factors: physical features which indicate the best possible genetic quality; and paternal behaviors which indicate those who are most likely to provide for the woman and the partnership's offspring [1]. Physically strong men are perceived as valuable for protecting women and their paired offspring, however are also viewed as poor in nurturing [2]. Women are known to prefer long-term mates who can provide for them and their offspring; however it is not unknown for women to adopt two mates in succession, one of whom passes high-quality genes on to the offspring; and a subsequent mate or mates who provide resources, nurturing, and protection [1,3]. Gross physical features of men that are indicative of good genetics and which are attractive to women are muscularity, broad shoulders, and a narrow waist. These features are associated with strength, testosterone, robust genetics (including resistance to disease), and cardiovascular fitness [4]. The dominant physical characteristic that displays increased muscularity and decreased adiposity in men is the waist-to-hip ratio, in which a low waist-to-hip ratio is demonstrative of a V-shaped torso. This has been shown in many studies to be a key visual indicator of men's attractiveness to women [4,5].

Men, on the other hand, select women to mate with based on health, reproductive potential, and the ability to nurture the partnership's offspring. Gross physical features which men find attractive in women include adiposity, breast size, buttock size, and hip width. These features are associated with fertility and reproductive potential, fat storage for lean times, and milk

production potential [6]. Research suggested that the dominant physical characteristic that displays robust female reproductively potential is the waist-to-hip ratio, and is a valid indicator of disease (or lack of) and sexual hormone health [7]. A low waist-to-hip ratio (a thin waist but wider hips - a curvaceous body) demonstrates fertility with optimal fat distribution, and has been shown to be highly attractive to men [8]. Initially proposed by Hens [9] and now more recently accepted, central and overall adiposity has been found to have a stronger association with attractiveness to men than waist-to-hip ratio, with Body Mass Index (BMI) now considered to be the primary visual physical trait in attractiveness [10,11]. Although large breasts are also a point of attractiveness to men [12], there is little evidence that breast size has any effect in successful conception or pregnancy outcome [6].

There are two inter-competitive issues in the perception of physical attractiveness in a potential mate. The first is that there are considerable studies demonstrating that thinness and muscularity are desired in a potential mate as women select supposedly physically strong men and men select supposedly fertile women [13], with the corollary that overweight and obesity are found less attractive [10,14], despite studies showing that body shape is not generally indicative of current or future health other than the extremely underweight or obese [15]. The second is that people have been shown to select characteristics in a mate that are similar to their own (including body shape) as more attractive [16,17]. In both men and women socioeconomic, cultural, ethnic, and sexual preference all show variations in physical appearance preferences. Studies by Yanover and Thompson [14], Wang and Ekeleme-Egedigwe, et al. [17], and others have found that Caucasian and Hispanic men and women

find leaner members of the opposite sex as more attractive; while African-American men are more attracted to women with greater adiposity and African-American women are more attracted to more muscular men. In countries and among populations of lower socio-economic status, larger and more adipose bodies are culturally perceived as a sign of health, beauty, prestige, and prosperity; while thinner bodies may be negatively perceived as a sign of ill health or poverty [18].

Factors for mate selection other than body shape appeal have also been identified for both men and women, with facial attractiveness and facial features a significant factor in mate selection for both sexes – and there are some studies that have shown a weak correlation between facial symmetry and attractiveness to health [19-21]. Women in particular identify non-physical factors such as higher socio-economic-status, education, and ambition as important factors in the selection of a mate [22].

Figure Rating Scales

Most body image assessment in the past was conducted through the use of body silhouettes on a sliding scale in which participants were requested to select the figure that best represented their response to the question posed. Stunkard and Sørensen et al. [23], developed a set of nine silhouettes of men and women ranging from very thin to very fat which came to be known as the Stunkard Scale. The Stunkard Scale has been validated to BMI in several studies, with a Pearson correlation coefficient of 0.67 [24], and with approximate BMI values allocated to each figure in the scale [25]. Criticisms of such scales include that they are ordinal or categorical while people vary in adiposity on a continuous spectrum [26], that there are inconsistent size changes between different regions in adjacent silhouettes [27], that such scales only account for change along a scale from ectomorphic to endomorphic without consideration of muscularity [28], that such scales do not account for different distributions of weight around the human body [29], and that many such scales are typically based on Caucasian physical features [30].

