RENA MEI

The Average Beauty

Introduction

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ROM SKINNY JEANS TO FIVE-INCH HEELS AND FOOT BINDING TO plastic surgery, women have regularly felt pressure to indulge in some form of artificial self-improvement. These conscious decisions to attract men may reflect subconscious, psychological perceptions of attraction woven throughout the course of evolution. One of these influential yet contradictory factors in sexual selection is height. Admired female models boasted in the media are generally taller than average female height (Pettijohn & Jungeberg, 2004; McDowell et al., 2008). However, studies show that men generally tend to prefer female partners who are relatively shorter (Pawlowski, 2003), which may be due to cultural and evolutionary norms in which men exhibit physical dominance over women (Buss, 1994; Fielding et al., 2008). A possible reasoning for this paradox may be the influence of the aesthetic and erotic quality of female legs, which contribute to the perception of height (Swami et al., 2006; Sorokowski et al., 2008). Existing studies argue over whether height or leg length is more influential in indicating health and fertility (Lawlor et al., 2002; Pawlowski et al., 2003; Lawlor et al., 2004; Swami et al., 2006; Fielding et al., 2008; Fraser et al., 2008, Helle et al., 2008; Sorokowski et al., 2008). Despite the evidence indicating both height and leg length are influential towards female attraction, I have found no current studies that find a compromise between the two components. Therefore I propose to demonstrate that the ideal female physique, which demonstrates the greatest potential of health, fertility and attraction, is average height with high leg-to-body ratio.

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en may have evolved a preference for traits like youth, femininity, health, and fertility in order to increase their own chances of survival, as well as the chances of survival for future generations (Buss, 1994). There is little doubt that height plays a significant role in such sexual selection. A look at the individual description statistics of models in *Playboy*’s “Playmate of the Year” within a 40 year time period would show that both the average height of nude models is about 67 inches (Pettijohn & Jungeberg, 2004), while the average height of American women above the age of twenty is only 63.8 inches (McDowell et al., 2008). Fashion models are even taller. In the eligibility requirements to participate in the contemporary television show “America’s Next Top Model,” 67 inches is merely the height minimum (ANTM Eligibility Form, 2007). Even in one season of the show where the height restriction was lifted to allow for “Mini Models,” the average height was 65.6 inches (ANTM, 2009), nearly two inches above average. Height is a trait flaunted not only in the United States, but also in poorer societies such as Gambia, where tall height is a quality that is desired in a female mate (Fielding et al., 2008).

 This desire for tall height may be because it is generally associated with health and status. The better nourished a person is during infancy and adolescence, the more successfully their bodies are allowed to grow (Fielding et al., 2008). This supports the proposed theory that height is also linked with fertility (Fielding et al., 2008; Helle, 2008). Taller women may have wider pelvises, which would decrease the risk of both infant and maternal mortality by allowing easier births of bigger babies (as cited in Swami et al., 2006). Additionally, taller height suggests a positive correlation with childhood socioeconomic status (Buunk et al., 2008; Fielding et al., 2008). The child’s family must have had the available socioeconomic capacity to provide the necessary attention and nutrition. Not only may height indicate high status of the person during childhood, but taller height can also indicate wealth and status (Fielding et al., 2008). On an evolutionary perspective, all these traits may be attractive to a male seeking a female partner. A healthy partner can assure longevity, and therefore stability; greater fertility can lead to continuation of future generations; and status can be indicative of plentiful economic resources and even power that can be passed on to the male through marriage (Buss, 1994). Such evolutionary benefits could explain why height may be considered attractive in a woman, and thus appear to be an appealing trait to look for in a partner.

