

COMMENT

On the Proper Functions of Human Mate Preference Adaptations: Comment on Eastwick, Luchies, Finkel, and Hunt (2014)

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Evolutionary psychologists have hypothesized that humans possess sex-differentiated mate preference adaptations. In the context of long-term mating, men are hypothesized to more strongly prefer cues to youth and fecundity, whereas women are hypothesized to more strongly prefer cues to status-related attributes. Eastwick, Luchies, Finkel, and Hunt (2014) recently asserted that if men and women evolved sex-differentiated desires, they should exhibit similarly sex-differentiated relational outcomes such as marital satisfaction in response to whether a partner fulfills those desires. This seemingly reasonable extrapolation from sex differences in mate preferences to sex differences in relationship outcomes is, from an evolutionary perspective, problematic and warrants careful conceptual analysis. Evolutionary psychologists have not predicted that selecting a mate with sex-differentiated desirable qualities always translates to more satisfying, trusting, and passionate relational outcomes. Indeed, in some cases obtaining an ideal partner is expected to lead to negative outcomes, such as incurring the costs of heightened courtship effort, mate retention exertion, and the painful experience of jealousy. There are 4 additional concerns with the Eastwick et al. analysis: (a) heterogeneous operationalizations of predictor and criterion variables, (b) inadequate treatment of individual differences in the expression of evolved mate preferences, (c) an overlooking of physical appearance cues central to women's long-term mate preferences, and (d) the impact of nonrandom mateship formation on sex-linked variances in preferred attributes (e.g., low status men and unattractive women may be underrepresented in studies of established couples). As conducted, the Eastwick et al. analyses, while valuable, did not adequately test function-related hypotheses derived from the evolutionary psychology of mate preferences.

Keywords: sex differences, mate preferences, relationship quality

Eastwick, Luchies, Finkel, and Hunt (2014) recently asserted that if men and women have evolved sex-differentiated desires (e.g., mate preferences for attractiveness or status), men and women should exhibit sex-differentiated relational outcomes (e.g., marital satisfaction levels) based upon whether they have succeeded in attracting a mate who fulfills their sex-differentiated desires. Eastwick et al. should be applauded for accumulating a wide variety of studies on the links between a partner's appearance-related and status-related attributes and associated relational outcomes. Predictions from interdependence theory and the ideal standards model may lead to the general expectation that obtaining what one desires will result in positive outcomes. From an evolutionary psychology perspective, however, the explanatory extrapolation made by Eastwick et al. from sex differences in evolved desires to predicting sex differences in relational outcomes once mated is conceptually problematic.

What to Expect When You Are an Evolutionary Psychologist

Evolutionary psychologists have hypothesized that humans possess several mate preference adaptations that are designed to influence the process of partner selection or "mate choice" (Buss, 1989). Some of these preference adaptations are specially designed for long-term mating, and among those some are hypothesized to be sex-differentiated (Buss & Schmitt, 1993). For instance, women are hypothesized to possess long-term mate preferences for cues to a man's ability and willingness to devote resources to herself and their offspring. Such cues typically include a man's social status—which can be highly culture specific and range from perceived hunting skills and physical strength in foraging societies to expensive cars and accumulated wealth in more modern nations—as well as less direct, weaker, and more probabilistic predictors of resources, such as his ambition, intelligence, social dominance, and slightly older age (Ellis, 1992). In contrast, men are hypothesized to have evolved long-term mate preferences for appearance-related cues to a woman's immediate fecundity and potential long-term reproductive value (i.e., the number of children a woman could have in the future). Such cues typically include indicators of a woman's relatively youthful age (e.g., neotinous face, full lips, wide eyes, small chin, lustrous hair, and good

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muscle tone; Sugiyama, 2005) and high-fertility estrogen levels (e.g., high femininity in face, voice, and waist-to-hip ratio; Bryant & Haselton, 2009; Perrett et al., 1998; Singh, 1993).