Alternatives to the Stunkard Scale have been developed over the years, including silhouette scales developed by Gardner and Stark et al. [31], and more recently figure scales based on photographs or computer-generated images which have been validated to BMI [28,29]. As mentioned, standard figure rating scales have come under criticism for their place on the endomorphic scale, and as such, there have also been a number of figure rating scales developed for men which show muscular variation; in which the scale varies from ectomorphic to mesomorphic [28,32]. Ralph-Nearman and Filik [33,34] have also produced dual scales for men and women who include both ectomorphic to endomorphic and ectomorphic to mesomorphic images.

Figure rating scales were originally developed for self-assessment of subject body image. It has been found in many studies that personal body image assessment and satisfaction

varies across age, ethnicity [35], socioeconomic status [36], and sexual preference [37-39]. These studies using figure rating scales do not necessarily reflect whether a person is satisfied or not with their body, and they often do not reflect body image as a whole, as body image is a complex construct encompassing multiple negative and positive components. However figure rating scales have been used in many studies to measure overall body shape satisfaction or otherwise. Many studies have identified that homosexual or gay men have a greater level of body dissatisfaction than heterosexual men, with a desire to be both thinner and more muscular [40], while homosexual or lesbian women have a lower level of body dissatisfaction than heterosexual women, and select a larger body size as ideal [37].

Figure rating scales have also been used to measure male and female physical attractiveness. Like self-assessment, physical attractiveness has been found to vary across several factors, and the use of body figure rating scales to identify the most attractive body shape has shown results similar to general physical attractiveness. Lamb and Jackson et al. [41], found that younger age cohorts found thinner body figures more attractive; Swami and Tovée [42] found men living in urban areas preferred thinner female body figures than those living in rural areas; and Overstreet and Quinn et al. [43], found Caucasian women in the US believed men found thinner women more attractive while African-American women believed men found a curvier woman more attractive. Across the majority of reported studies, men believe women to find a more muscled man more attractive than females report they prefer, and women believe men to find a thinner stature woman more attractive than males report they prefer [44,45].

Body figures on the heavier side of the central figure are consistently rated as less attractive (and less healthy) than body figures on the thinner side of the central figure when using an ectomorphic to endomorphic figure rating scale; yet in research which includes an ectomorphic to mesomorphic figure rating scale or which includes some muscular body images, muscular body figures at the same BMI as an endomorphic figure are rated as more attractive [14]. Homosexual males indicate a clear preference for more muscular men rather than just larger men [46].

Overweight and Obesity

The average height and weight of the world's population has increased substantially in recent decades, and there has been a rapid increase in adiposity (the prevalence of overweight and obesity has doubled globally since 1980), which is regularly termed the 'obesity epidemic' [47]. Although initially a health issue affecting developed nations, obesity is now prevalent in all nations regardless of developmental status [48]. In 2017-18, two thirds (67.0%) of Australian adults were overweight or obese, as determined by BMI > 25, consisting of 74.5% of adult men and 59.7% of adult women. The BMI of the average Australian man is 28.5 and the BMI of the average Australian woman is 27.6 [49]. These BMI figures are represented as figure six of the nine figures on the Stunkard men's scale, and between figures five and

six of the nine figures on the Stunkard women's scale. But these averages are rarely depicted in the media [50].

Body Ideals

Traditionally, advertising, media (and now social media) have portrayed a thin body shape as the preferred human body shape. This thin-ideal has particularly been portrayed as the preferred body shape for women [51,52]. More recently – driven through grass-roots and social media – the body positivity movement has depicted a broader range of body sizes and appearances more inclusive of different ethnicities [53]. Criticism of the body positivity movement is that for women particularly, it merely replaces the thin ideal with another body shape that is difficult to achieve – a “curvy” ideal that is a more extreme version of the hourglass figure consisting of a thin body with large breasts and large buttocks [54].

In addition to the curvy ideal and the body positivity movement, portrayals of fit and athletic body ideals for both men and women have been increasing [55-57]. The athletic body ideal promotes a more muscular physique than the thin ideal and is promoted through “fitspiration,” – images and words shared especially through social media to inspire both men and women develop an athletic and more muscular body shape [58]. The sharing of photographs and videos is now one of the most popular activities on social media [59], and social media platforms such as Instagram are awash with fitspiration imagery. Studies such as those by Ahrens and Brennan et al. [60], has found that female fitness influencers in particular post images that depict the thin and muscular ideal. There is a significant body of research that has shown that depictions of the more muscular body ideals are leading to negative comparisons in individuals, both of self and in potential mates [61,62]. Lightly muscular body ideals, particularly in women, have been found to be more attractive to the opposite sex [55], and as such, men and women are dieting and exercising to achieve this athletic muscular ideal to increase their attractiveness [61,63]. Overall, these studies demonstrate a shift towards a desirable figure that suggests physical fitness via muscularity rather than thinness.

