

Human Mate Selection Theory: An Integrated Evolutionary and Social Approach

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Abstract

Current research into mate selection processes has developed under two main theoretical approaches: evolutionary and social structural. While the evolutionary approach favors behavior mediated through evolved dispositions, the social structural approach is guided by cultural exchange and gender role expectations. The interpretation of empirical data within these two perspectives is reflected across the various dimensions of mate selection studies; particularly in the sexual differentiation of mate selection behaviors. Both theoretical models offer valuable insight into the mechanics of mate selection criteria; however, a combined theoretical approach provides a more thorough and comprehensive examination of the issue. Future research would benefit from a unified and multidimensional evolutionary and social structural approach.

Over the past three decades, a considerable amount of psychological research has been generated regarding human mate selection. A preliminary review of literature shows the various aspects of human mate selection that psychologists have investigated, such as the selection strategies that humans have developed to evaluate potential mates (e.g., Eagly & Wood, 1999; Feingold, 1992; Kenrick, 1994) and the criteria that men and women seek in a mate (e.g., Buss, 1989; Buss & Barnes, 1986; Howard, Blumstein, & Schwartz, 1987). One recurring pattern that has emerged from this research is a significant degree of sexual differentiation between the characteristics that men and women prefer in potential mates (e.g., Buss, 1989; Buss & Barnes, 1986; Cunningham, Barbee, & Pike, 1990; Cunningham, 1986). Presently, two main perspectives are used to examine the sexual differentiation that appears in human mate selection behaviors: the evolutionary perspective and the social structural perspective.

The evolutionary perspective proposes that men and women have evolved sex-specific cognitive mechanisms from primeval environments that cause them to differ psychologically, thereby predisposing them to behave and make decisions in a sexually differential manner (Eagly & Wood, 1999; Kenrick, 1994). In contrast, the

social structural perspective states that mate selection strategies are not necessarily based on evolved psychological dispositions; rather, they result from the contrasting social positions that men and women have historically occupied within society (Eagly & Wood, 1999; Howard et al., 1987). While both perspectives have generated support for their respective models, there has been some debate as to which perspective retains the greatest degree of validity. Regardless of this dissention, however, a proper examination of mate selection theory as a whole requires an investigation of both perspectives. The use of a combined evolutionary and social structural approach to sexual differentiation in human mate selection presents a more comprehensive model than either theory alone and is, therefore, able to more thoroughly address the multidimensional aspects that exist within the phenomenon of human mate selection.

In order to assess the possible influence of either social or evolutionary factors in human mate selection strategies, a better understanding of each individual perspective is necessary. The evolutionary perspective is grounded in evolutionary theory and the basic principles of Darwin (1859; 1872). His three most basic principles state that all animals struggle for existence, that there is heritable variation within a species that allows traits to be passed to offspring, and that natural selection will cause adaptable genotypes to replace those that are less adaptive. Based on these principles, evolutionary psychologists propose that historically successful mate selection behaviors continue to influence current mate choices, since those selected behaviors led to the continued existence and prosperity of the human species (Kenrick, 1994). In addition, the evolutionary perspective also suggests that sexual differentiation exists between male and female mate selection behaviors because men and women have historically faced different environmental and social pressures (Eagly & Wood, 1999). More specifically, men and women have played

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highly differential roles with regards to the level of investment required in the bearing and rearing of children. This phenomenon is best exemplified in Trivers (1972) parental investment model.

The parental investment model proposed by Trivers (1972) states that males and females of a given species have evolved mating behaviors that are specific to the level of parental investment required to ensure the survival of that species. As it applies to human mating, women are required to invest extensive physical resources in the carrying and birthing of any offspring. Men, however, invest fewer physiological resources beyond the act of conception; rather, men invest outside resources to help with the rearing of the child. In accordance to these principles, men and women look for cues in a potential mate that suggested the availability of the resource desired for successful reproduction. Women would be selective for characteristics that indicated her mate possessed adequate resources to help support and raise her child, whereas men would be selective for characteristics that indicated their mate was fertile and possessed the necessary physical qualities to successfully bear a child (Kenrick, 1994).