Diverse methodologies have been used to evaluate the scientific validity of evolutionary hypotheses concerning sex differences in long-term mate preference adaptations (for a detailed review, see Schmitt, *in press*). Supportive findings include cross-culturally and historically pervasive sex differences in self-reported mate preferences (Buss, Shackelford, Kirkpatrick, & Larsen, 2001; Lippa, 2007), sex differences in trade-off decisions when deliberately designing ideal partners (Li, Bailey, Kenrick, & Linsenmeier, 2002), sex differences in romantic responses to experimentally manipulated potential partners (Sadalla, Kenrick, & Vershure, 1987; Schmitt, Couden, & Baker, 2001; Townsend & Levy, 1990), and sex differences in cognitive and affective shifts in response to laboratory manipulations (Gutierrez, Kenrick, & Partch, 1999; Ha, Overbeek, & Engels, 2010; Kenrick, Neuberg, Zierk, & Krones, 1994). Evolutionary-predicted sex differences in long-term mate preferences have been confirmed in studies of real-world courtship dynamics (Cronk & Dunham, 2007; Guéguen & Lamy, 2012; Hughes, Farley, & Rhodes, 2010; Stirrat, Gumert, & Perrett, 2011), dating choices (Asendorpf, Penke, & Back, 2011; Fisman, Iyengar, Kamenica, & Simonson, 2006; Hitsch, Hortaçsu, & Ariely, 2010; Lenton & Francesconi, 2010; Li et al., 2013; Todd, Penke, Fasolo, & Lenton, 2007) and marital choices (Fletcher, 2009; Kenrick & Keefe, 1992; Lichter, Anderson, & Hayward, 1995; Perusse, 1994). Evolutionary-predicted sex differences in mate preferences and mate choice have received some support in studies of preindustrial cultures (Apicella, Feinberg, & Marlowe, 2007; Hurtado & Hill, 1992; Marlowe, 2004; Pillsworth, 2008).

Evolutionary psychologists further expect these mate preferences are “specially designed” to influence people’s attraction to, striving for, and actually selecting certain mates in ways that historically led to greater reproductive success compared to alternative designs. Extant anthropological and psychological evidence largely confirms that evolutionary-predicted mate preferences possess special design features that lead to increased reproductive success; marriages of older, higher status men and marriages of younger and more physically attractive women tend to have increased numbers and survival of offspring (Berezkei & Csanaky, 1996; Betzig, 1986; Fieder & Huber, 2007; Hurtado & Hill, 1992; Jokela, Rotkirch, Rickard, Pettay, & Lummaa, 2010; Nettle & Pollet, 2008; Pettay, Helle, Jokela, & Lummaa, 2007; Pflüger, Oberzaucher, Holzleitner, & Grammer, 2012; E. A. Smith, 2004).

For example, in a study of 1700s preindustrial Finland, women married to wealthier men had more children and better child survival than women married to poorer men (Pettay et al., 2007). Berezkei and Csanaky (1996) conducted a study of 1,800 Hungarians who were over 34 years of age and found that women who married older and better educated men tended to have more children. Fieder and Huber (2007) found that marrying a man 4 years older was associated with maximum levels of fertility among women, which matches very closely to what women say is their ideal long-term mate (Buss, 1989; Kenrick & Keefe, 1992). In Sweden, men who marry first wives who are 6 years younger have the highest levels of lifetime fertility (Fieder & Huber, 2007). In contrast, men who are married to older women have been found to have reduced reproductive success, while men married to younger and more attractive women tend to have more offspring. In a study

of 88 postmenopausal Austrian women from a rural community, among those who did not use contraception in their lifetime, women who were more physically attractive (including having higher objective symmetry and facial femininity) had more children (Pflüger et al., 2012). Attractive women have been found to have more children among the preindustrial Ache of Paraguay (Hurtado & Hill, 1992). A retrospective study of American women who in the 1950s were more attractive found they had approximately 11% more children than those American women who were less attractive (Jokela, 2009).

Alongside evidence of sex-differentiated attraction to, striving for, and actually selecting certain mates over others, empirical links to sex-differentiated fertility outcomes are appropriate evaluations of the ultimate functionality of mate preference adaptations from an evolutionary perspective. This is not to say evolved mate preferences are insensitive to local ecology or culture (Gangestad, Haselton, & Buss, 2006) nor that individual differences play no role in the expression of evolved mate preferences (e.g., mate preferences may be more strongly expressed when one is in a position to do so, such as having high mate value; see Overbeek, Nelemans, Karremans, & Engels, 2013; Pirlott & Schmitt, 2013). In addition, prevalence of contraceptive use and more generally the degree to which modern cultures match our ancestral past need to be considered when evaluating modern evidence of reproductive success (Nesse & Williams, 1994).

