

Evolutionary psychology and the concept of beauty



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Is Beauty in the Eye of the Beholder? Discuss with reference to evolutionary psychology.

Introduction

...[O]ur inner faculties are *adapted* in advance to the features of the world in which we dwell... [O]ur various ways of feeling and thinking have grown to be what they are because of their utility in shaping our *reactions* on the outer world. (James, 1892/1894, p. 11)

As signified by American philosopher and psychologist William James, an evolutionary perspective in psychology is not a novel concept. Indeed, evolutionary psychology has emerged as a distinct area of psychological research often applied to the study of attraction.

Humans are exquisitely receptive to beauty: it performs a vital part in impression formation and affects consequent assessments, in favour of the beautiful (Lindell & Lindell, 2014). Facial attractiveness is a pervasive aspect of daily life. Indeed, while people are generally not conscious of its impact, beauty potentially affects our health and social interactions in numerous ways. Our attention is compelled by beautiful individuals as an involuntary effect which is difficult to evade. Moreover, while beauty is arguably ephemeral, it plays a seminal role in mate selection.

The maxim that “ beauty is in the eye of the beholder” suggests a subjective understanding of physical attractiveness that varies from person to person (McClintock, 2014). However, there is a pervasive consensus among observers as to which persons are beautiful, which suggests a degree of

universality on what is considered attractive. This essay will examine whether an evolutionary psychology perspective is compatible with the adage that “ beauty is in the eye of the beholder” through a comprehensive reflection of existing research. Firstly, the author will briefly outline the evolutionary psychology perspective before examining the evolutionary importance of beauty. Next, the author will consider visual gaze studies insofar as they relate to evolutionary psychology and then examine a more wide-ranging exploration of the modalities of attraction. To conclude, the author will consider the significance of waist and hips ratios in determining attractiveness.

Evolutionary Psychology Versus the Standard Social Science Model

Evolutionary psychology is a Darwinian framework which has been developed and honed over the past three decades. It hypothesises that the human mind has changed through the course of natural selection to answer adaptive problems that Homo-sapiens encountered in their evolutionary history (Saad, 2004). Thus, in the same way that the pancreas, and the kidneys evolved as resolutions to difficulties of survival, our cognitions and behaviours were disposed to the same selection method (Saad, 2004). Therefore, evolutionary psychology posits that humans have evolved cognitive modules that are domain-specific in order to select mates and better parental guardianship.

The evolutionary perspective is at odds with the epistemological foundations of the Standard Social Science Model (SSSM), which contends that individuals are born tabula rasa and are consequently moulded into unique beings

through the effects of culture and further socialisation components (Saad, 2004). Moreover, the SSSM asserts that our minds are conferred with domain-independent competences. The SSSM, therefore, reflects the idea that “ beauty is in the eye of the beholder” such that an individual’s perception of what is attractive is moulded by, and unique to, the person’s life experiences. However, it is imperative to note that the evolutionary perspective is not necessarily incompatible with the “ beauty is in the eye of the beholder” maxim. Indeed, while this essay will go on to examine whether there are universalities of attractiveness, this does not mean that society and culture play no role. No serious evolutionist thinks that individuals are wholly moulded by culture or are defined solely by their biology. Rather, as argued by Tooby and Cosmides (1992), human uniqueness arises as an interaction between an individual’s genetics and their environment. Thus, evolutionary psychology does not reflect biological determinism. It would be more accurate to say that evolutionary psychologists merely do not prescribe to the idea that all standards of beauty are arbitrary, artificially constructed and meaningless. According to evolutionary psychology, there are certain characteristics that are considered attractive which communicate valuable information; that some conceptions of beauty are innate and intractable (Sigh, 2011).

The Evolutionary Importance of Beauty

From an evolutionary perspective, discerning possible mates based on outer beauty is dependent on the supposition that physical appearance is a veridical and accurate indicator of genetic robustness, that “ facial beauty is an honest signal of the genotypic and phenotypic quality of the bearer.”
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(Senior, 2003, p. 525). Evolutionary psychologists contend that humans have evolved to view certain physical characteristics and traits as preferable because they signify a healthy organism. Contrariwise, characteristically unattractive faces may indicate a weaker genetic profile, which in turn incites an adverse reaction in the perceiver (Lindell & Lindell, 2014).

