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Mate Preferences

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Synonyms

Desires in mating; Mate choice; Mate selection

Definition

Mate preferences are the outputs of psychological
mechanisms designed to motivate people to pur-
sue potential mates who possess particular quali-
ties. Preferred features range widely. They include
morphological (e.g., face or body shape), behav-
ioral (e.g., kindness or dominance), or social (e.g.,
status or connections) attributes. Mate preferences
can be species typical, sex differentiated, individ-
ually variable within sex, culturally variable, and
predictably context dependent.

Introduction

Human mate choice is not random. Given the
choice between a kind healthy partner and a
disease-afflicted cruel partner, most people
would prefer the first over the second. These pref-
erences determine who we are attracted to, who

we pine for during absences, and who we write
books, plays, songs, poems, and films about. They
affect who we select as mates; who we live with,
support, and receive support from; and, for some,
with whom we raise children. They influence who
has experienced mating successes and failures in
our evolutionary past, which is key to which qual-
ities increase or decrease in frequency over time.
Given this monumental importance, it is appropri-
ate that mate preferences have been one key cor-
nerstone of evolutionary psychological research.
This research uses an understanding of what pref-
erences are *for*, that is, their evolved functions, to
understand what human preferences are *like*, that
is, their content and nature. The study of mate
preferences has thus far been extraordinarily suc-
cessful, generating a large body of knowledge on
the content of human desire across cultures and
across contexts.

Why Do Mate Preferences Evolve?

Understanding mate preferences first requires an
understanding of why they evolve. Humans are a
sexually reproducing, social species who bear
offspring who are initially helpless and dependent
on parental investment for nearly two decades.
For our species, a mate is thus is a reproduction
partner, a potentially valuable cooperation part-
ner, a source of social connections, a parenting
partner, and more. Who an ancestral human
selected as a mate would have had direct impacts

on that person's health, their resources, their status, the parenting their children received, the traits their children inherited, and, ultimately, through these many routes, their reproductive success. Selection would have strongly favored the evolution of adaptations capable of guiding their holders toward fitness-beneficial partners because individuals with these adaptations would have greatly outcompeted their reproductive rivals.

The challenge for sexually reproducing organisms in mate selection is that they have no way, a priori, to determine which mates offer fitness benefits and which mates inflict fitness costs. Potential mates vary on innumerable trait and state dimensions. Some mates are larger than others; some have longer limbs. Some control more resources; others command more status. Some mates are kinder than others; some are more outgoing. Some mates have a larger ratio of dirt on their upper body relative to their lower body. Some have a higher or lower speed of fingernail growth. Only a miniscule subset of the infinitely many dimensions along which potential mates differ would actually be relevant to the net fitness benefits a potential mate offers.

Even if an organism could, against astronomical odds, guess which dimensions of variation should be relevant to its mate selection, it would have no means to know the valence the dimensions should be assigned. Is it better to have a large mate or a small mate? Do older mates offer more fitness benefits than younger mates? Does a healthy mate offer more fitness benefits than a wealthy mate? The answers to these questions will depend on species, sex, mating strategy, and context. A naïve organism could search the environment for its entire lifetime and still never determine the correct valence to assign to even one dimension along which potential mates vary.

So sexually reproducing organisms face a critical adaptive problem in selecting mates who offer them the largest net fitness benefits. Solving this problem appears to be computationally intractable. Each organism has an infinite number of dimensions of variation along which it could evaluate potential mates and an infinite number of valences it could assign to each dimension. How,

then, do organisms ever solve the adaptive problem of selecting fitness-beneficial mates?