The social structural perspective proposes a different scenario than the evolutionary perspective. Advocates of this approach maintain that human mate selection strategies are primarily based on attempts to maximize resources in an environment that is constrained by society's dictated gender roles and expectations. "From a social structural perspective, a society's division of labor between the sexes is the engine of sex-differentiated behavior, because it summarizes the social constraints under which men and women carry out their lives" (Eagly & Wood, 1999, p. 409). This perspective is often viewed in terms of marketable exchange. In society, women are delegated to roles that have less power and less access to resources. In order to gain power and access to resources, women seek out these characteristics in potential mates. Women, in turn, offer to exchange commodities that they do have access to, such as physical beauty, fertility, and sexual pleasure. As men are assigned to gender roles that place them in possession of greater power and financial independence, they are able to advertise those commodities on the mating market in exchange for those qualities that they desire in a potential mate (Buss & Barnes, 1986; Eagly & Wood, 1999; Howard et al., 1987). At this point, an important distinction regarding the social structural perspective should be made. The term 'social structural' is specific to Eagly and Wood's (1999) work on social structural theory and human mate selection. Although several psychologists had researched and commented on the roles of society and culture in human mate selection practices prior to the contributions of Eagly and Wood (i.e., Buss & Barnes, 1986; Howard et al., 1987), this research had not yet been labeled specifically as the social structural perspective.

Although research has been generated to support both the evolutionary perspective and the social structural perspective, the availability of information regarding the evolutionary perspective is more substantial. This disequilibrium marks a potential disservice to human mate selection theory as a whole, because both perspectives are equally important and deserve proper acknowledgement and consideration. Each perspective contributes to the development of the theoretical model for human mate selection. Whereas the evolutionary perspective is important for its biological approach to mate selection strategies, the social structural perspective is crucial for its recognition of the differential impacts that society and cultural values can have on mate choices. Additionally, research has often commented that, despite the differences in the two perspectives, the two hypotheses are not inherently incompatible (e.g., Buss & Barnes, 1986; Eagly and Wood, 1999; Howard et al., 1987; Kenrick, Groth, Sadalla, & Trost, 1993). Both perspectives acknowledge certain degrees of socialization in addition to investment and exchange behaviors.

The use of the evolutionary and social structural perspectives to examine the sexual differentiation that appears in human mate preferences has generated interesting results. One sexually differential aspect of human mate selection theory that has received considerable attention is the difference between how men and women judge and value physical attractiveness in a potential mate. Several experiments have been conducted to determine precisely which physical attributes men and women look for and desire in a mate. Two prime examples of these types of studies are Cunningham (1986) and Cunningham et al. (1990). In the Cunningham (1986) study, men were asked to judge several sample photographs of women. The results from these judgments demonstrated that the female features most "positively correlated with attractiveness ratings were the neonate features of large eyes, small nose, and small chin; the maturity features of prominent cheekbones and narrow cheeks; and the expressive features of high eyebrows, large pupils, and a large smile" (p. 925). Overall, neonate features were predominantly preferred and viewed as being more feminine. However, the results also emphasized the importance of other features, such as those that indicated maturity combined with neonate features. These results have several evolutionary and social structural implications. Cunningham (1986) proposed a multiple motive hypothesis indicating that a combination of neonate and mature features may operate as a visual cue that signals optimal mating age and fertility. Additionally, the importance of the maturity features may have social structural implications, as those features tend to be non-sex-typed and have greater status and cross-cultural significance.

In the second study done by Cunningham et al. (1990), an assessment was conducted to discover what features women find attractive in men. Similar to the

previous study, Cunningham et al. (1990) proposed a multiple motive hypothesis that suggested women are attracted to an “optimal combination of neotenus, mature, and expressive facial features” (p. 61). Those features include large eyes (neonate), a big smile (expressive), prominent cheekbones, and a large chin (maturity). One note of interest is that although the facial feature judgments made by women were similar to those made by males in the Cunningham (1986) study, the cognition behind female judgments appears to be somewhat different. For example, the Cunningham (1986) study found that female neonate features were linearly preferred by men for their femininity, and deviations from the norm were considered the most beautiful. The relationship for female judgments, however, was curvilinear, with the mean features being most preferable. Additionally, choices made by female judges from the Cunningham et al. (1990) study can be linked to a greater number of underlying mate characteristics, such as power, status, maturity, and sociability. The results from both the Cunningham (1986) and Cunningham et al. (1990) studies indicate a possible combination of both evolutionary and social influences. Both men and women appear to be relating to facial features not only according to cultural norms, but how they may contribute to the success of future procreation as well.

