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It's not all about her: Men's mate value and mate retention

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ABSTRACT

Men may have evolved psychological mechanisms that motivate mate retention behaviors to prevent their partners from being sexually unfaithful or defecting from the relationship because these events are likely to have inflicted reproductive costs on males over human evolutionary history. In the current research, 235 women provided information about their own and their long-term partners' mate value relative to alternatives, as well as information about their partners' mate retention behaviors. Men's mate value is a better predictor of men's mate retention behaviors than is women's mate value. Specifically, men of higher mate value perform more benefit-provisioning and fewer cost-inflicting mate retention behaviors than men of lower mate value. The discussion notes limitations and highlights directions for future research.

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1. Introduction

Men often act to thwart their romantic partner's infidelities or to prevent their partner's defection from the relationship (Buss, 1988; Buss & Shackelford, 1997; Daly & Wilson, 1993). If a man's partner is sexually unfaithful, he risks being cuckolded or unwittingly investing in offspring to whom he is not genetically related. If a man's partner defects from the relationship altogether, he loses his prior investment in his partner and the possibility of future reproduction with her. In both cases, the man has squandered resources that he could have allocated to other pursuits. The behaviors men use to prevent these potential costs are manifestations of male sexual jealousy and may have functioned to prevent reproductive losses for ancestral men (Buss, 1988; Buss & Shackelford, 1997; Daly & Wilson, 1993). These "mate retention" behaviors are diverse and include showering a partner with gifts and publicly derogating a rival male (Buss, 1988; Buss & Shackelford, 1997).

1.1. Mate retention behaviors

Some mate retention behaviors inflict costs on the woman and, therefore, may conflict with her interests (Shackelford, Goetz, Buss, Euler, & Hoier, 2005). For instance, a man may limit his partner's social contacts by monopolizing her time or he may derogate her in front of others (McKibbin et al., 2007). Such mate retention behaviors may inflict costs on a woman by decreasing her self-esteem and reducing her social support system (McKibbin et al., 2007; Miner, Shackelford, & Starratt, 2009). Although these cost-

inflicting mate retention behaviors may decrease the likelihood of infidelity and relationship defection by decreasing a woman's self-worth until she feels unable to acquire another partner, they also may render alternative relationships more attractive to the woman. Because of the increased potential for outright relationship defection, cost-inflicting mate retention behaviors can be risky for the man performing them (Miner et al., 2009). However, men also perform benefit-provisioning behaviors to thwart a partner's infidelities and relationship defection. A man may compliment his partner's appearance, or he might buy her expensive gifts. These benefit-provisioning mate retention behaviors may increase a woman's satisfaction with the relationship, reducing the likelihood that she will be unfaithful or defect altogether from the relationship. In most cases, men must have access to more expendable resources to perform benefit-provisioning mate retention behaviors than they need to perform cost-inflicting mate retention behaviors (Daly & Wilson, 1993; Miner et al., 2009). Benefit-provisioning mate retention behaviors are relatively low-risk to the man performing them because these behaviors are unlikely to increase the likelihood of his partner defecting from the relationship (Miner et al., 2009).

Men are more likely to perform mate retention behaviors in specific circumstances or when mated to women with particular characteristics. For instance, men allocate more effort to mate retention when they perceive that the risk of their partner's infidelities is greater (Buss & Shackelford, 1997; Goetz et al., 2005; Starratt, Shackelford, Goetz, & McKibbin, 2007). Men also perform more mate retention behaviors when they are mated to women who have characteristics associated with higher "mate value," such as youthfulness and physical attractiveness (Buss & Shackelford, 1997).