One potential solution to the problem of mate choice is mate preferences. Although organisms may never *know* what dimensions of variation it should use to guide its mate selection, random mutations will eventually cause some organisms to have motivational biases in favor of pursuing mates with particular features. Most of these random preferences will motivate organisms to discriminate among potential mates along inconsequential dimensions or with nonfunctional valences. But a very small proportion of these mutations will cause organisms to be motivated to pursue mates who possess fitness-beneficial features or to avoid mates with fitness-harmful features. Those individuals who happen to develop functional mate preferences will be attracted to beneficial mates and, over deep time, will be more likely to select adaptive mates and experience reproductive success. In this way, genes underlying preferences for fitness-beneficial features will tend to reproduce themselves over time, causing sexually reproducing organisms to accumulate mate preferences for fitness-beneficial features.

How Do Mate Preferences Evolve?

The evolution of mate preference adaptations will be favored by selection to the extent that these preferences guide organisms to fitness-beneficial partners. There are at least two routes through which preferences could provide fitness benefits: direct benefits delivered to the mate selector and indirect benefits delivered to the mate selector's kin.

Direct benefits delivered to the mate selector. The most obvious and likely most frequent route to the evolution of mate preferences is through the receipt of direct benefits. Preferences offer direct fitness benefits when they guide organisms to mates who offer fitness benefits directly to the mate selector. A classic example is nuptial gifting in insects. Female katydids prefer to mate with males who offer them "spermatophores": packages of food which the females

consume during mating. These spermatophores are extremely energetically dense and provide females the energy they need to survive and reproduce. Because these spermatophores meet all of the females' energetic needs, females who are provisioned can focus their time and energy on reproduction rather than foraging. The preference for males who provide spermatophores therefore provides katydid females a direct fitness benefit by allowing them to increase their own rate of reproduction.

Nuptial gifts concern the explicit exchange of benefits between mates; however, direct benefits can also come from less tangible sources. For example, males of many reptile species prefer to mate with larger females (e.g., Shine et al. 2001). These preferences appear to evolve because larger females are generally able to produce more eggs. Males who prefer to mate with larger females consequently receive a direct fitness benefit in that they can produce more offspring with their mates.

What is key about direct fitness benefits is that they increase the reproduction of the mate selector. These fitness benefits can be in the form of mates who offer resources or offspring provisioning that allow the mate selector to direct extra time and energy to reproduction. Benefits can come from access to prime territories or social groups that provide shelter or resources. Or they can come from access to fertile partners with whom the mate selector can produce many offspring. Securing any of these features in a potential mate will allow the holder of a mate preference to produce more offspring and thereby better reproduce the genes underlying their preferences.

Indirect benefits delivered to the mate selector's kin. The benefits of mate preferences need not go directly to the mate selector; fitness benefits can also flow indirectly by benefitting the kin of the mate selector. Selection can, for instance, favor the evolution of preferences for heritable features of potential mates if these preferences lead to offspring who are healthier, more fertile, or more successful in acquiring mates. One commonly hypothesized preference for this class of benefits across species involves the preference for symmetry (Møller and Pomiankowski 1993).

Many species are, by design, bilaterally symmetric: morphological traits on the left half of the body are supposed to be mirror copies of traits on the right half. Although this is the norm at the species level, few if any individuals are ever perfectly symmetrical. Individuals will tend to show random asymmetries throughout their bodies. Among birds, for example, although wings are of equal length on average, most individuals will have one wing that is slightly longer than the other (Møller and Pomiankowski 1993). These asymmetries are typically slight, but can occasionally be large.

Asymmetries are thought to reflect the stability of individuals' development. Because organisms are supposed to be symmetric, asymmetries provide a documentation of developmental "errors": instances where the individual's body failed to organize itself according to design. The developmental errors that cause asymmetries can also cause issues with survivability and health across several species. Further, these errors can result from environmental stresses but can also emerge because of genetic mutations. Symmetry therefore can signal direct benefits, but can also provide indirect benefits: individuals who select symmetric mates are selecting mates with heritable genetic endowments that on average produce healthier, more survivable offspring.

