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Mate value of romantic partners predicts men's partner-directed verbal insults

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ABSTRACT

To prevent a partner's infidelity and defection from the relationship, men perform mate retention behaviors, sometimes inflicting costs on their partners. These cost-inflicting mate retention behaviors are considered high-risk because in addition to decreasing the likelihood of future infidelity, they also may increase the likelihood of future relationship defection. Although previous research has indicated that mate value (expected future reproduction; [Trivers, R.L. (1972). Parental investment and sexual selection. In: B. Campbell (Ed.), *Sexual selection and the descent of man, 1871–1971*. Aldine, Chicago, pp. 136–179]) may be related to mate retention generally [Buss, D.M. (2003). *The evolution of desire* (rev. ed.). New York: Basic Books; Buss, D.M., & Shackelford, T.K. (1997). From vigilance to violence: Mate retention tactics in married couples. *Journal of Personality and Social Psychology*, 72, 346–361], research has not addressed cost-inflicting mate retention behaviors specifically. The current research examines the relationship between men's and women's mate values and men's use of partner-directed insults—a specific type of cost-inflicting mate retention behavior. One hundred fifty-eight women provided information about their own mate value, their partner's mate value, and their partner's verbal insults. The results indicate that although men's and women's mate values independently predict men's partner-directed insults, men's mate value is a better predictor than is women's mate value. Women who report that their partners have lower mate value also report that their partners insult them more frequently than women who report that their partners have higher mate value.

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1. Introduction

Men often try to prevent their long-term romantic partner from engaging in sexual infidelities and defecting from the relationship altogether (Buss, 1988; Buss & Shackelford, 1997; Daly & Wilson, 1993). If a man's partner is sexually unfaithful, he risks investing unwittingly 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 the woman and the possibility of future reproduction with her. In both cases, the man has invested resources that he could have allocated to other pursuits.

A man may perform a diverse set of behaviors to prevent a partner's short-term or long-term defection from the relationship, including low-risk, benefit-provisioning behaviors and high-risk, cost-inflicting behaviors. The use of benefit-provisioning "mate retention" behaviors, such as giving a woman an expensive gift to retain her affection or providing her with emotional support when she is upset (Buss, 1988; Buss & Shackelford, 1997), is a low-risk method for men to prevent infidelity and relationship defection. Because benefit-provisioning mate retention behaviors may increase directly a woman's self-esteem or relationship satisfaction,

these behaviors are unlikely to increase the likelihood of her infidelity or relationship defection.

In contrast, the use of cost-inflicting mate retention behaviors, such as limiting a partner's social contacts by monopolizing her time or insulting her, is a high-risk method for men to prevent infidelity and relationship defection. The performance of these mate retention behaviors sometimes conflicts with a partner's interests (Shackelford, Goetz, Buss, Euler, & Hoier, 2005), potentially inflicting costs on a woman by reducing her social support system and increasing the likelihood of negative health consequences (O'Leary, 1999). On one hand, cost-inflicting mate retention behaviors may decrease the likelihood of infidelity and relationship defection by decreasing a woman's self-worth to the extent that she feels unable to compete for other partners (McKibbin et al., 2007). On the other hand, the costs inflicted on women by these behaviors may eventually render alternative relationships more attractive to a man's partner. Therefore, although cost-inflicting mate retention behaviors may prevent infidelity and relationship defection, they also may be riskier for a man to deploy than benefit-provisioning mate retention behaviors because of the increased potential for outright relationship defection.

Both types of mate retention behaviors are manifestations of sexual jealousy and likely prevented reproductive losses for ancestral men (Buss, 1988; Buss & Shackelford, 1997; Daly & Wilson,