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1.2. The definition of mate value

A person's mate value refers to the extent to which mating with them and retaining them as a partner would have increased an opposite-sex person's ancestral reproductive success (Sugiyama, 2005). Previous research has assessed mate value as an absolute value on one or a few characteristics (see Buss, 2003, for review). For instance, women have been rated on a scale anchored by "attractive" and "not attractive". Absolute value assessments of characteristics of a prospective partner may be less important than relative assessments, however. According to Ellis, Simpson, and Campbell (2002), ancestral men who evaluated a partner's characteristics relative to characteristics of other available women may have selected higher value partners than men who selected partners without considering the mate value of possible alternatives. A woman's mate value relative to other available women therefore might be a better predictor of men's mate retention efforts than a woman's absolute mate value (Buss, 2003; Buss & Shackelford, 1997). Mate value inherently reflects a comparison, although sometimes an implicit one, between a person's characteristics and characteristics valued by potential opposite-sex partners. Because some characteristics may have differently affected the reproductive success of ancestral men and women, the sexes may have evolved different preferences in potential mates. For example, men place greater value than do women on youthfulness and physical attractiveness in a long-term partner (Buss, 1989, 2003), arguably because these characteristics are reliable indicators of a woman's reproductive value (expected future reproduction; Trivers, 1972).

1.3. Mate value and mate retention

Men allocate effort to mate retention in part according to the mate value of their partner (Buss, 2003; Buss & Shackelford, 1997). Previous research has documented a positive relationship between the effort men allocate to mate retention and their partner's mate value, showing that men mated to younger, more attractive women perform more mate retention behaviors than do men mated to older, less attractive women (e.g., Buss & Shackelford, 1997). Miner et al. (2009) documented that a woman's mate value predicts her partner's use of partner-directed insults, a type of cost-inflicting mate retention behavior. According to this research, women of higher mate value report that their partners insult them less frequently than do women of lower mate value. Miner, Shackelford, and Starratt argue that a man partnered to a woman of higher mate value may have difficulty replacing his valuable partner and, therefore, may be less willing to risk losing her by engaging in high-risk, cost-inflicting mate retention behaviors. Similarly, a man partnered to a woman of lower mate value may be able to replace his partner more easily and, therefore, may be more willing to risk losing her by engaging in high-risk, cost-inflicting mate retention behaviors.

This is not to suggest that a man partnered to a woman of lower mate value performs fewer mate retention behaviors overall. All men, regardless of their partners' mate value, have a stake in ensuring that their partners are sexually faithful and do not defect from the relationship. For this reason, a man partnered to a woman of higher mate value may also perform more low-risk, benefit-provisioning mate retention behaviors to compensate for his less frequent use of high-risk, cost-inflicting mate retention behaviors. Thus, the research conducted by Miner, Shackelford, and Starratt suggests that virtually all men perform mate retention behaviors, but that the type of behavior a man performs depends on his partner's mate value.

However, a woman's mate value may not be the best indicator of her relationship alternatives or, therefore, of her likelihood of infidelity or permanent relationship defection. Miner et al. (2009) also documented that a man's mate value relates to his use of part-

ner-directed insults. According to this research, women who perceive their partners to be of higher mate value report that their partners insult them less frequently than do women who perceive their partners to be of lower mate value. Building on this research, we hypothesize that a man who is perceived by his partner to be of lower mate value will perform *different* mate retention behaviors than a man who is perceived by his partner to be of higher mate value. Benefit-provisioning behaviors often require material or emotional resources that may not be available to every man (Buss & Shackelford, 1997; Miner et al., 2009). For instance, a man with substantial expendable income (an indicator of high mate value) has more resources with which to purchase gifts for his partner than a man without such resources. In this case, the man may be able to retain his partner only by performing only low-cost, benefit-provisioning mate retention behaviors. In contrast, men of low mate value may lack the resources to perform sufficient benefit-provisioning behaviors to retain their partners. These low-mate-value men may be forced to perform a wider range of mate retention behaviors, including more high-risk, cost-inflicting behaviors in order to prevent infidelity and relationship defection.