Any feature of a potential mate that provides reproductive benefits to offspring provides, through inclusive fitness, an indirect fitness benefit to the mate selector. This can include heritable features that increase health, fertility, or competitiveness on the mating market; but, particularly in cultural species, indirect benefits can also come from transmissible features such as wealth, status, or knowledge. By selecting mates who can benefit one's offspring, an individual with mate preferences that yield indirect benefits will produce offspring who are more likely to survive and reproduce and thereby reproduce the genes underlying their mate preferences.

Sensory exploitation. Many mate preferences across species appear to be functional, but preferences can also evolve as byproducts of other adaptations. One common evolutionary route to by-product preferences occurs when perceptual

adaptations evolved for other processes are hijacked by potential mates to gain attraction in the mating domain. This process is called "sensory exploitation" and appears to have created mate preferences across several species. Tungara frogs provide the prototypical case of sensory exploitation. Females of this species prefer to mate with males who produce a distinctive chuck sound. However, this preference does not appear to be functional. Rather, female tungara frogs have evolved a species detection system which contains an auditory bias toward sound frequencies produced by tungara frog males but not by males of other frog species. After females evolved this sensory bias, tungara frog males evolved the chuck: a meaningless sound which happens to maximally stimulate females' species detection system (Ryan et al. 1990). Female tungara frogs consequently show a mate preference for chucks that evolved purely as a by-product of a species detection adaptation.

Any perceptual adaptation that can motivate approach or avoidance can in principle be exploited by potential mates to manipulate attraction in the mating domain. The exploitation of existing perceptual adaptations is therefore a potentially common route to the evolution of mate preferences. The result in any case of sensory exploitation is potential for a coevolutionary arms race. Individuals of one sex will evolve adaptations that allow them to better exploit their potential mates; in response, individuals of the opposite sex will evolve sensory defenses to the extent that being exploited is costly. These escalating arms races will craft adaptations that shape how organisms perceive and interact with their worlds as well as shape their mating systems and mating behaviors. Understanding when and how perceptual adaptations are exploited in the mating domain can thus provide researchers insight into the nature of species' perception and mating.

Outstanding theoretical issues in the evolution of preferences. Evolutionary biologists have made considerable progress in developing theory concerning the evolution of mate preferences. But some areas of mate preference theory remain unclear or underdeveloped. One centers on the distinction between direct benefits to the mate

selector and indirect benefits through benefits to kin. These sources of benefits are often considered categorically distinct, but it must be stressed that they can overlap. For instance, a preference for mates willing and able to invest resources in offspring could provide direct benefits to the mate selector by providing supplemental parental investment but also indirect benefits if this provisioning increases offspring reproduction beyond what single parental investment would alone. A preference for good immune functioning could provide indirect benefits by producing healthier offspring but also direct benefits in lowering the risk of being infected by partners. When considering the functions of mate preferences, researchers must take care to consider the many and potentially overlapping functions of preference adaptations.

Indirect benefit hypotheses further focus largely on genetic benefits to direct offspring. But there are many potential ways by which preferences could provide indirect benefits to kin. First, the kin receiving benefits need not be direct offspring. A gene for a mate preference could increase its own reproduction if it were able to provide fitness benefits to siblings or other genetic relatives. A mate whose status or resources are able to spill over and increase the reproduction of siblings can produce fitness benefits by increasing the reproduction of preference genes they probabilistically share with the mate selector. Mate preference researchers must consider the many potential targets of indirect benefits when hypothesizing evolved functions of mate preferences.

What Do We Know About Human Mate Preferences?

Ample theory and evidence documents the ways in which evolution has shaped mate preferences in nonhuman species. Do human mate preferences show the same evolutionary fingerprints? Mate preference research has been a cornerstone of evolutionary psychology since the field's inception (e.g., Buss 1989). This research has discovered an impressive and growing catalog of human

preferences evolved to serve a variety of functions.

Direct benefits. Humans across cultures hold mate preferences hypothesized to have offered direct fitness benefits to human ancestors. One well-studied example concerns preferences for resources in potential mates. Human offspring are enormously costly, and they demand relatively large investments of resources to raise successfully. This is particularly true for women, who alone face the substantial energetic, temporal, and opportunity costs of pregnancy and up to several years of lactation. Analogous to female katydids, ancestral women could have partially offset these large reproductive costs by preferentially mating with partners who were willing and able to share resources with them.