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1993). Because these reproductive losses vary in magnitude across relationships, men allocate effort to mate retention based on characteristics of their own relationship, including their own and their partner's "mate value" (Buss, 2003; Buss & Shackelford, 1997)—a measure of the comparison of a person's characteristics with characteristics desired by current or potential partners. Although men and women value some of the same characteristics in partners, there also are sex-differentiated preferences. Men, more than women, value youthfulness and attractiveness in a long-term partner (Buss, 1989; Buss, 2003) because these characteristics are reliable indicators of a woman's reproductive value (expected future reproduction; Trivers, 1972). Consequently, men whose partners are younger and more attractive perform more mate retention behaviors than do men whose partners are older and less attractive (Buss & Shackelford, 1997). This positive relationship between the effort men allocate to mate retention and their partner's mate value (e.g., Buss & Shackelford, 1997) exists ostensibly because a woman of higher mate value has more opportunities than a woman of lower mate value to be unfaithful and to defect from the relationship (Schmitt & Buss, 2001; and see Buss, 2003, for review). Men also allocate more effort to mate retention in specific circumstances. For instance, men allocate more effort to mate retention when they perceive a high risk of their partner's infidelities (Buss & Shackelford, 1997; Goetz et al., 2005; Starratt, Shackelford, Goetz, & McKibbin, 2007).

In the current research, we examine the relationship between mate value and cost-inflicting mate retention behaviors. We focus on a specific kind of cost-inflicting mate retention behavior—partner-directed insults—rather than all cost-inflicting mate retention behaviors because some cost-inflicting mate retention behaviors have a more ambiguous valence than partner-directed insults. For example, men who monopolize their partner's time at a social gathering are considered to be inflicting costs on their partners (Buss, 1988; Buss & Shackelford, 1997). We argue that this behavior may have different consequences than when a man tells his partner that her breasts are ugly. Limiting our research to a specific set of cost-inflicting mate retention behaviors simplifies interpretation of the results.

Previous research has linked indicators of women's mate value with men's overall mate retention. To date, research has not examined the links between women's mate value and either of the two categories of mate retention behaviors. Men who lose high mate value partners may have more difficulty replacing their partners than men who lose low mate value partners. Because of the difficulty of replacing a high mate value woman, men partnered to high mate value women may be less likely to risk losing their partner by performing high-risk, cost-inflicting mate retention behaviors. We therefore hypothesize that women's perceptions of their own mate value will correlate negatively with women's reports of their partner's verbal insults (Hypothesis 1). Put differently, we hypothesize that a woman who perceives herself to be of higher mate value also will report that her partner less frequently insults her.

To our knowledge, research has not examined potential links between a man's mate value and his mate retention behaviors. Although a woman's mate value may predict her partner's insults directed toward her, a man's mate value also may predict his cost-inflicting mate retention behaviors. Because her partner could be more easily replaced, a woman partnered to a man of lower mate value may be more likely to risk her relationship by being unfaithful than a woman partnered to a man of higher mate value. Assuming her low mate value partner is aware of her greater likelihood of infidelity or defection, he may be motivated to perform more mate retention behaviors than a man of high mate value. Alternatively, low mate value men may lack sufficient resources to perform sufficient low-risk, benefit-provisioning behaviors to retain their partners because low mate value men have fewer re-

sources (money, time, etc.) than high mate value men. According to either argument, men of low mate value, relative to men of high mate value, may resort to high-risk, cost-inflicting mate retention behaviors such as leveling verbal insults to prevent infidelity and defection from the relationship. We hypothesize that women's perceptions of their partner's relative mate value will correlate negatively with women's reports of their partner's verbal insults (Hypothesis 2).

2. Methods

2.1. Participants

One hundred fifty-eight women, each of whom was currently in a committed, sexual relationship with the same man for more than one year, participated in this study. The mean age of the participants was 26.3 years ($SD = 7.6$), the mean age of the participants' partners was 29.0 years ($SD = 8.5$), and the mean relationship length was 61.3 months ($SD = 66.7$). Participants were drawn from universities and surrounding communities. Due to the sensitive nature of the questions and to assure anonymity, no further demographic information was collected. Miner, Starratt, and Shackelford (2009) report analyses of a different subset of the current data to test different hypotheses.