The previous two studies laid some of the groundwork for discovering what specific features men and women find physically attractive in the opposite sex and how each sex differs in their respective preferences. Subsequent research has reinforced the differential nature of which physical features men and women prefer in a mate. For example, Singh (1993) showed that waist-to-hip ratio (WHR) plays an important role in how men judge the attractiveness of women’s bodies. In this study, a female WHR of 0.7 was judged by men as being the most attractive and indicative of reproductive potential. More recently, research has focused attention on how the female menstrual cycle may affect female mate preferences. Several studies have shown that women near the ovulation stage of their menstrual cycle tend to exhibit a greater preference for men who advertise social dominance and masculinity (Senior, Lau, & Butler, 2007; Gangestad, Simpson, Cousins, Garver-Apgar, & Christensen, 2004). Not only do these studies contribute to the body of evidence supporting sexual differentiation in mate selection behaviors, but their biological nature provides strong support for the evolutionary perspective on mate selection. Although the contributions of the social structural perspective to human mate selection theory should not be dismissed, the large body of evidence supporting the evolutionary perspective deserves individual attention.

A meta-analysis conducted by Rhodes (2006) surveyed multiple studies conducted regarding the evolutionary perspective’s contribution to mate selection

theory. She stated that although beauty standards for both sexes have historically been viewed by social sciences as cultural standards, enough evidence is available to support a relationship between human biological heritage and mate selection practices. Rhodes best demonstrated this in her analysis of research dealing with the relationship of symmetry, averageness, and sexual dimorphism to facial attractiveness. She cites research suggesting that each of these facial characteristics may be considered ideally attractive because they are related to judgments of physical health, also known as the “good-genes” approach (Kalick, Zebrowitz, Langlois, & Johnson, 1998, p. 8; see also Andersson, 1994; Hamilton & Zuk, 1982; Møller, 1990). The good-genes approach is based on the idea that not only have humans evolved to select for physically attractive features, such as symmetry or averageness, but that the attractive features themselves have evolved to represent freedom from parasites and infectious disease (Rhodes, 2006; Kalick et al., 1998).

The good-genes approach has gained a substantial amount of support and has the potential to lend considerable weight to the evolutionary perspective. As a model, however, the good-genes approach is not without criticism. One of the primary complaints is the lack of sufficient empirical testing (Kalick et al., 1998). In one attempt to discover whether human facial attractiveness correlated with good health, Kalick et al. (1998) examined photos and health data from a series of longitudinal studies that recorded participants’ health across a lifespan. Using this information, Kalick et al. compared the recorded health of the participants from the study to attractiveness ratings of the initial study photographs taken between the ages of 17 and 18. After having two panels of raters judge the perceived health and physical attractiveness of the photos, they found that while raters were able to judge the health of the participants from the photographs somewhat successfully, attractiveness of a participant suppressed this correlation. This research implied that people are, in fact, “blinded by beauty” (Kalick et al., p. 11). People’s judgments are impaired in the presence of physical attractiveness. The evidence from Kalick et al.’s (1998) study suggests that there could be a compelling argument to support the good-genes approach once further research overcomes any potential biases and inconsistencies inherent to the model.

To date, both the evolutionary and social structural perspectives have been useful for interpreting the reasoning behind the sexual differentiation that appears between men and women’s preferences for specific physical traits. In order to further expound the human mate selection process, both models have also been applied to examining the different criteria that both sexes seek in a potential mate. One groundbreaking study that examined the specific characteristics and criteria that men and women preferred in a mating partner was conducted by Buss and Barnes (1986). In order to assess mate preferences, study participants were administered the