Modern women across cultures consequently express a preference for potential mates who control resources that can be invested in them and their families. Buss (1989) surveyed 10,047 men and women across 37 cultures for their mate preferences in an ideal, long-term relationship partner. These cultures varied widely in religion, climate, and economic, political, and marriage systems. Yet despite this incredible diversity, in every culture, women, more than men, expressed a strong preference for potential mates who possess economic resources. This preference is not limited to modern cultures: women among the Hadza hunter-gatherers express a preference for men who are good hunters and therefore good providers of essential resources (Marlowe 2004).

Direct benefit preferences are not limited to women. One critical adaptive problem ancestral men would have faced in the mating domain is identifying mates who are fertile. Men who were able to target their mating effort toward women who were particularly fertile would produce more offspring than men attracted to less fertile women. However, women are fertile during only a relatively narrow period of their lives – after puberty and before menopause. Further, unlike many other mammal species, human ovulation is relatively concealed: whereas chimpanzees develop prominent genital swellings around ovulation, human women show only small changes around the fertile period of the menstrual cycle.

How could ancestral men identify and select fertile partners, since fertility, unlike estrus, is not directly observable? Men's mate preferences appear to have solved this adaptive problem by drawing men to women who show cues statistically correlated with their fertility. Attributes of physical appearance and behavior provide a wealth of potential cues. One is a woman's body shape and particularly waist-to-hip ratio. Relatively low ratios of waist circumference to hip circumference are associated with young age, non-pregnancy status, fewer diseases, and an easier time getting pregnant. A low WHR is found attractive by men across cultures (Sugiyama 2005). Men's mate preferences also guide them toward mates with beneficial hormone profiles. Higher levels of ovarian hormones, including estradiol, are associated with a higher likelihood of conception (Lipson and Ellison 1996). Facial femininity is strongly correlated with estradiol levels in women; men are also strongly attracted to women who are facially feminine (Smith et al. 2006). This hormone-attractiveness link emerges in facial attraction, but also holds and emerges for body attraction: controlling for BMI, higher levels of estradiol are associated with higher levels of bodily attractiveness (Grillot et al. 2014). Through various probabilistic cues, men's mate preferences are able to guide them to mates who are relatively fertile.

Finally, one particularly important mate preference appears to capture direct benefits related to both resources and fecundity: preferences for the age of potential mates. Age is a key cue to both fecundity – the capacity to produce offspring – and resource acquisition. First, women are not fecund prior to puberty. After puberty, fecundity peaks roughly in the late twenties and early thirties and then gradually declines until menopause. A women's age is thus a rough cue to her fecundity. Age is also a cue to reproductive value: roughly, the number of future offspring a person can be expected to have. Reproductive value typically peaks in the late teens and early twenties and declines thereafter. By seeking younger partners, ancestral men would have increased their odds of finding fertile reproduction partners. Age is additionally a useful

cue to resource-earning potential. In both modern and traditional societies, men accrue more resources when they are older than when they are younger. By seeking older partners, ancestral women could thus have increased their odds of securing partners with resources available to invest.

People accordingly show strong preferences for the age of their potential mates. Across cultures, men express a desire for younger partners whereas women express a desire for older partners (Buss 1989). This trend has held across decades in India, China, and Brazil (see, e.g., Souza et al. 2016). These preferences manifest not only in what people say but also in what they do: for example, marriage records across cultures show that husbands tend to be older than their wives (Kenrick and Keefe 1992). This difference appears in marriage records extending as far back as the nineteenth century in Swedish records (Low 1991).