1.4. Current research

In the current research, we assess relative mate value explicitly, using comparisons of characteristics of one's partner with alternative opposite-sex others using the Trait-Specific Dependence Inventory (TSDI; Ellis et al., 2002). The TSDI assesses the ease with which a person could secure a partner equal to or better than their current partner along several factors of mate value (e.g., physical attractiveness, generosity, ambitiousness). The TSDI implicitly asks participants to compare the specific characteristics of their current partner with same-sex others (e.g., "If you and your current partner broke up, how difficult would it be for you to find another partner who is as able [as your current partner] to take charge of a group?"). We also included a parallel version of the TSDI that assesses women's perceptions of their own mate value (e.g., "If you and your current partner broke up, how difficult would it be for him to find another partner who is as intelligent as you?").

The research conducted by Miner, Shackelford and Starratt (in press) linked a type of cost-inflicting mate retention behavior with both men's and women's mate values. Research has yet to address the relationship between other forms of cost-inflicting mate retention behaviors and mate values or the relationship between benefit-provisioning mate retention behaviors and mate values. To address these limitations, we tested several hypotheses about the relationship between women's assessments of their own and their partners' mate value and women's reports of their partners' mate retention behaviors. Women's perceptions of their *own* mate value will correlate positively with women's reports of their partner's *benefit-provisioning* mate retention behaviors (Hypothesis 1) and negatively with women's reports of their partner's *cost-inflicting* mate retention behaviors (Hypothesis 2). Women's perceptions of their *partner's* mate value will correlate positively with women's reports of their partner's *benefit-provisioning* mate retention behaviors (Hypothesis 3) and negatively with women's reports of their partner's *cost-inflicting* mate retention behaviors (Hypothesis 4).

2. Methods

2.1. Participants

Two hundred thirty-five women, each of whom reported that she was currently in a committed, sexual relationship with a man participated in this study. The mean age of the participants was 25.8 years ($SD = 7.4$), the mean age of the participants' part-

ners was 28.4 years ($SD = 8.6$), and the mean relationship length was 47.8 months ($SD = 62.3$). Participants were drawn from universities and surrounding metropolitan communities. Due to the sensitive nature of the questions and to assure anonymity, no further demographic information was collected.

2.2. Materials

Participants completed an online demographic questionnaire that solicited information on her age, her partner's age, and the duration of her current relationship. After completing the demographic questions, participants completed two versions of the Trait-Specific Dependence Inventory (TSDI), one to assess their own mate value and one to assess their partner's mate value (Ellis et al., 2002). The TSDI secures comparisons between one's current partner and alternative opposite-sex others along several factors of mate value (e.g., physical attractiveness, generosity, ambitiousness). The 34 items are formatted to reflect either assessments of one's partner's mate value (e.g., "If you and your current partner broke up, how difficult would it be for you to find another partner who is as physically strong?") or of one's own mate value (e.g., "If you and your current partner broke up, how difficult would it be for him to find another partner who is as physically strong as you?"). For each item, the participant indicates how difficult it would be for her and her partner to replace each other, ranging from 1 = *Not difficult at all* to 5 = *Extremely difficult*. Previous research has established the reliability and validity of the TSDI (Ellis et al., 2002).

Participants also completed the Mate Retention Inventory – Short Form (MRI–SF; Buss, Shackelford, & McKibbin, 2008), which assesses performance of men's mate retention behaviors. The 38-item inventory assesses mate retention along the same 19 tactics as the original MRI (Buss, 1988). Previous research organized the 19 tactics from the original MRI into five categories (Buss, 1988; Shackelford, Goetz, & Buss, 2005). The current research organized the same 19 tactics from the MRI–SF into those same five categories: Direct Guarding (e.g., "Did not take me to a party where other men would be present"), Intersexual Negative Inducements (e.g., "Pointed out to me the flaws of another man"), Intrasexual Negative Inducements (e.g., "Told other men that I was not a nice person"), Positive Inducements (e.g., "Bought me an expensive gift"), and Public Signals of Possession (e.g., "Put his arm around me in front of others"). For each item, the participant indicates how often her partner has performed the behavior in the past year, ranging from 0 = *Never* to 3 = *Often*. For the current research, the five mate retention categories were further organized into groups of benefit-provisioning behaviors (Positive Inducements and Public Signals of Possession) and cost-inflicting behaviors (Direct Guarding, Intersexual Negative Inducements, and Intrasexual Negative Inducements). Previous research has established the reliability and the validity of the MRI–SF (Buss et al., 2008).