Marital Preferences Questionnaire (Gough, 1973) to determine the characteristics considered most valuable in a potential marriage partner. Buss and Barnes (1986) concluded that there are different levels of desired characteristics. One level consists of those characteristics that are consensually desired by both sexes, while a second level is mediated by sexually differentiated characteristics. The results of the Buss and Barnes (1986) study revealed that the top three characteristics consensually desired by men and women were kindness and understanding, intelligence, and an exciting personality. While there were several other consensually desired characteristics, the study found that there were three major areas where men and women significantly differed; men favored physical attractiveness more, whereas women preferred education and earning capacity. The researchers suggested two hypotheses to explain the sexual differentiation that appeared in criteria preferences. In their first hypothesis, they proposed that men and women exhibit gender specific preferences for certain mate criteria because of sex role socialization. For example, "women seek in mates those characteristics associated with power such as earning capacity and higher education" (p. 559), roles that are subsequently denied to them. However, they also proposed that these differential cues could be related to reproductive investment, with men relating physically attractive characteristics to reproductive health, and women looking for education and earning capacity as resource cues.

Buss and Barnes' (1986) proposal of two independent, yet interrelated hypotheses issued the invitation for future researchers to investigate each model. Further research was conducted to explore whether evolutionary or social structural factors were influencing mate choices. For the evolutionary perspective, Buss (1989) went on to replicate the findings of the Buss and Barnes (1986) study across 37 cultures, providing robust support for the evolutionary perspective's proposal that mate selection behaviors have been influenced by the evolution of the human species. Supportive of the social structural perspective, Howard et al. (1987) extended Buss and Barnes (1986) research by administering similar questionnaires to both heterosexual and homosexual couples. Results from this study demonstrated that the evolutionary approach was insufficient when addressing the mate preferences of gay and lesbian couples. Most notably, Howard et al. (1987) showed that the sex of the partner being evaluated, in addition to the sex of the evaluator, had a significant effect on mate preferences. This effect was not addressed in the original Buss and Barnes (1986) study and suggests the influence of cultural factors.

The findings from the Buss and Barnes (1986) study, as well as those studies that followed, not only demonstrate the viability of both the evolutionary and social structural perspectives, but the importance of

using both models when evaluating human mate selection behaviors. Neither model alone appears to be fully capable of addressing the complexity of human mate selection; but together the perspectives provide a rich and diverse picture. More recent forays into the field of human mate selection have yielded an even more intricate picture of mate selection theory. The Buss and Barnes (1986) study investigated the criteria that men and women look for in a potential marriage partner. As not all intimate relationships are formed for the purpose of marriage, advancing research to include relationship investment levels was necessary. Psychologists began looking at the characteristics men and women prefer in short-term versus long-term mates, as they may differ both sexually and across investment levels.

Two studies, Kenrick, Sadalla, Groth, and Trost (1990) and Kenrick et al. (1993), were conducted to further explore the effect of relationship investment level on mate selection criteria. For both studies, researchers proposed that the minimum acceptable level of any particular mate criteria would be lowest at the level of least investment and increase as the level of investment increased. The reasoning behind this approach was that men and women are hypothesized to become more selective and specific in the criteria they desire in a mate as the level of relationship investment increases (Kenrick, 1994). In the first study, Kenrick et al. (1990) asked a group of men and women to rate the importance of 24 potential mate criteria across four levels of relationship involvement: a single date, a sexual relationship, steady dating, and marriage. The results from this study showed that women were generally more selective than men on most criteria with the exception of physical attractiveness. The largest degree of gender differentiation occurred at the sexual relationship level. "Females showed a steady increase in criteria, whereas males' criteria did not increase between the level of date and sexual relations, but paralleled the female pattern after that" (Kenrick et al., 1990, p.104). These results indicate that, while women are generally more selective than men in most areas of mate characteristics, men also increase in selectivity at higher relationship investment levels. For men, it appears that selection criteria at the single date and sexual relationship condition are much lower and not significantly different from one another in every area except physical attraction. Additionally, Kenrick et al. (1990) found that, like the Buss and Barnes (1986) study, women exhibited a much greater preference for elements related to status, while men preferred physical attractiveness.

In order to expand on the results from the previous study, Kenrick et al. (1993) conducted a second study using the same procedures and adding a "one night stand" condition to the level of investment. The results once again showed that the differences in selection criteria were the most pronounced for sexual investments, even more so at the one-night stand condition, with women

being the most selective. The results from both studies have several implications for mate selection theory. Taken in context with the two mate selection perspectives, a combination of the evolutionary and social structural perspectives creates the most comprehensive explanation. The Kenrick et al. results (1990; 1993) suggest that women are more selective in potential mate criteria, particularly at the relationship investment levels that include a sexual relationship, because of increased potential for conceiving a child. Men, however, demonstrate less selectivity in criteria at lower investment levels because there is a lesser likelihood that they will be required to invest personal resources. As investment levels increase towards long-term relationships, however, men become nearly as selective as women in the criteria of a potential mate. These findings are supportive of Trivers' (1972) parental investment level and appear to be consistent with the evolutionary perspective.