Indirect benefits. Providing evidence for preferences evolved through indirect benefits is more difficult than providing evidence for preferences evolved via direct benefits. Nonetheless, humans have some mate preferences that are hypothesized to have evolved because they supplied ancestral humans with indirect fitness benefits. One concerns symmetry: human bodies are bilaterally symmetric by design, but all people show some degree of asymmetry. And just as in other bilaterally symmetric species, humans show a preference for symmetry in potential mates. More symmetric faces are found to be more attractive in both experimentally manipulated and natural faces (e.g., Scheib et al. 1999).

Another prominent preference hypothesized to have evolved via indirect benefits is women's preference for masculinity. Masculine facial, bodily, and behavioral attributes are thought to signal exposure to testosterone. Testosterone plays an important role in energy allocation: testosterone causes bodily systems to shift energy toward the development of muscle and away from maintenance processes such as immune functioning (Simmons and Roney 2009). Therefore, it is thought that only men who have "good genes" – that is, those for robust immune systems – can afford to produce large amounts of testosterone and develop highly masculine features. Consistent with this hypothesis, facial masculinity and asymmetry are correlated in men, suggesting they tap an underlying dimension of genetic quality (Gangestad and Thornhill 2003). By mating with masculine men, women with a preference for masculinity would bear offspring who inherit their good genes and thereby good immune systems. Evidence for attraction to masculinity is mixed, but women do appear to be more attracted to masculine men in short-term, sexual contexts (e.g., Little et al. 2002).

Despite longstanding research focus on preferences for masculinity, two complications exist for the indirect benefit hypothesis: one methodological and one theoretical. First, evidence is mixed that masculine features reflect circulating testosterone levels as opposed to early life exposure to testosterone (e.g., Whitehouse et al. 2015). If masculine facial features do not reflect circulating testosterone levels, then they do not clearly signal the ability to bear the costs associated with producing large amounts of testosterone. Second, even if masculinity were clearly related to attractiveness and circulating testosterone, these findings would not, on their own, suggest that preferences for masculinity evolved because they provided indirect benefits to human ancestors. An alternative possibility is that preferences for masculinity function to guide humans to healthy partners. These partners would have provided human ancestors direct benefits both in being less infectious and in being more likely to survive to co-parent mutual offspring.

Contextual shifts in preferences. Historically, at least some traits would have offered variable fitness benefits across contexts. Selection should have favored the evolution of mate preference adaptations that are sensitive to these contextual shifts in fitness benefits. Preference mechanisms should take information about the current state of the environment as input and moderate the strength and nature of preferences in response. One context variable studied in the extant literature is pathogen exposure. Pathogens are more prevalent and pose a greater threat under some conditions and in some environments (e.g.,

warmer climates). Under such contexts, preferences for health in potential mates would have historically provided greater fitness benefits and so selection would have favored the evolution of preference mechanisms sensitive to pathogen prevalence.

Preferences for physical attractiveness in potential mates appear to be one such context-sensitive preference (Gangestad and Buss. 1993). Several studies suggest that physical attractiveness is at least a moderate cue to health (Sugiyama 2005): people who are more physically attractive tend to be healthier across a wide array of indices. Ancestral humans who more heavily prioritized physical attractiveness under conditions of high pathogen threat would therefore have been more likely to select partners who were able to survive disease threats and remain healthy. Additionally, to the extent that immune functioning is heritable, these people would be more likely to produce offspring with strong-enough immune systems to survive in their local, high-pathogen threat environments. Accordingly, modern humans living in ecologies with greater pathogens report stronger preferences for physical attractiveness in potential mates (Gangestad and Buss 1993). Women's preference for masculinity in potential partners specifically varies across cultures related to the health of those cultures: in countries with greater health risks, such as pathogen threat, women express stronger preferences for masculinity in potential mates (Debruine et al. 2010).