2.3. Procedure

Prospective participants were directed to a website with a link to an online survey and were required to answer three screening questions prior to participation. Participants had to be (1) female, (2) at least 18 years of age, and (3) currently in a committed, sexual relationship with a man. If participants answered "yes" to all three questions and consented to participate, they proceeded to the online survey.

3. Results

Scores for women's own mate value and for their partner's mate value were calculated by summing responses to the 34 items of the

relevant version of the TSDI ($\alpha = 0.94$ and 0.96 , respectively). Women's assessments of their own and their partner's mate value correlated positively ($r = 0.57$, $p < 0.001$), indicating that women who perceived themselves to be of relatively high mate value also perceived their partners to be of relatively high mate value. This result is consistent with research indicating that partners in long-term relationships tend to be of similar mate value (see Buss, 2003).

Scores for each of the five categories of the MRI–SF were calculated by summing responses to items within that category, following Buss et al. (2008). Alpha reliabilities for the five categories – Direct Guarding, Intersexual Negative Inducements, Positive Inducements, Public Signals of Possession, and Intrasexual Negative Inducements – were 0.77, 0.73, 0.72, 0.70, and 0.60, respectively. Scores for the benefit-provisioning behaviors and the cost-inflicting behaviors were calculated by summing the category values for the constituent mate retention categories (see Section 2). Alpha reliabilities for the two groups of mate retention behaviors (benefit-provisioning and cost-inflicting) were both 0.74.

Consistent with Hypothesis 1, women's perceptions of their own mate value correlated positively with women's reports of their partner's benefit-provisioning mate retention behaviors ($r = 0.27$, $p < 0.001$). At the category level of mate retention, women's perceptions of their own mate value correlated positively with their reports of their partner's use of Positive Inducements ($r = 0.25$, $p < 0.01$) and Public Signals of Possession ($r = 0.23$, $p < 0.01$).

Failing to support statistically Hypothesis 2, women's perceptions of their own mate value did not correlate with women's reports of their partner's cost-inflicting mate retention behaviors, although the association was in the predicted direction ($r = -0.13$, $p > 0.05$). At the category level of mate retention, women's perceptions of their own mate value correlated negatively and significantly with their reports of their partner's use of Direct Guarding ($r = -0.17$, $p < 0.05$), but not with their reports of their partner's use of Intersexual Negative Inducements ($r = -0.04$, $p > 0.05$) or Intrasexual Negative Inducements ($r = -0.15$, $p > 0.05$).

Consistent with Hypothesis 3, women's perceptions of their partner's mate value correlated positively with women's reports of their partner's benefit-provisioning mate retention behaviors ($r = 0.29$, $p < 0.001$). At the category level of mate retention, women's perceptions of their partner's mate value correlated positively with women's reports of their partner's use of Positive Inducements ($r = 0.25$, $p < 0.01$) and Public Signals of Possession ($r = 0.28$, $p < 0.001$).

Consistent with Hypothesis 4, women's perceptions of their partner's mate value correlated negatively with women's reports of their partner's cost-inflicting mate retention behaviors ($r = -0.20$, $p < 0.05$). At the category level of mate retention, women's perceptions of their partner's mate value correlated negatively and significantly with women's reports of their partner's use of Direct Guarding ($r = -0.23$, $p < 0.01$) and Intrasexual Negative Inducements ($r = -0.18$, $p < 0.05$), but not with their reports of their partner's use of Intersexual Negative Inducements ($r = -0.09$, $p > 0.05$).