While the results of Kenrick et al. (1990, 1993) provide strong support for the evolutionary perspective, Kenrick et al. (1990) maintains that the theory is more indicative of a "relationship-qualified parental investment model" (p. 102). According to this qualified model, the evolutionary aspects of the parental investment model are moderated by different levels of social exchange across relationship levels. This effect is best exemplified by the results from both studies regarding the gender differentiation that appeared in men and women's ratings of physical attraction. While both the evolutionary and social structural theory maintain that men should value physical attractiveness more than women, Kenrick et al. (1990; 1993) found that men and women are actually more similar in how much they value physical attractiveness in a mate at certain levels of relationship investment. Specifically, at the one-night stand and sexual relationship levels, the sexual differentiation effect nearly disappeared and both men and women valued high attractiveness for potential sexual partners. This effect suggests that evolutionary and social factors may be influencing mate selection behaviors both simultaneously and in multifaceted ways.

Review of the previous studies suggests that the current evolutionary and social structural perspectives would benefit from combining their respective elements in order to address the complexities of mate selection strategies. Research has also demonstrated that men and women appear to be sexually differentiated across certain areas of mate selection behaviors. These differences, however, are potentially mediated by relationship investment levels to the point that both sexes demonstrate similar preferences at different relationships levels. Li, Kenrick, Bailey, and Linsenmeier (2002) suggest that the conflicting results regarding the degree of differentiation in male and female mate preferences is a product of the methods used in prior studies. They noted that "rating traits one at a time, unconstrained,

may not reveal trade-offs normally made when people select mates, whose traits come in bundles" (p. 948). Li et al. (2002) proposed that mate selection strategies are better explained by expanding the evolutionary and social structural perspectives to include the economic principle of a cost versus benefit exchange. In this model, certain traits might be viewed as necessary, whereas others are more of a luxury. If the sufficient levels of a certain necessary characteristic are present, such as physical attractiveness or access to resources, men and women are able focus more attention on other desirable traits. Li et al. (2002) hypothesized that if men and women were placed in situations where they were required to develop a budget that reflected their ideal mate across different relationship investment levels, those budgets that were limited would best reflect the qualities that both sexes deemed essential in a potential mate.

The model proposed by Li et al. (2002) was further tested by Li and Kenrick (2006). For their experiment, Li and Kenrick (2006) were primarily interested in men and women's ratings of physical attraction at the short-term investment level, as this condition seems to diverge the most from previously proposed theory. In this series of two studies, Li and Kenrick asked participants to design a hypothetical short-term mate using either a low, medium, or high budget. Participants were supplied with a series of potential mate characteristics, such as physical attractiveness, kindness, and status, and they were instructed to assign portions of their budget accordingly. Results from these studies found that across all budget conditions at the short-term level, men and women both reported the highest level of prioritization for physical attraction. As budgets increased from low to high, the researchers found that, while the physical attractiveness effect still existed, characteristic allocations became more rounded and less differentiated for both sexes. These results led Li and Kenrick (2006) to conclude that physical attractiveness in a mate is seen as a necessity at the short-term level. With enough options, however, men and women both prefer a more characteristically balanced mate. The research of Li and Kenrick (2006) suggests that understanding mate selection behavior is far more complex than what evolutionary and social structural theorists have thus far determined. The future of mate selection criteria research lies in a more comprehensive approach, with the use of both evolutionary and social structural theories, as well as a microeconomical design.