Evolutionary Psychologists Do Not Expect That Success in Attracting a Mate Who Fulfills Sex-Differentiated Desires Always Leads to Better Relational Outcomes

In the context of sex differences in appearance-related and status-related mate preferences, Eastwick et al. (2014) rightly noted that “it is currently uncontroversial that these sex differences describe the average stated preferences of men and women in complex modern societies” (p. 626) and that the evolution of such sex differences “would have improved reproductive success because they directed ancestral men and women to prefer and pursue mates who possessed the appropriate characteristics” (p. 626). However, Eastwick et al. inaccurately portrayed evolutionary psychology as further theorizing that fulfilling evolved mating desires always leads to higher relationship quality once mated. When Eastwick et al. asserted that “presumably, this functionality would apply to all three of the Levinger and Snoek (1972) stages—perhaps especially the surface contact and mutuality stages” (p. 626), it appears they conflated the ultimate function of mate preferences (i.e., selecting a reproductively valuable long-term mate, which in ancestral environments generally resulted in higher reproductive success compared to no mate preferences or to different mate preferences) with a more proximate understanding of function (i.e., increasing subjective pleasure or contentment; Tinbergen, 1963). This conflation is conceptually problematic and leads to some confusion about how to interpret their results as informing evolutionary theory.

Eastwick et al. (2014) documented and described as “currently uncontroversial” (p. 626) sex differences in stated preferences for certain mates over others, but they did not examine reproductive success outcomes. Such outcomes would perhaps not be relevant to evaluating interdependence theory or the ideal standards model.

However, they noted that “Like the interdependence perspective, the evolutionary perspective also proposes that ideal partner preferences are functional. . . . Therefore, the sex differences should be reflected in evaluations of actual romantic partners such that (a) the physical attractiveness of a partner inspires men’s romantic evaluations more than women’s, and (b) the earning prospects of a partner inspires women’s romantic evaluations more than men’s” (Eastwick et al., 2014, p. 626), and empirically they surmised that “The evolutionary perspective predicts that (a) the physical attractiveness correlations should be larger for men than for women and (b) the earning prospects correlations should be larger for women than for men” (p. 630). Given their definitions of “romantic evaluations,” these statements are not accurate representations of evolutionary psychology and represent a mistaken conflating of ultimate and proximate functionality. From an evolutionary psychology perspective, preferential mate selection (and historically differential reproductive outcomes) are the proper functions of evolved mate preferences, not the generation of happiness, satisfaction, trust, or any other measure of within-relationship subjective well-being. It is possible that affective forecasting of happiness or well-being has functional consequences for reproductive success in humans (see Buss, 2000a), but conceptually a rationale for how and why mate preferences and well-being influence subsequent reproductive success was not clearly articulated by Eastwick et al. (2014). Especially important would be specifying how such a model of mate preferences and relational outcomes could have evolved within dynamic ancestral human cultures that had comparatively high mortality, polygynous marital systems, and frequent divorce and remarriage (Gangestad, 2011). Indeed, it is quite possible that the design of some mate preferences (e.g., men’s preference for youth) may be ultimately functional by predictably leading to lower proximate levels of happiness over time.

What would an evolutionary psychology perspective expect about the downstream relational effects of obtaining especially high-value partners (i.e., attractive women and high-status men) as long-term mates? Expectations would not be simple. Relational effects likely would be contingent on a host of factors, including the local ecological conditions, operational sex ratio, and marital system (including degree of polygyny; Schmitt, 2005); the relative mate values of those involved (e.g., someone with high mate value may incur fewer costs associated with having a high-value partner; Buss & Shackelford, 2008); and the specific personal attributes examined. Especially critical in generating an evolutionary psychology prediction would be the particular relational outcomes examined and specifying how obtaining a high-value partner affects those relational outcomes in ways that subsequently influence reproductive success.

Eastwick et al. (2014) examined a heterogeneous variety of relational outcomes such as satisfaction (sexual or relationship), commitment, trust, intimacy, love, passion, wanting to date, inclusion of self in other, and “feeling emotionally bonded” (p. 628). From an evolutionary perspective, it seems unlikely that a woman who marries an older man with high status and thereby reaps reproductive benefits for herself and their offspring (Berezkei & Csanky, 1996; Fieder & Huber, 2007; Pettay et al., 2007) would especially feel sexual passion or an “emotional bond” with him compared to how other women feel about their partners. Importantly, finding that women with wealthy husbands do not feel

