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It's in Our Genes:  
The Biological Basis of Human Mating Behavior  
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## Abstract

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While cultural values and messages certainly play a part in the process of mate selection, the genetic and psychological predispositions developed by our ancestors play the biggest role in determining to whom we are attracted. Women are attracted to strong, capable men with access to resources to help rear children. Men find women attractive based on visual signs of youth, health, and, by implication, fertility. While perceptions of attractiveness are influenced by cultural norms and reinforced by advertisements and popular media, the persistence of mating behaviors that have no relationship to societal realities suggests that they are part of our biological heritage.

250 words or fewer.

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### It's in Our Genes:

#### The Biological Basis of Human Mating Behavior

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Consider the following scenario: It's a sunny afternoon on campus, and Jenny is walking to her next class. Out of the corner of her eye, she catches sight of her lab partner, Joey, parking his car. She stops to admire how tall, muscular, and stylishly dressed he is, and she does not take her eyes off him as he walks away from his shiny new BMW. As he flashes her a pearly white smile, Jenny melts, then quickly adjusts her skirt and smooths her hair.

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This scenario, while generalized, is familiar: Our attraction to people—or lack of it—often depends on their physical traits. But why this attraction? Why does Jenny respond the way she does to her handsome lab partner? Why does she deem him handsome at

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all? Certainly Joey embodies the stereotypes of physical attractiveness prevalent in contemporary American society. Advertisements, television shows, and magazine articles all provide Jenny with signals telling her what constitutes the ideal American man. Yet she is also attracted to Joey's new sports car even though she has a new car herself. Does Jenny find this man striking because of the influence of her culture, or does her attraction lie in a more fundamental part of her constitution? Evolutionary psychologists, who apply principles of evolutionary biology to research on the human mind, would say that Jenny's responses in this situation are due largely to mating strategies developed by her prehistoric ancestors. Driven by the need to reproduce and propagate the species, these ancestors of ours formed patterns of mate selection so effective in providing for

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their needs and those of their offspring that they are mimicked even in today's society. While cultural values and messages clearly play a part in the process of mate selection, the genetic and psychological predispositions developed by our ancestors play the biggest role in determining to whom we are attracted.

### **Women's Need to Find a Capable Mate**

Pioneering evolutionary psychologist Trivers (as cited in

- Allman, 1993) observed that having and rearing children requires women to invest far more resources than men because of the length of pregnancy, the dangers of childbirth, and the duration of infants' dependence on their mothers (p. 56). According to Fisher
- (as cited in Frank, 2001), one of the leading advocates of this theory, finding a capable mate was a huge preoccupation of all prehistoric reproductive women, and for good reason: "A female couldn't carry a baby in one arm and sticks and stones in the other arm and still feed and protect herself on the very dangerous open grasslands, so she began to need a mate to help her rear her young" (p. 85). So because of this it became advantageous for the woman to find a strong, capable man with access to resources, and it became suitable for the man to find a healthy, reproductively sound woman to bear and care for his offspring. According to evolutionary psychologists, these are the bases upon which modern mate selection is founded, and there are many examples of this phenomenon to be found in our own society.

One can see now why Jenny might be attracted by Joey's display of resources—his BMW. In our society, men with good job prospects, a respected social position, friends in high places, or any

Source quoted in another source; secondary source and date in first parentheses, page number in second parentheses.

First-level headings boldface, centered.

Authors referred to by last name.

combination thereof have generally been viewed as more desirable mates than those without these things because they signal to women that the men have resources (Buss & Schmitt, 1993, p. 226). Compared with males, females invest more energy in bearing and raising children, so it is most advantageous for females to choose mates with easy access to resources, the better to provide for their children.

### Men's Need to Find a Healthy Mate

For men, reproductive success depends mainly on the reproductive fitness of their female counterpart: No amount of available resources can save a baby miscarried in the first month of gestation. Because of this need for a healthy mate, men have evolved a particular attraction “radar” that focuses on signs of a woman’s health and youth, markers that are primarily visual (Weiten, 2001, p. 399). Present-day attractiveness ratings are based significantly on this primitive standard: “Some researchers have suggested that cross-cultural standards of beauty reflect an evolved preference for physical traits that are generally associated with youth, such as smooth skin, good muscle tone, and shiny hair” (Boyd & Silk, 2000, p. 625). This observation would explain why women of our time are preoccupied with plastic surgery, makeup, and—in Jenny’s case—a quick hair check as a potential date approaches. As Cunningham, Roberts, Barbee, Druen, and Wu (1995) noted, “A focus on outer beauty may have stemmed from a need for desirable inner qualities,” such as health, strength, and fertility, and “culture may build on evolutionary dynamics by specifying grooming attributes that signal successful adaptation” (pp. 262-263).