 One major contributor to the perception of height is leg length. While leg length increases with height, it does not decrease with declining height due to old age (Fielding et al., 2008). This accounts for why multiple studies relating to women’s height also test leg-to-body ratios (or what is known as LBR). These studies show that LBR demonstrates similar correlations with health and fertility (Lawlor et al., 2002; Lawlor et al., 2004; Swami et al., 2006; Fielding et al., 2008; Fraser et al., 2008; Sorokowski et al., 2008). This may be because leg length, out of all the components of stature, is particularly receptive to environmental factors (Swami et al., 2006; Sorokowski, 2008). This is especially true during childhood (Swami et al., 2006; Sorokowski et al., 2008). Since leg growth is at its maximum during adolescence (Tsunawake et al., 1995), leg length could be indicative of both health and youthfulness, similar to indications of height. The indication of youthfulness is attractive because it implies fecundity (Buss, 1994; Jones, 1995), whereas a stunt in leg development may indicate malnutrition (Swami et al., 2006; Sorokowski et al., 2008). Shorter legs are seen to relate to a greater risk of coronary heart disease; higher diabetes resistance; higher blood pressure; greater amounts of liver enzymes (which is proportional to risk of liver diseases); adult mortality; and cancer (Lawlor et al., 2002; Lawlor et al., 2004; Ebrahim et al., 2008; and as cited in Swami et al., 2006).

The suggested benefits of leg length, however, do not entirely correspond with those of height. LBR could be representative of additional evolutionarily beneficial traits that are not correlated with height. For example, since women generally have higher LBR than men, this trait could have evolved as a perception of femininity, while the opposite effect occurs for short legs (Swami, 2006). On the contrary, taller height is a trait more closely correlated with male dominance (Buss, 1994; Buunk et al., 2008). In exploring this topic of height versus leg length, I found that studies comparing the effects of both height and leg length on health and fertility had different results, with some suggesting that one trait even overrides the other (Fielding et al., 2008; Sorokowski et al., 2008). In addition, I have found multiple studies exploring the potential benefits of long legs (Swami et al., 2006; Fielding et al., 2008; Fraser et al., 2008; Sorokowski et al., 2008), but I have not found actual evidence that men *do* desire long legs in a female partner. Therefore, I decided to collect this necessary evidence in the following study in order to test these contradictory hypotheses of natural preference, if any, towards height or LBR.

Procedure

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he basis of my study is an anonymous survey I conducted by means of email and Facebook. I sent out the survey to email lists on the Harvard College campus; on Facebook, I created an “Event” containing a link to my survey and invited “Friends” from both high school and college. This short survey consists of general questions (gender, sexual orientation, race, age) for statistical control, and more specific height-leg-related questions. After retrieving the height of the participant, two questions are asked: the first asks male participants for their desired height range for female partners; the second, asks all participants what they believe the ideal female height range is. Afterward, participants rank on a scale of 1 to 5 (of increasing attraction) the attractiveness of several combinations of stature to leg length.

Results and Discussion

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received a total of 132 responses to my survey; roughly half the participants were male, half female (see Appendix A for detailed participant statistics). The average male height for this survey was 69.2 inches and the average female height was 64.2 inches, which are consistent with average male and female adult height in the National Health Statistics Reports (69.6 inches and 64.2 inches, respectively; McDowell et al., 2008). The survey showed that the average preferred height range of males for their respective desired female partners is 62.4 inches to 66.4 inches, which is approximately the average female height, allowing for a 2-inch deviation (above and below). The second height range for an “ideal woman,” as noted by men, is slightly taller than this first “desired female partner height range.” Males here considered the “ideal” female height range to be 63.6 inches to 66.8 inches. In this second height range, the minimum is raised; the ideal woman could only be at most 0.2 inches shorter than average female height, but up to 3 inches taller.

 It is clear that the height range of the “ideal woman” is slightly taller than what men actually want for their desired mates. This suggests that attractiveness based on a taller height (due in part to its possible correlation with health and fertility) factors somewhat into female sexual selection. However, these results show that men generally do not want exceedingly tall women; in fact, average height is the most desired. This trend is further supported by the results in the 1 – 5 scale ranking of stature-to-leg, in which average height was rated the highest for both short and long legs, above short and tall height. This demonstrated preference for average height may be understood by comparing the listed desired female partner heights to the heights of the respective male participants. Men seem to offer more leeway in height when choosing a mate by lowering the height minimum by a few inches. However, as expected, they are harsher on setting the standards of an ideal woman. In addition, the data clearly shows male preference for a shorter female partner. On average, the male participants want a female who is 2.8 inches to 4.8 inches shorter than themselves. Some men didn’t even specify a height range, but rather a maximum height (which would generally be an inch shorter than their own heights), or even simply stated “shorter.”