especially passionate or bonded with their mates would not represent an empirical disconfirmation of the ultimate functionality of women’s long-term mate preference for status. Similarly, if a man married a woman for her youth and high fertility cues and thereby reaped reproductive benefits for himself and their offspring (Fieder & Huber, 2007; Jokela, 2009; Pflüger et al., 2012), but the man had to mate guard her and constantly fend off mate poachers, perhaps leaving him anxious and untrusting toward his wife, this would not be a disconfirmation of the ultimate functionality of men’s long-term mate preference for youth and fertility cues. In short, evolutionary psychologists do not expect that obtaining one’s ideal mate will simplistically, typically, or invariably lead to higher relationship quality. Evolutionary mate preference predictions are about adaptive designs that resulted in specific functional outcomes (i.e., mate choices) historically tributary to reproductive success, not “beneficial effects” in an informal intuitive sense that potentially reside outside of proper adaptive functions, such as marital happiness or subjective well-being in relationships.

Problematic Operationalizations of Predictor and Criterion Variables

Although evolutionary psychologists do not expect that obtaining one’s ideal long-term mate invariably leads to across-the-board better relational outcomes, documenting such associations would represent an interesting scientific contribution, and Eastwick et al. (2014) should be commended for their efforts at pulling together such a diverse set of empirical findings. However, their operationalizations of physical attractiveness, earning prospects, and relational outcomes yielded, in many cases, ambiguous evaluations of these associations.

For example, Eastwick et al. (2014) evaluated the effects of physical attractiveness by examining links between a partner’s ratings on a scale of “sensual” and relational quality. Sensual is not equivalent to physical attractiveness (itself being a proxy cue of men’s preferences for youth and fertility). Sensual has connotations of provocativeness of a carnal, sensory, or even “fleshy” nature—connotations that likely pertain more to men’s desires within short-term mating rather than long-term mating contexts. It is perhaps unsurprising that there were no sex-differentiated links between having a sensual partner and feeling especially satisfied, trusting, or bonded in a long-term relationship.

Eastwick et al. (2014) also evaluated links between a partner’s ratings on a scale of “successful” (as a cue to earnings prospects) and one’s relational quality. Successful is an exceptionally vague descriptor and could indicate success in domains outside of earning prospects. The desire to include as many studies as possible is understandable when conducting a meta-analysis, but by conflating so many disparate operationalizations of physical attractiveness and earning prospects, Eastwick et al. are likely to have neutered their chances of finding any postselection sex differences in relational outcomes, if any exist.

Eastwick et al. (2014) examined a wide variety of relational quality measures, including commitment, trust, and “feeling emotionally bonded” (p. 628). Some of these relationship quality indicators may be differentially expressed across genders (e.g., women may be more sensitive to trust and emotional commitment in relationships; Buss, 2000b), and this could have deflated some of the sex-differentiated links between partner attributes and rela-

tional quality. For instance, men may sexually appreciate cues to their partner's relative youth and physical attractiveness (more so than women do; Brody & Weiss, 2013), but men may not especially report greater trust in response to their partner's youth and physical attractiveness. From an evolutionary perspective, men are likely to expend more efforts on mate retention and experience more intense feelings of jealousy because their partner is young and physically attractive (Buss, 2000b). Men are certainly not expected to feel more trust in such circumstances. Evolutionary psychologists have previously noted links between spousal attributes and marital conflict and satisfaction (Botwin, Buss, & Shackelford, 1997; Buss, 1991; Shackelford & Buss, 2000), but these links are predicted to have very function-specific ties to suspected infidelity and other features of strategic interference.

There is undeniably great difficulty in navigating the many facets of mate preferences and empirically examining how each relates to differing relational outcomes. Often, mate preferences exert the strongest influences in particular combinations (Jensen-Campbell, Graziano, & West, 1995) and are differentially moderated by factors such as temporal context, local ecology, and personal mate value (Buss & Shackelford, 2008; Schmitt, 2005). The Eastwick et al. (2014) findings represent a noteworthy accumulation of studies relevant to this important topic, but these studies often operationalized mate preferences and relational outcomes in disparate ways. The Eastwick et al. placement of diverse predictor and criterion variables into vague collections of appearance-related attributes, status-related attributes, and relational outcomes was problematic. Even if those collections are empirically justified at high-enough taxonomic levels (similar to Big Five traits justifiably clustering together as α and β at the highest taxonomic levels of personality hierarchies; see Digman, 1997), the present approach using overly inclusive collections undermines the goal of careful conceptual and empirical analysis of specific mate preference adaptations and their proper functional consequences.