Therefore, in order to discern whether beauty is truly subjective, it is prudent to consider whether beauty is an accurate gauge of health.

Current findings suggest there is an apparent relationship between beauty and health, albeit a modest one. Those deemed more attractive live longer (Henderson & Anglin, 2003), have superior health (Langlois et al., 2000) and slightly better mental wellbeing (Feingold, 1992), compared to less beautiful people. However, there remains a dearth of reliable evidentiary support of a relationship between health and attractiveness. Thus, while there remains much scope for further investigation, the existing evidence would suggest that a predilection for physically attractive mates advantages the body and its offspring to some degree. However, the author wonders whether the likes of improved mental health among those considered more attractive is more a consequence of the inherent social benefits bequeathed to such people than a consequence of evolution.

Beauty captures the attention of the beholder

Evidence suggests that beauty serves an essential evolutionary function as an inherent cue indexing genotypic and phenotypic quality (Lindell & Lindell, 2014). Since a penchant for beauty is decidedly adaptive, the brain has grown to activate neural networks concomitant with reward in response to

attractive faces (e. g. orbitofrontal cortex, ventral striatum). Predictably, this means that beauty enjoys privileged attentional repute. Even in circumstances whereby attention is occupied elsewhere, beauty can quickly, readily and unconsciously change the focus of attention, subverting gaze even when falling beyond the focus of conscious attention or an area of high visual acuity (Lindell & Lindell, 2014).

Indeed, evidence suggests that the time spent looking at a face is a reliable covariate of attractiveness. Leder et al. (2016) investigated the relationship between beauty and gaze by displaying natural scenes which always portrayed two people, covering an extensive range of facial beauty. Through assessing eye movements in a free viewing paradigm, a linear relationship was observed between facial beauty and gaze such that longer gazes corresponded with more beautiful faces. This echoed evolutionary findings that support a positive relationship when participants observe opposite-sex faces (Leder & al., 2016). Furthermore, from an evolutionary psychology perspective, it is notable that even new-borns and infants gaze longer at more attractive people, which further supports the idea that the effects of beauty on directing our visual attention reflect an innate and hardwired universality within humans. On this basis, it is congruent that offering positively toned events may be the chief tool of the biologically determined perception of beauty (Darwin, 1859). However, empirically corroborating this assertion necessitates illustrating that facial beauty systematically affects visual attention (Leder et al. 2016). This would require further research delving into the complexities of visual attention.

Attractiveness is Multimodal

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While there is compelling evidence corroborating the evolutionary relationship between physical attractiveness and its function in our lives, there is a scarcity of research which examines the potential relationship between non-visual modalities and evolutionary psychology (Groyecka & al. 2017). Indeed, acoustic and olfactory cues can keenly affect the perceived beauty of a person and in turn, feelings and actions toward that individual.

Vision, audition, and olfaction form the central tele-receptive senses that manage proximal and distant sensory data in the external environment, and which, together, augment the efficacy of our actions and responses when handling important social cues (Aglioti and Pazzaglia, 2011).

Various empirical enquiries illustrate that the perception of beauty is multimodal. At a neural level, many modalities in human perception are combined in the superior temporal sulcus (Campanella and Belin, 2007). At an operational level, visual, auditory and olfactory appeal have all been related to characteristics suggestive of sex hormone levels and health (Groyecka & al. 2017). Perceptions of beauty frequently co-vary between modalities, even though these cross-modal connexions can vary by sex. Despite mounting research investigating the perceived attractiveness of these cues, research remains limited compared to studies concerning visual beauty (Groyecka & al. 2017).

This lack of multimodality research on attraction is a blatant limitation of contemporary evolutionary psychology. Indeed, the information one can determine about an individual just by their scene or voice is extensive (Groyecka & al. 2017). Humans can apply olfactory cues existing in body

odour to evaluate sex, character, fertility, diet, genetic compatibility, and youth (Havlicek & Roberts, 2009). Moreover, it is possible to distinguish relatives through body odour, which plays a significant role in mate selection to prevent inbreeding (Groyecka & al. 2017). Furthermore, brain imaging indicates that the neural reaction to coalesced visual-olfactory cues in the right middle temporal cortex and left superior parietal cortex is incredibly addictive- more so than the total of visual and olfactory cues given in isolation (Royet et al., 2013).