To investigate whether women's and men's mate values uniquely predicted men's mate retention behaviors, we conducted multiple regressions using women's perceptions of their own and their partner's mate values to predict women's reports of their partner's mate retention behaviors (see Table 1). The overall models for benefit-provisioning and cost-inflicting mate retention behaviors were significant. For both models, investigation of the individual standardized regression coefficients indicated that men's but not women's mate value uniquely predicted men's mate retention behaviors.

To further investigate whether women's and men's mate values uniquely predicted men's mate retention behaviors, we conducted

Table 1
Multiple regression analyses for women's self-reports of women's and men's mate value predicting men's mate retention.

Men's mate retention	Mate value		Full model		
	(Standardized beta)		F	(df _B , df _W)	R ²
	Women	Men			
<i>Cost-inflicting behaviors</i>	–0.00	–0.22*	3.68*	(2,142)	0.05
Direct guarding	–0.01	–0.25*	5.12**	(2,149)	0.06
Intersexual negative inducements	0.04	–0.12	0.85	(2,150)	0.01
Intrasexual negative inducements	–0.10	–0.14	3.55*	(2,151)	0.05
<i>Benefit-provisioning behaviors</i>	0.16	0.23*	9.67***	(2,146)	0.12
Positive inducements	0.19*	0.16	8.13***	(2,147)	0.10
Public signals of possession	0.09	0.25**	7.74**	(2,151)	0.09

Notes: Mate retention behaviors were assessed by the Mate Retention Inventory; mate value was assessed by the Trait Specific Dependence Inventory (see text).

* $p < .05$.

** $p < .01$.

*** $p < .001$.

five additional multiple regressions using women's perceptions of their own and their partner's mate values to predict women's reports of their partner's use of each of the five categories of mate retention behaviors (see Table 1). Four of the five overall models were significant (the model predicting use of Intersexual Negative Inducements was not significant). Investigation of the individual standardized regression coefficients indicated that women's perceptions of their own (but not their partner's) mate value uniquely predicted women's reports of their partner's use of Positive Inducements. In addition, women's perceptions of their partner's (but not their own) mate value uniquely predicted women's reports of their partner's use of Public Signals of Possession and Direct Guarding. Neither women's perceptions of their own nor their partner's mate values uniquely predicted women's reports of their partner's use of Intersexual Negative Inducements and Intrasexual Negative Inducements. We repeated all analyses, controlling for men's age, women's age, and relationship length. These analyses produced results that did not differ substantively from the results reported above (analyses available upon request).

4. Discussion

The results of the current research are consistent with the proposal that both women's and men's mate values are related to men's use of mate retention behaviors. With a few exceptions, women who perceive themselves or their partners to be of higher mate value also report that their partners perform more benefit-provisioning and fewer cost-inflicting mate retention behaviors than women who report themselves or their partners to be of lower mate value.

The results of the current research are consistent with the results of previous research linking mate value to men's cost-inflicting mate retention behaviors. Previous research indicates that men mated to women of higher mate value insult their partners more frequently than men mated to women of lower mate value (Miner et al., 2009). The results of the current research also indicate that men mated to women of higher mate value perform more cost-inflicting mate retention behaviors than men mated to women of lower mate value. Previous research also indicates that men of lower mate value insult their partners more frequently than men of higher mate value (Miner et al., 2009). The results of the current research are consistent with the results of this research in that we document relationships between men's mate value and men's cost-inflicting mate retention behaviors. However, the current research is the first to examine the relationship between men's mate value and men's benefit-provisioning mate retention behaviors.

The nature of the current research provided the opportunity to examine the unique predictive contributions of women's and

men's mate values to men's mate retention behaviors. The results indicate that men's but not women's mate value uniquely predicts broad assays of men's benefit-provisioning and cost-inflicting mate retention behaviors. This result is consistent with the finding of Miner et al. (2009) that men's but not women's mate value uniquely predicts men's use of partner-directed insults. Additional analyses in the current research addressing mate retention behaviors at the category level indicate that men's but not women's mate value uniquely predicts men's use of Direct Guarding and Public Signals of Possession. Although women's mate value did not uniquely predict broad assays of men's benefit-provisioning and cost-inflicting mate retention behaviors, category-level analyses indicate that women's but not men's mate value uniquely predicts men's use of Positive Inducements. This may be because one of the behaviors included in this category focuses squarely on a man's explicit appreciation of and compliments on his partner's attractiveness, a key component of women's mate value.