While published research has demonstrated the fitspiration phenomenon – particularly photographs and images published on social media – has had a detrimental effect on personal body image [62,64], there are relatively few studies on the effect that fitspiration has had on what people perceive to be attractive in a potential mate. Bozsik and Whisenhunt, et al. [55] found that over a period of 15 years, Miss USA pageant winners have become increasingly muscular, while a study of Instagram posts by male users found that those depicting men adhering to a muscular but lean body type received significantly more likes and comments [65]. Younger people are heavier users of social media in general, and their use is more heavily weighted to photo and video social media such as Instagram and TikTok [66]. Hence it is thought likely that younger persons would find a more mesomorphic or muscular body shape as more attractive due to the saturation and influence of fitspiration-themed social media.

AIM

The aim of this research was to determine the difference in attractiveness of physical body image by age of men and women. It was hypothesized that:

- Participants in younger age groups would be more likely to identify more mesomorph or muscular images as more attractive.
- Women would be more likely to identify more ectomorph or thin images of women as more attractive to men.
- Men would be more likely to identify more mesomorph or muscular images of men as more attractive to women.

It was also the intent of this study to obtain a sample that was more representative of the general population than has been achieved in the majority of other recent studies in which undergraduate university or college students have been the sample population [44,61,67-69].

MATERIALS AND METHODS

Participants were recruited in person and were requested to complete a computer-based survey to gather age and sex and provide responses to questions of attractiveness using figure rating scales. Two dimensional men's and women's figure rating scales which had been developed by Ralph-Nearman and Filik [33], Ralph-Nearman and Filik [34] were used. There are two figure rating scales for each sex; an ectomorphic to endomorphic figure rating scale, and an ectomorphic to mesomorphic scale. These scales were developed with the assistance of a professional artist/graphic designer, as described by Ralph-Nearman and Filik [33], Ralph-Nearman and Filik [34]. The body figures at the extreme ends of the scales (the most emaciated, most obese and most muscular figures) were modelled from photographs of anorexic, obese, and weight-lifting males. Figures between the extremes were drawn, increasing in size by 10% in width between each body figure. The figure rating scales were assessed for validity in relation to actual body measures and test-retest reliability in participant selection, and found to provide valid and reliable results [33,34]. The figure rating scales as developed by Ralph-Nearman and Filik and used in this study are depicted in the results in Figures 1,2.

Data Collection

Participant sampling was conducted at various public locations around a major Australian city. Locations were selected where a cross-section of persons representative of the population were likely to occur. Sampling locations included parks and recreation areas, sporting venues, market venues, and various shopping centers where permission to conduct sampling was granted. Sampling took place at various times of the day (morning, during the day, afternoon, and evening) in order to achieve a population-representative sample. A sample size of 420 persons was calculated as the minimum required to achieve sufficient statistical power (0.8 large effect size) at the $p < 0.05$