 Other studies also show that women of average height are actually the most attractive to men (Buunk et al., 2008), which supports the findings in my study as well. In terms of health, similar to how the averaged female face is the most attractive due to the omitting of flaws (Lemley, 2000), average height is the healthiest because it doesn’t show diseases demonstrated by women who are at either extreme of the height spectrum (as cited in Buunk et al., 2008). This may also suggest that average-height women have a greater chance of reproductive success (as cited in Buunk et al., 2008). Although some studies support that taller height allows easier, more frequent, and healthier births (as cited in Helle et al., 2008), others argue there is a tradeoff of energy between growth and temporary reproduction energy (Fielding et al., 2008; Helle, 2008). This theory suggests that although shorter women are physically smaller for reproduction, they have the extra energy stored up from adolescence that was not used for growth, and is instead used for reproduction (Fielding et al., 2008). The energy tradeoff is demonstrated in a study with Finnish women; the study revealed that women who give birth earlier are statistically shorter later on (Helle et al., 2008). Therefore, shorter or average-height women may have just as much success at reproducing as taller women. Altogether, average height in women may maximize health and fertility. It lowers the chance of diseases and it is a good height for reproduction. It demonstrates a compromise between physical height and stored energy necessary for successful births.

 This contradictory evidence against preference for tall height may be explained by differences in perceived attraction cross-culturally. Tall height is not a globally significant characteristic desired in a female partner. Height may be a “trophy” trait to look for in a mate in poorer communities such as Gambia, since it implies status and health (Fielding et al., 2008). However, the standards may be different in industrialized western societies where the struggle for survival is not as difficult and health and wealth are more prominent. Taller women in America are actually less successful in the sexual market (Fielding et al., 2008). In one study, British men even perceived taller women negatively, as less “considerate” and less “nurturing” (as cited in Fielding et al., 2008). This rejection of tall females could be due to the societal image of the dominant male partner (Buss, 1994; Fielding et al., 2008). In ancient times, men would have gone hunting and demanded copulation from the relatively inactive women who stayed home and took care of the children (Buss, 1994). When this evolutionary and cultural norm of men exhibiting dominance over their female partners is reversed, it may be a blow to men’s pride (Fielding et al., 2008). The availability of more potential mates affects sexual selection by allowing mates to be choosier about factors such as male pride. This increased selectivity may result in two related behaviors: that the already tall women want to look for taller and even more dominant men, and shorter men are less interested in them because of a feeling of physical inferiority next to tall women. This behavior shows that, in fact, taller women are limited in their scope of potential mates.

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f average-height women are considered to be the most attractive, we are left with the question of why tall models appeal to the general public. This appeal may be because, as suggested by the study, LBR plays a role in female attraction. The last part of the survey, which tested for leg-to-body ratio attraction, demonstrated an average rating (in a rating scale between 1 and 5) from about 0.54 up to 1.50 increase in attraction for increase in leg length with each height standard. (See Appendix B for full results.) Also, although both men and women find average height to be the most attractive on a woman, the survey results also show that low LBR is so unattractive that short women with long legs are rated (on a scale of 1 to 5) up to 0.5 higher than average-height women with short legs, and up to 0.8 higher than tall women with short legs. These ratings demonstrate that LBR plays an even more important role than height alone when gauging female attraction. In fact, studies show that shorter legs rather than shorter height may be indicative of lowered reproductive capabilities (Fielding et al., 2003; Sorokowski et al., 2008). Higher LBR, rather than height, may contribute to higher birth-weights (Fielding et al., 2008). On an evolutionary note, long legs can also signify femininity (as stated before), which may be attractive to males because femininity in a woman would further assert their position as the dominant male partner (Fessler et al., 2005). Thus, it is possible that LBR is, in fact, a better indicator of health, fertility, and attraction rather than height.

