



The Shape of Beauty: An Anthropological Perspective

BASANTA KUMAR BINDHANI

Department of Anthropology, University of Delhi, India

Abstract: This article aims to highlight the relationship between body fatness and beauty, focusing on the role of waist-to-hip ratio (WHR) and body mass index (BMI). Beauty is a personal insight rather than a universal one. Attractiveness or ideal body size varies across cultures and societies. The perceptions tend to differ on the issue of the origins of some beauty standards. A complex brain, like the brain of a human being, is required to sense beauty. Also, there lies a difference between healthiness and attractiveness. Anthropologists and evolutionary scientists have proposed that beauty is a reliable indication of human health, fertility, and socio-economic measures.

Received : 13 April 2021

Revised : 19 April 2021

Accepted : 29 April 2021

Published : 2 September 2021

TO CITE THIS ARTICLE:

Bindhani, B.K. 2021. The Shape of Beauty: An Anthropological Perspective, *Skylines of Anthropology*, 1: 1, pp. 14-21

An Overview of Body Shape and Beauty

The human may be the only creature that steadfastly refuses to let genes alone dictate their appearance. Indeed, our capacity for self-modification and adornment is the central and essential feature of our humanity. However, the particular way in which we shape our bodies is a cultural phenomenon. In most contemporary and past agrarian societies, physically healthy and fat women were socio-culturally accepted ideal or beautiful women. In a patriarchal society, one of the adaptive problems that our male ancestors regularly faced was to assess a female's mate value or the degree to which she would enhance his reproductive success. Female mate value was determined by numerous variables such as hormonal profile, reproductive age, fecundity, parity, and resistance to diseases, one of which could be directly observed to some extent still exists today. It has been proposed that specific characteristics of female bodies reliably convey information about some of these variables and that natural selection, therefore, produced psychological mechanisms in men to attend to bodily features in assessing a female's mate value.

Ideal body size varies across cultures and societies. Among the tribes of the Kalahari Desert, shiny skin is considered an attractive feature, so much so that even in times of famine, the tribes choose to use precious animal fats as a skin emollient rather than as food (Turner, 1980). Humans are among the fattest of all primates (Pitts and Bullard, 1968). Even though obesity is a risk factor for pregnancy, females' greater energy reserve in fat has a selective advantage over their lean counterparts in withstanding the stress of food shortage, not only for themselves but also for nursing children (Pitts and Bullard, 1968). Thus, humans have evolved to "save up" food energy for the inevitability of food shortages through the synthesis and storage of fat.

Moreover, females, whose reproductive fitness depends upon their ability to withstand the nutritional demands of pregnancy and lactation, appear to have been selected for more slow-releasing peripheral body fat than males. In pre-industrial societies, social status is related, both symbolically and statistically, to fertility and fatness. In a classic example, Malcolm described the custom of fattening huts for the seclusion of elite Efik pubescent girls in traditional Nigeria (Malcolm, 1925).

Among the Havasupai of the American Southwest, if a girl at puberty is thin, a woman would place her foot with her whole weight on the girl's back so that she will become attractively plump. In this society, fat legs and lesser extent arms, are considered essential to beauty (Smithson, 1959). The Tarahumara of Northern Mexico, whose men are famous as long-distance runners, reportedly considers large, fat thighs as the first requisite of beauty; a good-looking woman is called a "beautiful thigh" (Bennett *et al.*, 1935). Among the Amhara of the Horn of Africa, thin hips are called "dog hips" in a typical insult (Messing, 1957). A South African Bemba courting song has the following verse: "Hullo Mama," the beautiful one, let us go to town/you will be obese, you girl, if you stay with me" (Brown, 1987).

The ethnographic record concerning body preferences in males is very weak. In almost all societies, preference was for a muscular physique and tall or moderately tall stature. However, large body sizes and even overweight are desirable because they symbolize economic success, political power, and social status in some societies. Their constituents describe political leaders in tribal New Guinea regarding their size, physical well-being, and other attributes. The Bemba of South Africa believes that fatness in a man demonstrates his economic success and spiritual power in fending off the sorcery attacks. A similar symbolic association can be assigned to deities. The corpulence of the seated Buddha, for example, symbolizes his divinity and other worldliness

(Brown, 1987). In western culture, a thin body is considered a beautiful body. Very interestingly, it is evident that low WHR and BMI indicate the beautiful body shapes in the Greeks and Romans. Cultural variation in the meaning of fatness is also found among ethnic groups.