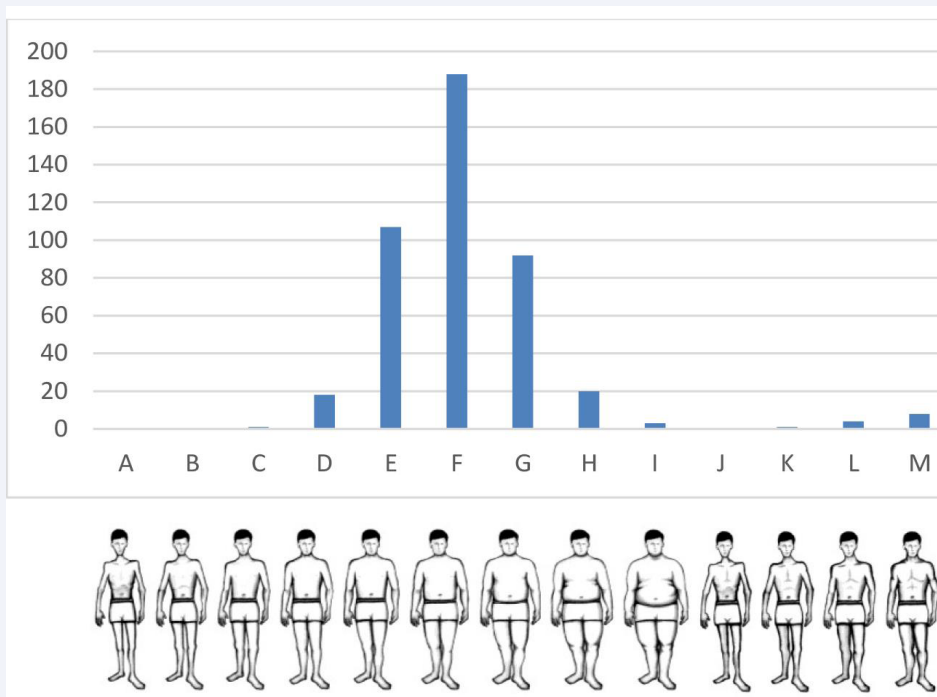


Figure 1 Responses for Average Australian Man. Body Figural scales used by permission from Dr Christina Ralph-Nearman [33].

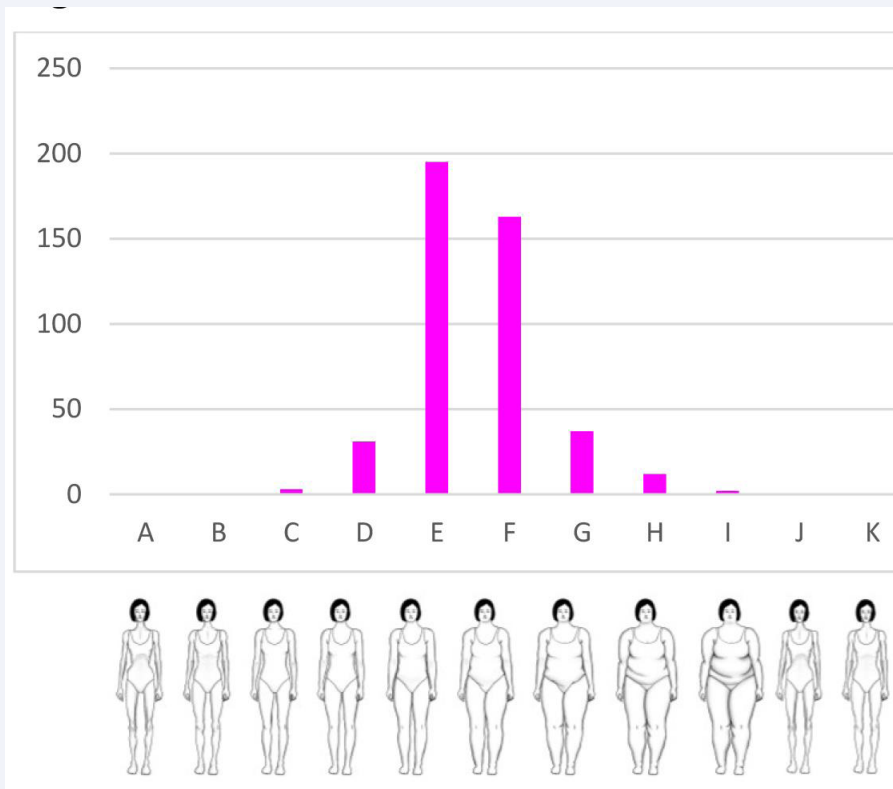


Figure 2 Responses for Average Australian Woman. Body figural scales used by permission from Dr Christina Ralph-Nearman [33]

level, consisting of approximately 50% male and 50% female participants and distributed approximately evenly across the six 10-year age groups. All participants sampling was conducted by the authors. Selection bias was minimized through a system of approaching every fourth person who walked past a static location and requesting their participation in the research project. If those approached showed interest, the researchers provided those prospective participants with the participant information sheet which described the study. Persons who confirmed they were adults (persons over the age of 18) and who read the participant information sheet and provided consent were invited to complete the computer-based survey on a provided lap-top computer. The computer-based survey requested participants to provide their biological sex, age group, and whether they were more attracted to members of the same or opposite biological sex. No ethnicity data was captured as it was not the intent of this study to examine any differences in attractiveness ratings between ethnicity of the participants. Sexual preference data was not collected – however participants were asked if they were more attracted to men or women (regardless of sex) – and were presented with the figure rating scale which aligned with their sexual preference. Again, it was not the intent of this study to examine any differences in attractiveness ratings by sexual preference of the participants. Age group and sex of the participants was collected as they were the most important variables to test the hypothesis.