In a current theoretical appraisal concerning prosocial biases, Maestriperi et al. (2016) reference the potential attractiveness of voices and odours only once. This lack of regard for the multimodalities of attraction represents how insufficient the current research is in this regard, as more frequently, research does not consider the multimodalities of attraction at all. It would not be prudent to disregard the potentially significant contributions that cross-modal research may provide to our comprehension of the evolutionary basis of beauty.

Shape and Significance of Feminine Beauty: An Evolutionary Perspective

In a similar vein, studies of attractiveness primarily focus on the face, and there is a scarcity of research regarding the body. However, research undertaken by Singh (2011), posits that gynoid body distribution (which denotes female-normative body shape whereby fat distribution is focused around the hips and thighs) is a reliable evolutionary marker of health and fertility.

Gynoid body fat distribution (WHR) is calculated by observing the ratio of waist and hips circumferences (Singh, 2011). Singh presents empirical findings which demonstrate that WHR is an independent prognosticator for risks for major diseases and fertility. Additionally, Singh posits that systematic variations in the WHR engender systematic vicissitudes in the perception of female beauty across cultures. This widespread appeal of low WHR implies that humans have evolved cerebral mechanisms to evaluate body features suggestive of good health as beautiful, indicating that some standards of beauty cannot be arbitrary or constructed (Singh, 2011). While WHR affects both males and females' discernments of health and beauty, the preponderance of existing research relates to men's judgements of women's WHR (Singh and Luis, 1995).

Sex hormones control fat distribution. Oestrogen impedes fat deposition in the abdominal region and rouses fat deposition in the gluteofemoral region. This gynoid fat distribution is ascertained by the magnitude of WHR (Singh, 2011). There is mounting clinical and epidemiological research which suggests that risk for certain diseases are less due to BMI, and more attributable to anatomical distributions of fat deposits (WHR). For example, a high WHR is a reliable, independent forecaster for cardiovascular disorders, adult-onset diabetes, hypertension, cancer (endometrial, ovarian and breast, gall bladder disease and premature mortality (Singh, 2011). Furthermore, studies have demonstrated that WHR also signifies fertility in premenopausal females.

Therefore, it is clear from existing evidence that women possessing a WHR within a healthy range (0.67-0.80) are generally healthier and more likely to

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be fertile. However, for the evolutionary health-beauty relationship hypothesis to hold up, it is crucial that such cues are also considered attractive.

An investigation conducted by Singh in 1993 found that reworkings of the WHR in female bodies engender systematic changes in the appraisal of attractiveness. The participants of the study which included lesbians, perceived figures with a lower WHR as more beautiful than those with a higher, and thus more typically masculine, WHR in all the weight groups. It may be inferred from this that the lower WHR was also indicative of better health and not just reproductive capabilities as the reason for why lesbians also rate bodies with lower WHR as more beautiful. Such findings have been replicated with African Americans (Markey et. al, 2002), in Germany (Henss, 2000), and Australia (Connolly et al. 2004). Therefore, this is highly suggestive of a cross-cultural consensus and universality, reflective of evolutionary psychology theories. This evidence serves to contest the prevalent notion that attractiveness is completely arbitrarily demarcated by social influences such as the media (Singh, 2011). This does not necessarily mean that the media is unable to affect notions of attractiveness; however, it seems that the media's capacity to do so is constrained to aspects of the body which are not indicative of health and hormone conditions.

Conclusion

To conclude, while beauty is likely in the eye of the beholder to some extent, there is a pervasive evolutionary underpinning which suggests a certain universality of attractiveness. In order to garner a more comprehensive

understanding of attractiveness as it pertains to evolutionary psychology, it would seem prudent to extend one's focus to include further multi-modal research. Likewise, additional studies which seek to link health and attractiveness, in furtherance of WHR investigations, may be invaluable in combatting the current beauty narrative of striving to achieve unrealistic levels of socially prescribed perfection in favour of striving for optimum health. Indeed, perhaps if further research supports a link between health and attraction, media pressures which often herald underweight models as the pinnacle of beauty, thereby perpetuating low self-esteem among the public, then such toxicity will be undermined.

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