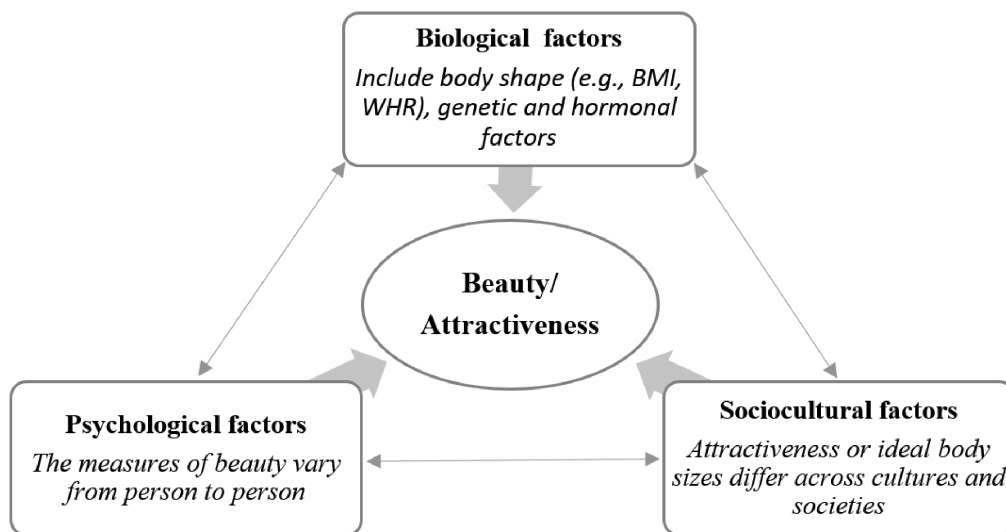


Figure 1: Crucial factors that influence the measures of human beauty or attractiveness

WHR and BMI for Assessing beauty and Mate Selection

Variation in fat distribution in human beings depends upon age and sex. Fat distribution is similar in both sexes during infancy, early childhood, and old age (Singh, and Singh, 2011). But, differences in fat distribution are more significant from the early teens until late middle age, in other words, during the reproductive period of human life (Vague 1956). Sex hormones influence fat distribution. Estrogen suppresses fat deposition in the abdominal area while stimulating fat deposition in the gluteofemoral area (hips, buttocks, and thighs). Testosterone, on the other hand, stimulates abdominal fat deposition while inhibiting gluteofemoral fat deposition.

Consequently, the body shapes of males and females are determined by fat distribution, which is influenced by sex hormones (Bjorntorp 1987, 1991; Refubbe-Scrive 1987). The distribution of gynoid and android fat is most frequently assessed by WHR size. The WHR represents both the upper and lower corpus fat distribution and the relative abdominal fat distribution. Prior to puberty, both boys and girls have similar WHR values. After puberty,

however, women deposit more fat on the hips, and, hence, their WHR becomes considerably lower than men. The WHR has a relatively small gender bimodal distribution (Marti *et al.* 1991). The distinctive range of the WHR for healthy premenopausal females ranges from 0.67 to 0.80, whereas healthy adult men have a WHR value range of 0.85 to 0.95 (Marti *et al.* 1991). Women maintain lower WHRs than men throughout their reproductive age. After menopause, their WHR approaches the masculine range due to reduction of estrogen levels (Kirschner and Samojlik 1991).

The most commonly used measure for bodyweight is body mass index (BMI), which is calculated by dividing body weight (kg) by the square of the height (m). WHR and BMI are positively correlated and measure overlapping yet distinctly different aspects of body fat deposits. BMI reflects the degree of thinness/fatness without differentiating whether fat is centrally located or peripherally located (on the limbs). In contrast, WHR measures upper central (android) and lower (gynoid) body obesity. However, BMI does not take into account regional body fat. It is, therefore, not a good measure for predicting health risks, except in instances in which the individual is morbidly obese and possesses a BMI of 30 or above. Furthermore, bodyweight gain or loss of up to 8 kg does not significantly alter the size of WHR (Kissebah *et al.* 1985).