The current results further probe the relationship between men's mate value and men's mate retention by partitioning mate retention behaviors into behaviors that bestow benefits on a partner and behaviors that inflict costs on a partner. Most men perform at least some mate retention behaviors to prevent their partner's infidelity or outright relationship defection, regardless of their mate value (see Buss, 2003, for review). Given the choice between allocating substantial resources to benefit-provisioning or to cost-inflicting mate retention behaviors, men of high mate value might opt for the lower-risk, benefit-provisioning behaviors, in part because they have the resources to perform them. Correspondingly, men of low mate value may lack the material or emotional resources to perform sufficient low-risk, benefit-provisioning behaviors to prevent their partner's infidelity or defection from the relationship. The current results support this speculation in that men of low mate value perform higher-risk, cost-inflicting mate retention behaviors more than do men of high mate value.

Previous research indicates that men's mate value may be related to men's performance of more general cost-inflicting controlling behaviors. Daly and Wilson (1993) contend that low mate value in men can activate sexual proprietariness, which motivates the performance of cost-inflicting mate retention behaviors. A large empirical literature corroborates this argument. For example, men with lower-status jobs who are, therefore, of lower mate value, inflict more violence on their intimate partners than do men with higher-status jobs (Fox, Benson, DeMaris, & Wyk, 2002). As another example, men's low socioeconomic status—an indicator of the resources and related benefits men have available to bestow on their partners—also is linked with greater violence inflicted on female partners (Wilt & Olson, 1996). Thus, men who lack sufficient resources to perform benefit-provisioning mate retention

behaviors and, correspondingly, the resources that would increase their mate value, may be particularly likely to resort to cost-inflicting mate retention behaviors.

One limitation of the current research is that it relies on women's reports of their own and their partner's mate value and of men's mate retention behaviors. Previous research documents that partnered men and women provide consistent reports of men's mate retention behaviors (Shackelford, Goetz, Buss, Euler, & Hoier, 2005). Although there is no strong reason to suspect that men's reports of their own and their partner's mate value would produce results that differ substantively from the current results, future research might profitably investigate this possibility.

A second limitation of the current research is that it relies on correlational data and, therefore, we cannot offer clear statements about causality. Although we speculate that men of higher mate value perform more benefit-provisioning mate retention behaviors as a consequence of this higher mate value (which includes access to expendable resources, for example), we cannot rule out the possibility that the direction of this relationship may work in the reverse. It may be that men who perform benefit-provisioning behaviors are, as a consequence, rated as more valuable by their partners. Assessments of mate value and mate retention behaviors at different time points across the duration of a relationship, rather than at a single point as in the current research, might provide additional insight into the nature of the relationship between men's benefit-provisioning mate retention behaviors and men's mate value.

A third limitation of the current research is that it explains just a small amount of the variance in women's reports of men's mate retention behaviors. Although we have documented a relationship between men's mate value and men's mate retention behaviors, the current research offers only a modest first step toward explaining the nature of men's mate retention. Future research may benefit from assessing direct cues to a partner's infidelity or future relationship defection as well as mate value as predictors of men's mate retention behaviors.

Previous research has linked characteristics associated with women's mate value and men's mate value with men's mate retention behaviors. The current results are consistent with this previous research, but also indicate that men's mate value might be a stronger correlate than women's mate value of men's cost-inflicting mate retention behaviors and benefit-provisioning mate retention

behaviors. Additionally, men of higher mate value perform more benefit-provisioning and fewer cost-inflicting mate retention behaviors than men of lower mate value.

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