The ectomorph to endomorphic figure rating scale and the ectomorph to mesomorph figure rating scale for both men and women were provided, and participants were requested to select the figure that best represented what they considered to be the best-fit average figure for both men and women in the Australian population; which figure best represented what they consider to be the most attractive (depending on sexual preference); and which figure best represented what they believe their preferred sexual partner (men or women) would find the most attractive. The two figure rating scales were presented on two separate lines and participants were made aware they were making their single selection between two scales. 222 men and 238 women for a total of 460 participants were sampled. Twelve participants withdrew from the survey before completion and their data was deleted. All other surveys were complete and no other data was removed.

Data Analysis

The data was compiled and analyzed, and results drawn. Data collected from the computer-based survey was recorded directly in Microsoft Excel (Microsoft Corporation) version 2110 (build 14527.20234). Data analysis and statistical tests were conducted using R (The R Foundation for Statistical Computing) version 4.0.3 – “Bunny-Wunnies Freak Out”. The two ordinal scales (ectomorph to endomorphic and ectomorph to mesomorph) were concatenated to make a single categorical scale for each sex. Correlations between sex, age group, and figure selection were conducted using chi square analysis.

RESULTS AND DISCUSSION

The demographic characteristics of the participants are

shown in Table 1. Of the responses to the survey, the total of 460 valid responses represents 0.2% of the population in the city (population circa 200,000). The participants consisted of 51.7% (n=238) female, and 48.3% (n=222) male. Distribution of participants across the six 10-year age groups was weighted more heavily towards the younger age groups. The demographic characteristics of the participants are detailed in Table 1.

Participant responses to the request to select the figure that best represented what they consider to be the best-fit average figure for both men and women in the Australian population are depicted in (Figures 1,2). The most frequently selected figure for the average Australian man was (Figure F), with the mean slightly higher. The most frequently selected figure for the average Australian woman was figure E, with the mean selection approximately equally weighted between (Figures E,F). There were no significant results in the selection by sex or age group of participant.

Participants who identified as being more attracted to men were asked to select the figure that best represented which male figure they considered to have the most attractive body shape; and participants who identified as being more attracted to women were asked to select the figure that best represented which female figure they considered to have the most attractive body shape. Participants were also asked to choose which figure other people would select to have the most attractive body shape (either men or women, depending on sexual preference).

There was a noticeable difference between which figure participants selected as the most attractive male body shape and which figure they considered other people would select as the most attractive male body shape. Male participants believed a more muscular male body shape was more attractive to others (centered on body (Figure N) on the mesomorph scale), with (Figures M,O) also highly selected. Those who were more attracted to men however, selected (Figures M,N) (on the mesomorphic scale), with (Figure E) (on the endomorphic scale) also often selected as the most attractive men’s body shape. The use of a categorical scale precludes the calculation of a statistically significant difference between what participants selected as the most attractive body shape and the body shape thought to be most attractive to other people; however the

Table 1: Demographic Characteristics of the Respondents

Demographic Characteristic	%	(n)
Sex		
Male	48.3	(222)
Female	51.7	(238)
Age Group		
Under 25	17.4	(80)
25 – 34	22.2	(102)
35 – 44	20.0	(92)
45 – 54	12.8	(59)
55 – 64	15.0	(69)
65 and over	12.6	(58)
Total		(460)

dissimilarity in the body shape selected as the most attractive and the body shape selected as the most attractive to others (by proportion of selection due to differing numbers of male and female participants) for men is depicted graphically in Figure 3. Chi square tests showed no significant results in the selection of most attractive male body shape or male body shape most attractive to others by sex ($p=1$ and $p=1$; respectively), or age group ($p=0.8$ and $p=0.3$ respectively) of participant.

As for men, there was a noticeable difference between which figure participants selected as the most attractive female body shape and which figure they considered other people would select as the most attractive female body shape. It was thought by participants that the female figure most would find attractive was (Figure D) (on the endomorphic scale), with (Figures C,E) also highly selected. Additionally, female (Figures L,M) (on the mesomorph scale) were also selected as the most attractive to others – particularly by women respondents in the 45-54 and 55-64 year age groups. This was not found to be statistically significant however. Participants more attracted to women found less thin body shapes (Figure D,E) more attractive. Again, the use of a categorical scale precludes the calculation of a statistically significant difference between what participants selected as the most attractive body shape and the body shape thought to be most attractive to other people; and the dissimilarity in the body shape selected as the most attractive and the body shape selected as the most attractive to others (by proportion) for women is depicted in (Figure 4). There were no significant results in the selection by sex or age group of participant.