The fact that WHR correlates with health and sex hormone profile does not, in and of itself, establish that it is a critical feature in determining female attractiveness. Many components contribute in varying degrees to beauty. Quite possibly, despite the relationship between WHR and a woman's health and reproductive status, people use other features (breast size or leg shape) to infer attractiveness. To establish the importance of WHR, it is essential to demonstrate those female attractiveness ratings are significantly correlated with WHR. If such a relationship exists, it should be possible to change a woman's perceived attractiveness by manipulating her WHR alone. The choice to represent various WHRs by changing the waist size was based on findings that of all body parts, waist size is positively correlated with altered sex hormonal profile. Participants of this study were men and women of diverse ages, professions, educations, and ethnicities. The findings indicate that variations in the WHR in female figures produce systematic changes in attractiveness judgment. Participants, including lesbian and bisexual women (Cohen and Tannenbaum 2001), rated figures with a lower, more feminine WHR as more attractive than figures with a higher, more masculine WHR in each of the weight categories. There was an unexpected finding that underweight women with low WHR were not judged to be most attractive.

Given that the media glorifies female thinness (Grabe *et al.*, 2008), it was expected that the participants would rate the underweight figures as more attractive than the average or overweight figures. However, the results showed that participants overwhelmingly judged average weight figures with low WHR as most attractive, followed by underweight figures, and finally fat figures. Thus, it appears that given a choice, people's judgments of female beauty are based on average body weight and low waist-hip ratio. The preference for average weight would be expected considering that psychological mechanisms to assess attractiveness from body characteristics were shaped by the Stone Age environment (Singh 1993).

A study was conducted paying particular attention to female attractiveness because it has been studied to a far greater extent than male attractiveness and seems to have a more substantial role in mating behavior in particular (Fisher and Voracek, 2006). This difference in research focus is not without understandable reason; men place considerably more importance on female attractiveness than women place on male beauty (Symons, 1979). Moreover, women pay close attention to other women's attractiveness relative to other traits and characteristics (Fisher, 2004). Thus, given the salience of female beauty, it is not surprising that it has been well studied relative to male attractiveness. This dichotomy is well captured by the sexual selection theory, which connotes that people select mates to maximize their reproductive success (Fisher, 2004) or, in other words, to maximize the probability that they will successfully have children. Therefore, according to this theory, people prefer physical features that serve as cues of reproductive value, such as youth for women, based on the assumption that a young woman is presumably more fertile than an older woman. However, although both women and men prefer attractive rather than unattractive mates, the critical nature of female attractiveness has been stressed to a much larger degree because of its universal, adaptive nature (Feingold, 1990; Kenrick *et al.*, 1993). During humans' long evolutionary history, women have been unable to secure their resources, such as sufficient food and shelter, because of the demands of producing and raising offspring. Hence, women are thought to prefer men who possess resources and skills relating to parenting and protection of offspring.

In contrast, men are believed to prefer attractiveness in a mate beyond all other characteristics, where attractiveness indicates a woman's potential to provide offspring successfully. Women even compete among themselves in terms of attractiveness, and this competition appears to be most severe during times of sensitive fertility. In one study, women in the maximum fertile phase

of their ovulatory cycle, based on self-report, rated female faces significantly less attractive than women in less productive stages (Fisher, 2004). There was no corresponding effect for male faces, suggesting a unique process occurs when women judge other women. Because women presumably compete for mates possessing resources and parenting ability, and to a lesser degree, attractiveness, female competition is expected to be strongest when conception is most probable. Due to the critical nature of women's beauty for winning mates, it is logical that women compete in this arena.

The study presented three aspects that have gained much research attention and have influenced perceptions of female physical attractiveness: waist to hip ratio (WHR), body mass index (BMI), and curvaceousness. In addition, the study presented some less well-explored but also important issues such as the sex of the evaluator, societal influences, and the mode of presentation. Numerous researches have shown that there are significant relationships between WHR and BMI and that none, by itself, is a reliable indicator of female physical attractiveness. For example, when men were presented with nude photographs of women's frontal view (faces obscured) and back view, as well as their faces, attractiveness was negatively correlated with BMI (Thornhill and Grammer, 1999). However, it was not simply a matter of men declaring thin women as most attractive, as the most beautiful women, according to men's evaluations, were those with intermediate levels of body fat and WHR.