The data here also shows the standards that women put on other women and themselves. Males considered the “ideal” female height range to be 63.6 inches to 66.8 inches, whereas females considered it to be 64.0 inches to 66.4 inches. The average woman generally considers the height of an ideal woman to be taller than herself, and what women consider to be the minimum height of an ideal woman is taller than what men want. Observations from the stature-to-leg rankings also show that women are harsher than men when it comes to ranking unattractiveness (short legs), but more eager to give high ratings to attractiveness (long legs; note that “attractiveness” in this context is in terms of popular opinion). This information may indicate that women have higher standards for women than even the men. Evolutionarily, these standards could be a result of intrasexual competition that may have evolved as a behavioral tactic to attract mates (Buss, 1994; Walters and Crawford, 1994). Competition may have arisen since the amount of high quality traits was limited. The more attractive a woman appeared, the more likely it was for her to acquire a desired mate of her choice (Buss, 1994). Over the years, such competitive behavior may explain why women have higher standards for themselves as opposed to the standards that men hold.

 Such perceptions of female beauty standards and female competition may explain why some women artificially exaggerate or outright change certain traits to make themselves more appealing. For example, since leg length is such an attractive and desired trait, many women resort to advertised products that attempt to enhance and accentuate their legs. These products can create subtle optical illusions to mimic longer legs. Miniskirts, high-waisted skirts, and tiny T-shirts may allow the waistline to appear higher so that the legs would appear to make up a larger fraction of the body. Certain products, however, may result in some serious adverse effects. One such example is high heels, which not only add a few inches of height but allows the legs to appear longer by enhancing the way a woman walks (Smith and Helms, 1999). High heels are so effective that women continue to wear them despite the impracticality and severe injuries that may result. The shape of the high heels severely restricts the toes and reorients one’s center of gravity while walking in them, which may cause side effects such as sprained ankles, shortened Achilles tendon, back pain, worsened posture, increased oxygen intake, and lowered mobility (Smith and Helms, 1999). Another example is skinny jeans. The slimness of these jeans allows the legs to appear longer. However, even these may have side effects, such as nerve damage if the jeans are overly tight (Praetorius, 2009). Although the use of such risky products contradicts the Darwinian theory of survival, this behavior is an attempt by women at increasing the chance of sexual selection (Buss, 1994). The higher the standards that the women set on the ideal woman, the more likely they are to go farther in using such tactics to attract males, even if it increases the risk of personal health and safety.

Conclusion

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rom the results of my study, it appears that leg-to-body ratio, more so than height, is the better detail of attraction. This implies that although taller height may also hint at health and fertility, leg length is more likely the better indicator, as is supported by other studies. Leg length is shown to be associated with youth, health, fertility, and femininity – traits that are evolutionarily attractive in a female partner. In fact, models may be perceived as attractive not because of the popular belief of tall-height appeal, but because of the high LBR that is usually associated with them. This association could mean that attractive traits are not only evolutionarily pre-formed in the mind, but are continuously being shaped by the standards set by the media. Intrasexual competition for a partner then comes into play, where women would risk their personal wellbeing in order to increase their chances of sexual selection. As women continue to distort their bodies to more closely fit the supposed ideal female physique, it is important to realize that these standards of physical attraction are not static; nor are these the only qualities that men find attractive. Such “objective” traits merely contribute to a single subjective perception of beauty. Although previous evolutionary triumphs may have already preset our psychological criteria for the “fittest” human attraction, we should not be committed to a priority of conforming to such measures. Rather, we should commit ourselves to making the best of our existing qualities to continue to shape the future of sexual selection.

Appendix A

Demographic Data for 132 Responses

Appendix B

Rating Attractiveness

Attraction Scale (1 – 5)

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