DISCUSSION

The most common use of figure rating scales is to measure personal body shape satisfaction and self-esteem – although noting personal body satisfaction is complex with many components. There are some previous studies which have used figure rating scales to measure attractiveness, although the majority of these studies have been conducted with small sample sizes of undergraduate college/university students – and commonly undergraduate psychology students. This is the first study in which a broad range of participants representative of the general community have used figure rating scales to select the figure that best represents the most attractive body shape in their desired partner, and the figure that best represents that which they believe their prospective partner would find the most attractive. Personal body shape satisfaction – a complex construct inclusive of height, adiposity, breast size (for females), perceived attractiveness, and other factors was not collected. As far as the authors are aware, this is the first such study to obtain a sample representative of the community both in general terms, and in sample size to achieve a suitable statistical power.

Average Australian Body Figure

As previously noted, the Stunkard Scale has a high degree of correlation to approximate BMI values for both the men's and women's scale [25]. Approximate BMI figures were applied to the body figure scales used in this study, with the centre-most

figure (figure E on the endomorphic scale) being equal to the centre-most figure on the Stunkard Scale (BMI of 28.85 for men and 25.68 for women), and a BMI of 10% lower or higher applied to each subsequent figure to the left and right of the centre-most figure respectfully, in accordance with the construction of the figure scales as described by Ralph-Nearman and Filik [33], Ralph-Nearman and Filik [34]. The intent of requesting participants to select the best-fit average figure for both men and women in the Australian population was to *prime* the participants towards a realistic selection of the most attractive body shape. The results were surprising, with the mean selection for the average Australian man being slightly greater than figure F (an approximate BMI of a little higher than 28.85); and the mean selection for the average Australian woman being approximately between figures E and F (an approximate BMI of 26.97). The mean Australian male BMI is 28.5, and the mean Australian female BMI is 27.6 [49]. This reveals that survey participants were remarkably well-aware of the general body shape of the Australian population; however other studies suggest that such body shapes – although they meet the BMI definitions of overweight – are not generally recognised by the population as clinically overweight or obese [70,71].

Most Attractive Body Figure

Body shape is just one element of what others find attractive in a potential mate. Other factors that influence physical attractiveness include overall height (in males) [72], breast size (in females) [12,73], facial features and symmetry, hair style and length; and non-physical factors such as clothing, personality, wealth and success. The results of this study show that there is a difference between what men and women perceive as the ideal body shape for their sex, and what body shape people find most attractive. Overall, men believed a more mesomorph (a more muscular) body shape to be more attractive to others; while women believed a more ectomorph (thin) body shape to be more attractive to others.

These results are similar to and replicate those found in other studies [44,69,74], in that men overestimated the heaviness and muscularity that women find attractive in a potential partner, and that women overestimated the thinness that men find attractive in a potential partner. The reasons behind this are undoubtedly complex. While advertising, media, social media, peer comparison, and family pressure are factors contributing to personal body image assessment and satisfaction, the same factors likely drive the misperception of attractiveness to potential mates. In particular, response to what people see in the media might explain the discrepancy between what women want and what men think they want (and vice versa), with media marketed at men pushing increased muscularity as more attractive and media marketed at women pushing the thin-ideal as more attractive. Perceptions of self-perceived body shape attractiveness are undoubtedly partially due to social conditioning via images pushed through advertising and media; with several studies identifying the body ideal images aimed at men and the body ideal images aimed at women being quite different [75,76].