Individual Differences Within the Sexes in Romantic Partner Choice

It is important to note that not all men and women routinely display evolved sex differences in long-term mate preferences (Pirlott & Schmitt, 2013). Researchers have found that people with high mate value tend to be more sex-typical in mate choice. For example, men with more masculine or male-typical psychologies tend to more strongly exhibit evolved mate preferences hypothesized by evolutionary psychologists, such as preferring feminized female faces (F. G. Smith, Jones, & DeBruine, 2010). Men who consider themselves more attractive to the opposite sex (Burriss, Welling, & Puts, 2011b; Kandrik & DeBruine, 2012), those who have higher testosterone (Welling et al., 2008), even those who are currently handling money (Yong & Li, 2012), also more strongly express hypothesized male-specific long-term mate preferences for cues to women's youth and fecundity (see Pollet, Pratt, Edwards, & Stulp, 2013).

Among women, those who are generally more oriented toward short-term mating as a sexual strategy tend to prefer more masculine mates (Provost, Kormos, Kosakoski, & Quinsey, 2006), those nearing ovulation prefer dominance and masculinity in short-term (but not long-term) mates (Gildersleeve, Haselton, & Fales, in

press; Lukaszewski & Roney, 2009), and women who explicitly state they prefer masculine long-term mates usually end up choosing masculine men as long-term partners (Burriss, Welling, & Puts, 2011a). Moreover, women with physically asymmetrical partners are expected from an evolutionary perspective to seek out extrapair copulations with more attractive and symmetrical men, and they appear driven to do so (Gangestad, Thornhill, & Garver-Apgar, 2005). Evolutionary psychologists also have noted that high mate-value women tend to "want it all," perhaps believing their own physical attractiveness affords them the capacity to retain a wealthy and good-looking male partner who will not be as tempted toward infidelity as he would be with a less valuable partner (Buss & Shackelford, 2008; Chu, Farr, Muñoz, & Lycett, 2011).

Individual differences within the sexes, therefore, likely moderate any relationship quality impact of obtaining a mate that possesses features most desired by one's own sex. To their credit, Eastwick et al. (2014) address an aspect of this in the second section of their analysis, finding among studies of established relationships that the extant "evidence collectively suggests that, consistent with the ideal standards model, participants whose dating partners matched their ideal partner preferences were happier with their relationships and were less likely to break up with their partners" (p. 639).

Women Want Physically Attractive Long-Term Mates, Too: On the Relative Influence of Specific Cues

Eastwick et al. (2014) attempted to address the issue of relationship length on the effects of a partner's physical attractiveness and earning prospects on relationship quality. For example, they found physical attractiveness is more important to relationship quality earlier and later in relationships. Women are expected from an evolutionary perspective to especially emphasize physical attractiveness in their short-term mates (often more than men do; Buss & Schmitt, 1993; Kenrick, Sadalla, Groth, & Trost, 1990). Consequently, assuming one's relational satisfaction depends on obtaining what one wants, failing to find sex differences in the effects of physical attractiveness on early aspects of relational quality (especially when including speed-dating studies in the meta-analysis) is not unexpected, as both sexes prefer physically attractive short-term mates (see also Li et al., 2013).

Even in long-term mating, evolutionary psychologists fully expect women to pay attention to and preferentially desire several key physical cues in men. For example, women are hypothesized to prefer physical cues to genetic quality in long-term mates (Buss & Schmitt, 1993, p. 207), particularly in high pathogen environments (Moore et al., 2013). Although Eastwick et al. (2014) found men and women both respond well to having what they perceive to be a physically attractive partner, an evolutionary perspective would add that men and women are not responding to identical physical features. Instead, it is likely that men are responding to cues to youth and fecundity, whereas women are responding to cues to status, masculinity, and older age. It would not be expected from an evolutionary perspective for men and women, on average, to express identical desires for a high-status, highly masculinized, and older marital partner, but finding men and women express equal enjoyment being married to what they subjectively consider physically attractive partners is unsurprising (especially as doing

so with highly attractive partners likely involves associated costs such as jealousy and mate guarding).