Conclusion

In conclusion, several studies have revealed a multifaceted and conflicting portrait of human beauty. Many aspects influence a human's attractiveness, including WHR, BMI, and level of curvaceousness. However how these factors are interrelated or the relative importance of each factor compared to the other is still unknown. Culture and environment also play a vital role in a person by defining beautifulness. The perception of attractiveness denotes a comparison, but the perception of good health does not. If humankind is aware of the relationship between beauty and health, this consciousness might decrease the burdensome desire for beauty. Rather than view beauty as a weapon of domination, it can help humans understand how health and beauty intersect. Furthermore, there needs awareness regarding the factor that health is beauty, not the body shape or the way of fat distribution. Physical attractiveness is not identical or a symbol of good health, and similarly, physical beauty defined by body fat distribution is not a symbol of good health.

References

- Bennett, W.C. and Zingg, R.M., 1935. The Tarahumara, an Indian tribe of northern Mexico.
- Björntorp, P., 1987. Fat cell distribution and metabolism. *Annals of the New York Academy of Sciences*, 499(1), pp.66-72.
- Brown, P. J., and Konner, M., 1987. An anthropological perspective on obesity. *Annals of the New York Academy of Sciences*, 499(1), pp.29-46.
- Cohen, A. B., and Tannenbaum, I. J., 2001. Lesbian and bisexual women's judgments of the attractiveness of different body types. *Journal of Sex Research*, 38(3), pp.226-232.
- Feingold, A., 1990. Gender differences in effects of physical attractiveness on romantic attraction: A comparison across five research paradigms. *Journal of Personality and Social Psychology*, 59(5), pp. 981.
- Fisher, M. L., and Voracek, M., 2006. The shape of beauty: determinants of female physical attractiveness. *Journal of Cosmetic Dermatology*, 5(2), pp.190-194.
- Fisher, M. L., 2004. Female intrasexual competition decreases female facial attractiveness. *Proceedings of the Royal Society of London. Series B: Biological Sciences*, 271 (suppl_5), pp.283-285.
- Grabe, S., Ward, L. M., and Hyde, J. S., 2008. The role of the media in body image concerns among women: a meta-analysis of experimental and correlational studies. *Psychological Bulletin*, 134(3), pp.460.
- Kenrick, D. T., Groth, G. E., Trost, M. R., and Sadalla, E. K., 1993. Integrating evolutionary and social exchange perspectives on relationships: Effects of gender, self-appraisal, and involvement level on mate selection criteria. *Journal of Personality and Social Psychology*, 64(6), pp.951.
- Kissebah, A. H., and Krakower, G. R., 1994. Regional adiposity and morbidity. *Physiological Reviews*, 74(4), pp.761-811.
- Malcolm, L.W.G., 1925. Note on the Seclusion of Girls among the Efik at Old Calabar. *Man*, 25(8), pp.113-114.
- Marti, B., Tuomilehto, J., Salomaa, V., Kartovaara, L., Korhonen, H. J., and Pietinen, P., 1991. Body fat distribution in the Finnish population: environmental determinants and predictive power for cardiovascular risk factor levels. *Journal of Epidemiology and Community Health*, 45(2), pp.131-137.
- Messing, S. D., 1957. The highland-plateau Amhara of Ethiopia.
- Pitts, G.C. and Bullard, T.R., 1968. Some interspecific aspects of body composition in mammals. *Body composition in animals and man*. Washington, DC: National Academy of Sciences, pp.45-70.
- Refubbe-Scrive, M., 1987. Regional adipose tissue metabolism in men and women during menstrual cycle, pregnancy, lactation, and menopause. *International Journal of Obesity*, 11(347355), pp.163173.

- Singh, D., and Singh, D, 2011. Shape and significance of feminine beauty: An evolutionary perspective. *Sex Roles*, 64(9-10), pp.723-731.
- Singh, D., 1993. Adaptive significance of female physical attractiveness: role of waist-to-hip ratio. *Journal of personality and social psychology*, 65(2), pp.293.
- Smithson, C. L., *The Havasupai Woman* (No. 38). University of Utah Press, 1959.
- Symons, D., 1979. *The evolution of human sexuality* Oxford University Press. *New York*.
- Thornhill, R., and Grammer, K., 1999. The body and face of woman: One ornament that signals quality?. *Evolution and Human Behavior*, 20(2), pp.105-120.
- Turner, V., 1980. Social dramas and stories about them. *Critical inquiry*, 7(1), pp.141-168.
- Vague, J., 1956. The degree of masculine differentiation of obesities: a factor determining predisposition to diabetes, atherosclerosis, gout, and uric calculous disease. *The American Journal of Clinical Nutrition*, 4(1), pp. 20-34.