As the investigation into human mate selection theory progresses, research reveals how truly complex the process is. While experiments initially suggested that there was a high degree of sexual differentiation between male and female mate selection strategies, more recent work has demonstrated that men and women may, in fact, be more alike than they are dissimilar. The patterns of similarity that appear in the work of Kenrick (1990; 1993), Li et al. (2002), and Li and Kenrick (2006) suggest that the future development of human mate selection

theory may lay in investigating both the similarities and differences that exist between men and women's mate choices (Mather, 2006). Additionally, the research of Li et al. (2002) and Li and Kenrick (2006) demonstrates that previous methods of investigating human mate selection strategies have been insufficient for capturing adequate information. Several researchers have concurred with this conclusion and have developed new methods of gathering data. For example, Kenrick, Sundie, Nicastle, and Stone (2001) employed a "zoom and focus" approach to observe nonlinearities in mate judgments. Using this method, they examined how different degrees of wealth affected women's judgments of a man's desirability. Results showed that women judged men to be progressively more desirable as personal wealth increased; however, this effect was not significant once a certain degree of wealth was obtained. Kenrick et al. (2001) suggested that female choice is motivated to avoid poverty rather than to seek wealth.

Another study that sought a novel method of examining mate selection behaviors was Graziano, Jensen-Campbell, and West (1995). This study examined how women's judgments of men's desirability were affected by dominant and altruistic behaviors. This research was built on a previous research study conducted by Sadalla, Kenrick, and Vershure (1987) that showed women were more attracted to men who exhibited dominant behavior. Sadalla et al. (1987) hypothesized that women's preference for men who exhibited dominant behaviors were indicative of evolutionary influences, because male dominant behaviors conveyed reproductive advantages and the ability to access resources. While Graziano et al. (1995) agreed with this hypothesis, they proposed a modified model with women judging dominant men as being more attractive and desirable in the presence of altruistic behaviors. The reasoning behind this approach was that while women may prefer dominant men because of the resources they would be able to contribute to a relationship, women would exhibit a preference for men with both dominant and prosocial behaviors that indicated a man's willingness to share resources. Results from the Graziano et al. (1995) study showed that "female attraction was an interactive function of male dominance and agreeableness. Dominance seems to matter when a man is high in agreeableness. When a man is low in agreeableness, however, dominance seems to have no effect" (p. 438). Graziano et al.'s (1995) work demonstrates the need for research designs that examine mate criteria simultaneously, as certain criteria appear to be capable of mediating the importance of others.

The further that research delves into human mate selection theory, the more difficult it becomes to amass all the available data into a singular cohesive theory. Existing research has demonstrated how the two dominating theoretical perspectives of human mate selection seem singularly inadequate in addressing mate

selection behaviors. Therefore, a combined theoretical approach of both the evolutionary and social structural perspectives appears to be a much more viable option. The need for such a model is exemplified by Hamida, Mineka, and Bailey's (1998) research into the effects of perceived control over mate value. They hypothesized that "women feel they have less control over traits relevant to their desirability than men feel they have over traits related to male desirability" (p. 953). They also suggested that efforts to augment one's own value as a potential mate is transmitted into a society's culture of beauty standards. A woman's value as a mate has been linked through both the social and evolutionary perspectives to age and physical attractiveness, whereas a man's value is determined through wealth and status. Since women have less control over their own biology than a man might exert over his status, women appear to be more vulnerable to negative affective consequences, such as body dissatisfaction, low self-esteem and depression. In addition, across time, a man's potential to amass wealth increases as he ages, whereas a woman's potential to maintain youth and beauty decreases. As these results suggest, there are multiple factors influencing human mating behaviors, both societal and evolutionary. If psychology is to address any negative effects influencing these behaviors, research must advance until a reliable theory has been developed that is capable of accounting for the influences of evolution and society on mate choices and reliably predicting human mating behaviors.

As previous research has shown, there is merit to examining the differential impact of society and evolution on human mate selection; however, the ability to predict universals in human mating behavior requires a more cohesive and unified theoretical approach. While some psychologists have begun to move down this avenue (i.e., Li et al., 2002; Li & Kenrick, 2006), further research along these lines is needed for the development of a social evolutionary model for human mate selection. The progression of such a model would allow researchers to examine the evolutionary, societal, and cultural histories of human mating, thus allowing them to make predictions about behavior while accounting for the power of evolutionary and societal influences. By combining the evolutionary and social structural perspectives into a comprehensive approach, as well as incorporating new and innovative methods of researching mate selection behaviors, psychology stands to benefit from the development of an integrative model for human mate selection theory.

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