Author names in parentheses when no signal phrase is used.

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### The Influence of the Media on Mate Selection

There is, however, a good deal of opposition to evolutionary theory. Some critics say that the messages fed to us by the media are a larger influence on the criteria of present-day mate selection than any sort of ancestral behavior. Advertisements and popular media have long shown Americans what constitutes a physically ideal mate: In general, youthful, well-toned, symmetrical features are considered more attractive than aging, flabby, or lopsided ones. Evolutionary psychologists argue that research has not determined what is cause and what is effect. Cosmides and Tooby (1997) offered the following analogy to show the danger of assigning culture too powerful a causal role:

For example, people think that if they can show that there is information in the culture that mirrors how people behave, then *that* is the cause of their behavior. So if they see that men on TV have trouble crying, they assume that their example is *causing* boys to be afraid to cry. But which is cause and which effect? Does the fact that men don't cry much on TV *teach* boys to not cry, or does it merely *reflect* the way boys normally develop? In the absence of research on the particular topic, there is no way of knowing. ("Nature and Nurture: An Adaptationist Perspective," para. 16)

We can hypothesize, then, that rather than media messages determining our mating habits, our mating habits determine the media messages. Advertisers rely on classical conditioning to interest consumers in their products. For instance, by showing an image of a beautiful woman while advertising a beauty product,

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advertisers hope that consumers will associate attractiveness with the use of that particular product (Weiten, 2001). In order for this method to be effective, however, the images depicted in conjunction with the beauty product must be ones the general public already finds attractive, and an image of a youthful, clear-skinned woman would, according to evolutionary psychologists, be attractive for reasons of reproductive fitness. In short, what some call media influence is not an influence at all but merely a mirror in which we see evidence of our ancestral predispositions.

#### If Not Media, Then What?

Tattersall (2001), a paleoanthropologist at the American Museum of Natural History, offered another counterargument to the evolutionary theory of mate selection. First, he argued that the behavior of organisms is influenced not only by genetics, but also by economics and ecology working together (p. 663). Second, he argued that no comparisons can be made between modern human behavior and that of our evolutionary predecessors because the appearance of *Homo sapiens* presented a sudden, qualitative change from the Neanderthals—not a gradual evolution of behavioral traits:

As a cognitive and behavioral entity, our species is truly unprecedented. Our consciousness is an emergent quality, not the result of eons of fine-tuning of a single instrument. And, if so, it is to this recently acquired quality of uniqueness, not to the hypothetical “ancestral environments,” that we must look in the effort to understand our often unfathomable behaviors. (p. 665)

The key to Tattersall's argument is this "emergent quality" of symbolic thought; according to his theories, the ability to think symbolically is what separates modern humans from their ancestors and shows the impossibility of sexual selection behaviors having been passed down over millions of years. Our sexual preferences, Tattersall said, are a result of our own recent and species-specific development and have nothing whatsoever to do with our ancestors.

Opponents of the evolutionary theory, though, fail to explain how "unfathomable" mating behaviors can exist in our present society for no apparent or logical reason. Though medicine has advanced to the point where fertility can be medically enhanced, Singh (1993) observed that curvy women are still viewed as especially attractive because they are perceived to possess greater fertility—a perception that is borne out by several studies of female fertility, hormone levels, and waist-to-hip ratio (p. 304). Though more and more women are attending college and achieving high-paying positions, women are still "more likely than men to consider economic prospects a high priority in a mate" (Sapolsky, 2001-2002, p. 18). While cultural norms and economic conditions influence our taste in mates, as Singh (1993) showed in observing that "the degree of affluence of a society or of an ethnic group within a society may, to a large extent, determine the prevalence and admiration of fatness [of women]" (pp. 304-305), we still react to potential mates in ways determined in Paleolithic times. The key to understanding our mating behavior does not lie only in an emergent modern quality, nor does it lie solely in the messages relayed to us by society; rather, it involves as well the complex mating strategies developed by our ancestors.



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Alphabetized  
by authors'  
last names.

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All sources  
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