Mate preferences differ across environments, but they also shift within people across contexts. For instance, the traits that are beneficial in a potential mate depend on the mating strategy one is pursuing. For men, a key benefit of short-term, uncommitted mating is access to multiple sexual partners (Buss and Schmitt 1993). This access would be hampered by mate preferences that set high standards for potential mates. Men's mate preferences consequently shift as a function of their mating strategy. When men are pursuing a long-term, high-commitment mating strategy, their preferences set high standards for the intelligence and kindness of their potential mates (Kenrick et al. 1990). When men are pursuing

uncommitted, short-term partners, they substantially lower their preferences for kindness and intelligence, which presumably allows them to mate with a variety of short-term partners. Importantly, men's physical attractiveness preferences remain relatively strong across mating strategies: healthy and fertile partners are always beneficial to men, and so preferences for these traits are relatively insensitive to mating context.

Women's mate preferences also shift across context. One well-studied contextual shift concerns shifts in women's mate preferences as a function of ovulatory status. A growing body of literature suggests that when women are ovulating, they more strongly prefer potential mates who are symmetric, with masculine bodies, and show dominant behavioral displays (Gildersleeve et al. 2014). These preference shifts are generally stronger when women are considering short-term, sexual partners rather than long-term, committed, romantic partners. Because women can only conceive offspring when or just before they are ovulating, these preference shifts have been hypothesized to function in motivating women to conceive offspring with partners who possess "good genes" – including those that allow them to build and maintain symmetric and masculine phenotypes. However, although many of these ovulatory shift effects appear to be empirically robust, the ultimate function of these shifts remains heavily debated. Alternative theoretical accounts include proposals that preference shifts are byproducts of adaptations calibrated to between-women differences in fertility and byproducts of adaptations designed to calibrate preferences to differences in fertility within women between menstrual cycles (see, e.g., Roney 2009).

What Is Not Known About Mate Preferences?

Despite the considerable and growing body of knowledge, many uncertainties remain about the nature of human mate preferences. These questions span the levels of Tinbergen's four questions

and include issues of the development, mechanism, and function of human preferences.

Development. Mate preference research has focused largely on the content of adult mate preferences. Almost no research explores how preferences develop into these mature forms. This developmental question encompasses several sub-questions. For instance, when, developmentally, do mate preferences come online? Because mate preferences presumably function to guide mate selection, one intuitive hypothesis is that mate preferences will not generally emerge until humans begin their mating careers – that is, at puberty. However, some evidence indicates that at least preferences for physical attractiveness appear very early in life (e.g., Langlois et al. 1987). Different preference adaptations may activate and deactivate at different points across the lifespan depending on when they would have been most functional throughout human evolutionary history. The developmental emergence of mate preferences is a very open and important area of inquiry.

A second question concerns the factors that affect the developmental trajectories of mate preferences. For example, mate preferences are known to vary somewhat across cultures (Buss 1989; Gangestad and Buss 1993). These cultural differences could be caused by psychological adaptations that actively calibrate mate preferences to local environments throughout the lifespan. However, an alternative developmental trajectory is that mate preferences are fixed relatively early on in life by environmental cues experienced in infancy or childhood. This relates to a third question: to what extent are mate preference adaptations sensitive to sociocultural cues? That is, do people have adaptations designed to promote learning of mate preferences from their cultures or social groups? Humans are known to engage in some degree of "mate copying": a learning process that appears across species wherein individuals learn to be attracted to potential mates based on the mate choices of others (Waynforth 2007). However, precisely what preference adaptations include these learning features, how long these learned changes last, and just how much learning can adjust the magnitude of mate preferences are still unknown.

Finally, relatively little is known about the developmental course of mate preferences across the lifespan. Many adaptive problems faced in mate choice would have been age linked throughout human evolution. For example, women's fertility wanes at menopause. After this point, features of potential mates related to heritable benefits, such as the possession of good genes, could no longer provide fitness benefits. Accordingly, women's mating strategies appear to shift around menopause (Easton et al. 2010). These shifts are hypothesized to function in motivating women to take advantage of their fertile years. However, this is just one preference shifting at one point in women's lifespan. Little is known about the extent to which other preferences, such as those for resources, health, or fertility, change across the lifespan.