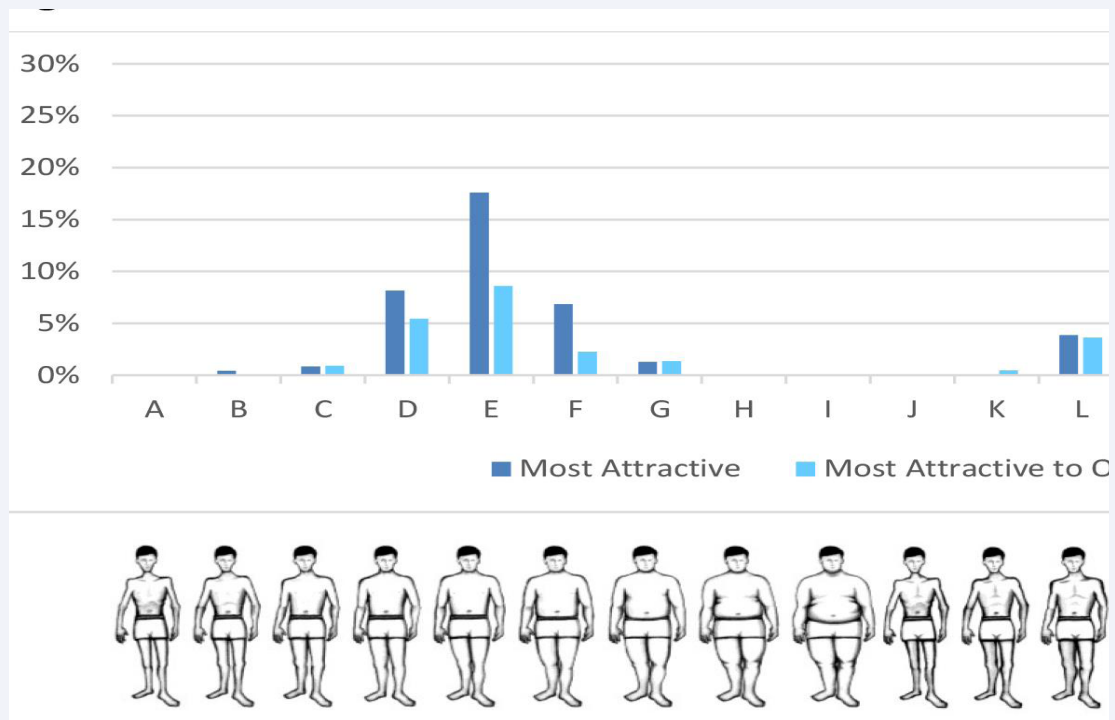


Figure 3 Proportions of Male Body Shape selected as the Most Attractive and as Most Attractive to Others.

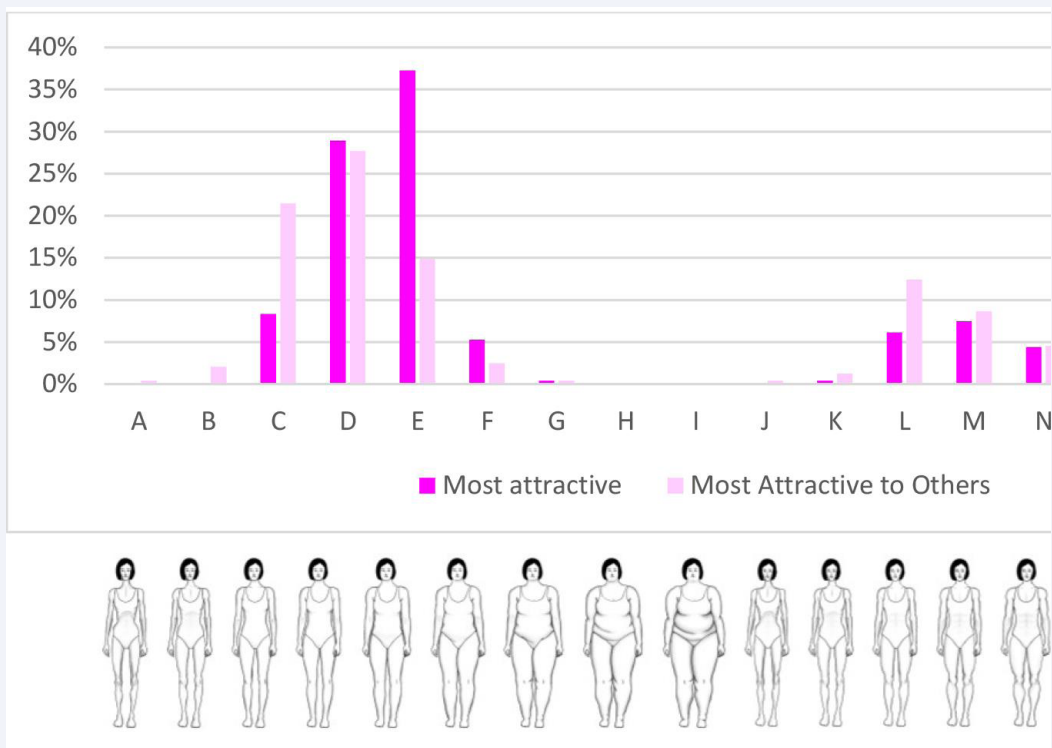


Figure 4 Proportions of Female Body Shape selected as the Most Attractive and as Most Attractive to Others.

