

Human Sexual Selection and Attraction

The man walked towards the woman. Their eyes locked, and the scent of each other filled the air. Blood rushed through their bodies as their hearts beat a little faster. For a few moments, it seemed as if they were the only two people in the world. Something was happening. Something unseen, but something that was the basis of all life. Sexual attraction was taking place. This animalistic magnetism between two humans comes from their basic natural instincts. While most aspects of the involuntary draw between humans are unknown, it is known that biology and subconscious human nature combine to form the simplest thing in life: sexual attraction.

Natural Selection

Charles Darwin was the first to propose sexual selection, or the process in which a female chooses the male that will give her the strongest offspring. In most animal societies, the female chooses the male that she wants to mate with, the one that she is sexually attracted to. Females prefer mates primarily by their parental investment. Because females care more about their offspring than males do, females are the gender that chooses the mate. Female choice for mates affects the entirety of sexual selection. If a female likes the ornaments on a male, she'll answer his mating rituals. Darwin suggested that the female's choice of mate is what spurs the male's ornaments or color. The males try to win over the females with these special appearances, mating calls, or something else specific that would make them appear attractive to the females.

Sexual competition between males for female affection spurred what is known as the Machiavellian hypothesis. This hypothesis states that human intelligence has increased due to sexual competition. The more intelligent a male is, the more advantage he has over less intelligent males in the quest for a mate.

This competition for mates creates a circle of sorts. While the females ultimately choose their male partner, the males of society base their actions on what the female is attracted to. The male wants to win the female, so he attempts to be the best prospective mate in the community. Thus, in order to be chosen as a mate, a male is always adapting to the desires of his female counterpart. Therefore, a balance in society is maintained. Both males and females play a role in attraction, and both must cooperate in an effort to preserve their genes.

Natural selection shows how some individual species continue through generations, while others die out. However, natural selection does not show what factors put setbacks on some animal's survival. A female takes a male as her mate and produces offspring with him, giving both animals a chance to carry on their genetics. Genes can continue if the individual with those genes reproduces. Therefore, the continuation of certain genes depends on how well an individual can attract a mate.

Hormones' Roles in Sexual Attraction

Every member of the human species produces his or her own type of bodily perfume: pheromones. While pheromones are actually odorless, males and females unconsciously find the scent of them attractive. Basically, pheromones are chemicals present in the body that send a message to the brain (see Figure 1). This message appeals to both the sender, the person who produces the pheromone, and the receiver, the person who smells or takes in the pheromone. While a small number of scientists think that humans do not give off pheromones, research has shown that pheromones are important to the animal world. Therefore, humans should also secrete pheromones. Some scientists believe that human emotions and feelings are reaction to the pheromones that people give off. Ethologists in particular have found that these smells, or pheromones, have an impact on how people view each other. These pheromones are generally only noticed subconsciously.

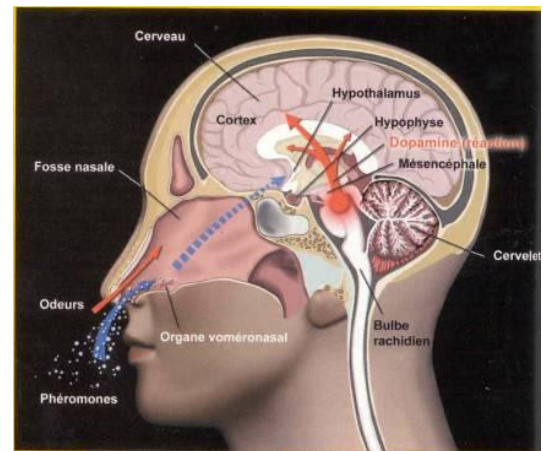


Figure 1: Pheromones enter the human body and are processed in the brain.

Both human genders make pheromones, which are present in urine or sweat, although the pheromones differ between males and females. Pheromones are produced in the apocrine glands, located in human skin. Females create copulins, an ingredient in their secretion. Research has shown that when males are exposed to the smell of copulins, they view women as more attractive. The men do not consciously notice a change in opinion because of the hormones, however. Testosterone levels in males also rise when they are affected by copulins. The males' reactions to copulins increase when the female is undergoing ovulation.