Still, it is possible that preferences for physical attractiveness play a greater role in men's long-term mate choices and fertility outcomes compared to women's. For instance, men's desires for relatively youthful partners may be more potent in affecting mate choice and fertility outcomes compared to women's desires for relatively older partners. In a historical review of mate preference research using rankings, Buss et al. (2001) found both men and women have increased the ranked importance they place on physical attractiveness in long-term mates over time. Men's increased ranking of the cue "good looks" (from 14th place in 1939 to 8th place in 1996) was greater than women's increased ranking (from 17th place in 1939 to 13th place in 1996). Although good looks ranked higher for men (8th place) compared to women (13th place) in 1996, it is unclear whether men's relatively high rankings of physical attractiveness have an equally influential effect on mate choice and fertility outcomes. What can be concluded is that the relative emphasis that men, compared to women, place on physical attractiveness in ranking long-term mate preferences has at least persisted, if not grown, across American generations (Buss et al., 2001).

Nonrandom Mating Causes Sex-Linked Differences in the Variance of Status, Appearance, and Relationship Outcomes

A final, but especially important, concern with the Eastwick et al. (2014) findings is that people in established relationships are extremely unlikely to have randomly assorted together. Instead, heterosexual couples embody a subgroup of individuals who have passed the minimum threshold on exactly those attributes that are deemed relatively desirable by the opposite sex (Kenrick et al., 1990). In addition, the degree to which "more is better" is true is unclear at all points along the many continua of preference-related attributes. Much like our evolved taste preferences for sugar and fat, obtaining too much of a good thing may be maladaptive (Nesse & Williams, 1994). Thus, it could be that once a necessary minimum level is achieved, more earning prospects or more physical attractiveness is unassociated, or possibly even negatively associated, with relationship quality outcomes in one sex more than the other.

As established couples are composed of individuals who by definition surpass minimum levels of desirability, the degree to which men and women differ in their satisfaction in response to mating with especially poor or especially unattractive long-term mating partners remains unaddressed in the Eastwick et al. (2014) analysis. Nonrandom mate selection leads to restricted variances of earning prospects and physical attractiveness of mated individuals, variance restrictions that are likely to be sex-specific in such a way as to minimize any subsequent sex differences in relational quality predicted by interdependence theory and the ideal standards model. Kenrick et al. (1990) asked people what the minimum threshold of possessing a particular attribute would need to be to agree to marry a person. Women, on average, required men's earning capacity to be in the 70th percentile to be marriageable, whereas men required women to be in the 40th percentile. This is a very large and potentially impactful sex difference (overall $d = -1.41$). If women are only marrying men with sufficient

resources, but men marry women of a wider range of resource levels, any predictive validity of men's resource levels on women's relationship satisfaction is relatively attenuated. Indeed, if too much wealth leads to lower satisfaction, one could even find a negative association. Similarly, if men are marrying only those women with sufficient attractiveness but women marry men of a wider range of attractiveness levels, any predictive validity of women's attractiveness levels on men's relationship satisfaction is attenuated. These biases may be especially true for the still-married "mutual contact" couples represented in the Eastwick et al. meta-analysis. It may be that partnering with someone extremely low in earning prospects (or physical attractiveness) is predictably associated with relationship deterioration and divorce in sex-specific ways (Betzig, 1989), but such couples were missed by the current study either because they were already divorced—or, more likely, the relationships never occurred to begin with.

In sum, Eastwick et al. (2014) performed a significant service to relationship science by accumulating the extant evidence on links between partner attributes and relational outcomes. In evaluating these associations, however, it was inaccurate to claim that evolutionary psychologists predict having a mate who more fully embodies sex-typical mate preferences simply or invariantly leads to better relational outcomes. Feelings of happiness, trust, passion, or emotional bonding are certainly beneficial effects at an intuitive or proximate level, but these subjective states are not the ultimate proper functions of evolved mate preferences. Moreover, in some cases obtaining an ideal partner may be proximately associated with negative outcomes, such as incurring the costs of heightened courtship effort, mate retention exertion, and the painful experience of jealousy. Moving forward with this research agenda, it will be important not to conflate the proper ultimate functions of mate preferences (i.e., influencing mate choice and subsequent reproductive success) with more proximate outcomes such as happiness or emotional bonding. More precision in the operationalizations of mate preferences and relational outcomes, improved treatment of individual differences in the expression of mate preferences, incorporating the physical appearance cues central to women's long-term preferences, and addressing the impact of nonrandom mate-ship formation will help to advance our understanding of what makes for higher quality long-term mateships.

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