This perception of body shape and body muscularity attractiveness might have an impact on personal body image, leading to personal body shape dissatisfaction which is dissimilar to what is actually perceived as a preferred body shape by a potential mate. This is more pronounced in females than males, with an increasing trend for women to desire the athletic muscular ideal rather than the thin ideal [63,77], and which may be even more difficult to achieve than the thin ideal [67].

There is an additional pair of confounders: In studies such as Yanover and Thompson [14], women's notion of the most attractive female body shape was thinner than what was perceived as the healthiest, and men's notion of the most attractive male body shape was heavier than what was perceived as the healthiest. This suggests both men and women attribute more value to attractiveness (and finding a mate) than to health. The other confounder which might influence attractiveness is the context or circumstance. Women may form a short-term relationship to mate for high-quality genes; but then form a long-term relationship for offspring cultivation. Therefore pre-defining selection of the most attractive body shape for short-term or long-term relationships could reveal a disparity in selection – in both men and women [1-3,68,74].

From this study and others, it follows that both men and women perceive the attractiveness of their body shape through a misperception of the lens of others. For women, this can lead to unhealthy exercise habits, eating disorders, and negative body satisfaction; while in men the primary consequence is unhealthy exercise habits – although eating disorders and negative body image assessment and satisfaction can also result [32,61,67,78]. These findings have implications for clinical treatments related to body image, compulsive exercise, and media literacy, and it is recommended that the school health curriculum include information to help individuals interpret media messaging and prevent young adults (the heaviest users of social media) and others from experiencing negative effects from the parade of inspiration imagery [64,65,79].

LIMITATIONS

There are a number of limitations to this study. Like previous criticisms of figure rating scales, the scales used in this study do not account for different distributions of weight around the human body and do not account for different body shapes based on ethnicity. During the conduct of the survey, survey participants also noted preference for other body features they find attractive rather than just overall body shape including height, hair length, and breast size. The collection of further participant details (such as ethnicity, education level, or participant BMI) may have permitted more analysis, however would have also had a negative effect on the voluntary participation rate – which the researchers found to be low (less than 1 in 20 who were approached agreed to take part). The collection of such data would no doubt provide further insights; however a recruitment and sampling methodology different to that used in this study (convenience sampling of the public) would most likely be required.

The use of two separate ordinal scales (ectomorph to endomorphic and ectomorph to mesomorph figure rating scales) concatenated into a single categorical scale for men and women complicated participant selection of body images and statistical analysis; however the gross results – that men believe a more muscular male body shape is more attractive to others and that women believe a thinner female body shape is more attractive to others – is similar to and replicates the findings of previously published research.

CONCLUSION

The results of this study did not support the hypothesis that participants in younger age groups, both men and women, would be more likely to identify more mesomorph or muscular images as more attractive. The hypotheses that women are more likely to identify more ectomorph or thin images of women as more attractive to men; and that men are more likely to identify more mesomorph or muscular images of men as more attractive to women were confirmed. Although these results have replicated the findings found in other studies, this work was undertaken with a broader range of participants who were more representative of the general population than has been sampled previously. A surprising finding was that both men and women participants in the study were well aware of the body shape of the average Australian man and woman. Even with the limitations of this study, the results show the disparity between what men and women perceive as the ideal body shape for their sex, and what body shape people find most attractive. The results demonstrate the misperceptions of attractiveness of body shape, which may lead to personal body shape dissatisfaction. These findings have implications for clinical treatments related to body image, eating disorders, and compulsive exercise; in that correction of these misperceptions might have value in the reduction of personal body image dissatisfaction and in the treatment of eating disorders. These findings also illustrate that clinical treatments focusing on maintaining a healthy body at the expense of perceived attractiveness of body shape are unlikely to be effective.

ACKNOWLEDGEMENTS

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Ethics Approval

The study received ethical approval from the Townsville Hospital and Health Service Human Research Ethics Committee (HREC) on 07 July 2021. HREC reference number HREC/QTHS/76605.

Data Availability Statement

The data that support the findings of this study are publicly available from Men delay Data repository at, <https://data.mendeley.com/datasets/ht4h95h7cm/2>

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