While females produce only copulins, males make both androstenol and androstenone. Androstenol is a pheromone found in male sweat, and androstenone is what androstenol oxidizes to. Females find the scent of androstenol pleasing, but do not like the smell of androstenone. However, when a woman is ovulating, she is more inclined to like the smell of androstenone, compared to when she is not ovulating. Both a woman's menstrual cycle and use of oral contraceptives affect her views of male pheromones.

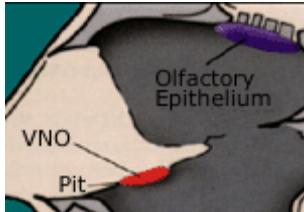


Figure 2: The VNO is a narrow sac located by the nasal septum.

Scientists believe that the vomeronasal organ (VNO) identifies human pheromones, as this body part identifies pheromones in animals. Experiments have proved that, when exposed to hormones of the opposite gender, humans send electrical impulses to the brain from where the VNO would be located. The VNO is located in the nose (see Figure 2) and sits by the nasal septum. When the VNO senses pheromones, it sends messages to the brain. Neurons are required to send this message. While humans have a VNO, the neurons needed to relay messages are unaccounted for.

In 1970, an experiment was conducted that illustrated VNO messaging. Hormone signals from rodents were sent from the VNO to the accessory olfactory bulb. From the olfactory bulb, the signals traveled to the brain, specifically the sections that control reproductive behavior.

The Human Body and Sexual Attraction

Human sex hormones, testosterone and estrogen, are produced at the start of puberty. However, research shows that another hormone, dehydroepiandrosterone (DHEA) is the hormone that “is the primary hormone responsible for the onset of sexual feelings and attractions in young humans of both sexes. Boys’ and girls’ adrenals begin to secrete DHEA at about 6 years of age, and the amount secreted rises continuously until the mid-teenage years, when it stabilizes at adult levels” (Gray 196).

Scientists have found that humans are attracted to people with a certain set of genes, or major histocompatibility complex (MHC). The MHC is important in fighting pathogens in the body. Humans generally choose a mate with a MHC different than their own because this produces stronger children. Parents with different MHCs have children with better immune systems. Most humans find that a person with a MHC different than their own smells better.

However, when a female is on birth control, hormones affect her body in a different way. Therefore, the woman tends to find MHCs similar to her own more attractive than different MHCs. Sexual intercourse can also influence how attraction is perceived. Oxytocin is released from the brain after sex. Oxytocin, a chemical, creates feelings of love and attraction when there may be none actually present.

The limbic system in a mammal enables the animal to learn responses and replicate them. The limbic system also allows mammals to change and think about the inside workings of another mammal. The adaptive nature of the limbic system helped evolution, as working together increases survival rates. The neocortex of the brain sets humans apart from other animals, because it is this section that controls reasoning.

While the genetic make-up and characteristics of the human body greatly affect sexual attraction, the physical appearance of humans can trigger lust as well. Males aren't necessarily attracted to intellect or talent in a woman. Stimulated visually, human men are attracted primarily to the looks of women. Attractive women are healthy looking and with a certain body figure that portrays youth and fertility. Body features that show this include full lips, soft skin, and small hips. A human female, however, has a large amount of criteria upon which she bases her attraction. In addition to physical attributes, like taut bodies and large, broad shoulders, women look for a mate with power, success, intelligence, and wealth.

The body's role in attraction is only one aspect of the quest for the perfect mate among humans, however. It is through the picking and choosing of mates, subconscious lure of smells, and mysterious gene appeal that society, chemical, and physical aspects culminate to form the driving force that brings two people together. While the outcome of many complicated processes and factors, sexual attraction is the simplest instinct in humans. Felt by animals a millennia ago and humans in millennia to come, sexual attraction is the force that allows the world to grow, the force that is the basis of all life.

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