Mechanism. A central assumption of mate preference research is that mate preferences motivate people to pursue and select mates who fulfill those preferences. But preference researchers do not as yet understand how mate preferences are integrated to make actual mating decisions. Given preferences for mates who are, for example, intelligent, kind, and physically attractive and an array of potential mates who vary randomly on each of these dimensions, how exactly do people determine which mates are worth pursuing and which are worth passing over? How do we weigh a mate who is kind, attractive, and dull against a mate who is beautiful, smart, and rude?

Human mate choice psychology must have some psychological machinery that integrates our many mate preferences into summary decision variables, such as valuable as a mate or not. Several algorithms have been proposed for how this integration is accomplished. These include linear combinations similar to linear regression (Buss and Schmitt 1993), aspiration models involving series of thresholds (Miller and Todd 1998), nonlinear models involving trade-offs between necessities and luxuries (Li et al. 2002), and a Euclidean algorithm that minimizes the distance between desires and potential mates across multiple dimensions (Conroy-Beam and

Buss 2016). Understanding the nature of human preference integration will be key to understanding both the content of human mate preferences and the downstream effects of these preferences on mating outcomes.

Function. Finally, mate preference research has been predominantly driven by functional hypotheses that propose mate preferences evolved to solve adaptive problems faced throughout human evolution. However, it is unlikely that all human preferences are the functional outputs of adaptations. At least some preferences are likely to be byproducts of other adaptations. For instance, the most common explanation for why humans prefer symmetry is that symmetry cues health and good genes (Grammer and Thornhill 1994). But it has also been proposed that symmetry preferences can emerge as byproducts of perceptual adaptations designed merely to detect, but not evaluate, mates who happen to be imperfectly bilaterally symmetric (Johnstone 1994). These hypotheses are not mutually exclusive: both functional and by-product preferences for symmetry could act to guide people toward symmetric partners.

Despite an apparent frequency of sensory exploitation in nonhuman animals (e.g., Ryan et al. 1990), sensory exploitation hypotheses for the evolution of mate preferences have not been explicitly explored in human mating. Many preferences whose functions are unclear – for instance, for attributes such as hair color and styling, dressing, dancing abilities, and so on – could exist because they hijack preexisting features of human perception. Exploring these sensory exploitation hypotheses has potential to provide psychologists insight into human perception and human mating.

The number and role of nonfunctional mate preferences remains an open empirical question. Full understanding of the breadth of human mate preferences will require preference researchers to explore by-product hypotheses alongside functional hypotheses as well as conduct empirical tests that compete by-product and functional hypotheses against one another for the ultimate origins of human mate preferences.

Conclusion

Mate preferences have pervasive effects on human life and human evolution. Mating is central to differential reproduction, the engine of evolution by selection. All living humans are descendants of a long and unbroken chain of ancestors, each of whom successfully mated. Consequently, the study of human preferences has been a large part of evolutionary psychology since the field's inception. This research program begins with an understanding of how preferences evolve, including the receipt of direct and indirect benefits as well as by-product processes such as sensory exploitation. The application of these evolutionary theories has yielded a substantial body of evidence about the content of human preferences. This includes cross-cultural, sex-differentiated preferences for features such as possession of resources, future resource potential, symmetry, masculinity, and many cues to fertility, such as youth, femininity, and low waist-to-hip ratios. Preference research has also uncovered context sensitivity of many preferences, responsive to diverse circumstances such as personal mate value, pathogen prevalence, and mating strategy. Despite this large and growing body of knowledge, many questions remain open about mate preferences for future research. Preference researchers still have little understanding of how mate preferences develop over the lifespan, how multiple preferences are integrated with one another to make decisions about actual mate choice, and how some preferences might have evolved through nonfunctional routes such as sensory exploitation. Mate preference research is a large, successful, and vibrant research area with a long future ahead. The success of preference research contributes understanding of a large and critical domain of human life and underscores the value of applying an evolutionary perspective for understanding human psychology.

Cross-References

▶ Cross-Cultural Evidence

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