2.2. Materials

Each participant 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; Ellis, Simpson, & Campbell, 2002). Although the TSDI was not developed to measure mate value, the phrasing of the items makes it a suitable measure of global mate value, implicitly comparing the characteristics of one person with others. 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 such that they implicitly ask participants to compare specific characteristics of their current partner with same-sex others, a comparison which is necessary because by definition all measures of mate value are relative (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 relative 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?"). 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 Partner-Directed Insults Scale (PDIS; Goetz, Shackelford, Schipper, & Stewart-Williams, 2006). Participants first read the following statements: "Men sometimes try to hurt their female partner's feelings by saying insulting things to them. The following list includes insulting things that a man might say to his partner." Participants were then presented with a list of 50 potentially insulting behaviors. For each item, the participant indicated how often their partner has said each insulting thing to them, ranging from 0 = *My partner has never said this insulting thing to me* to 5 = *My partner has said this insulting thing to me 25 or more times*. Following Goetz et al. (2006), we organized the 50 potentially insulting behaviors into four categories:

Derogating Physical Attractiveness (e.g., “My partner told me that my breasts are ugly”), Derogating Value as a Partner/Mental Competency (e.g., “My partner told me that it is my fault when something bad happens”), Derogating Value as a Person (e.g., “My partner told me that I am worthless”), and Accusations of Sexual Infidelity (e.g., “My partner accused me of wanting to have sex with another man”). Previous research has established the reliability and validity of the PDIS (Goetz et al., 2006; McKibbin et al., 2007; Starratt, Goetz, Shackelford, McKibbin, & Stewart-Williams, 2008).

2.3. Procedures

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

Response values for the 34 items of the relevant version of the TSDI were summed to calculate scores for women's own mate value and for their partner's mate value ($\alpha = .94$ and $.96$, respectively). Women's perceptions of their own and their partner's mate value correlated positively ($r = .51$, $p < .001$), indicating that women perceive themselves to be of a similar mate value as their partners. This finding is consistent with research indicating that partners in long-term relationships tend to be of similar mate value (see Buss, 2003).

Response values for the 50 items of the PDIS were summed to calculate full-scale scores. Scores for each of the four categories of the PDIS were calculated by summing response values to items within that category, following Goetz et al. (2006). The alpha reliabilities for the full-scale, total PDIS and the four categories of the PDIS (Derogating Physical Attractiveness, Derogating Value as a Partner/Mental Capacity, Derogating Value as a Person, and Accusations of Sexual Infidelity), were $\alpha = .95$, $.85$, $.91$, $.82$, and $.88$, respectively.

Consistent with Hypothesis 1, women's perceptions of their own mate value correlated negatively with women's reports of their partner's verbal insults ($r = -.23$, $p < .05$). At the category level of partner-directed insults, women's perceptions of their own mate value correlated negatively with their reports of their partner's use of insults within the categories of Derogating Physical Attractiveness ($r = -.20$, $p < .05$), Derogating Value as a Partner/Mental Competency ($r = -.24$, $p < .01$), and Accusations of Sexual Infidelity ($r = -.25$, $p < .01$), but not with use of insults within the category of Derogating Value as a Person ($r = -.03$, $p > .05$).

Consistent with Hypothesis 2, women's perceptions of their partner's mate value correlated negatively with women's reports of their partner's verbal insults ($r = -.35$, $p < .001$). At the category level of partner-directed insults, women's perceptions of their partner's mate value correlated negatively with their reports of their partner's use of insults within the categories of Derogating Physical Attractiveness ($r = -.26$, $p < .01$), Derogating Value as a Partner/Mental Competency ($r = -.39$, $p < .001$), Derogating Value as a Person ($r = -.26$, $p < .01$), and Accusations of Sexual Infidelity ($r = -.32$, $p < .001$).

To investigate whether women's and men's mate values uniquely predicted men's deployment of verbal insults, we conducted multiple regressions using women's perceptions of their own and their partner's mate values to predict women's reports of their

Table 1

Multiple regression analyses for women's self-reports of women's and men's mate value predicting men's partner-directed insults

Men's partner-directed insults	Mate value (Standardized beta)		Full model		
	Women	Men	F	(df _b , df _w)	R ²
Derogating physical attractiveness	-.11	-.20	4.06*	(2,104)	.07
Derogating value as a partner/ mental capacity	-.10	-.35**	10.87***	(2,109)	.17
Derogating value as a person	.16	-.35**	5.28**	(2,108)	.09
Accusations of sexual infidelity	-.10	-.27*	6.79**	(2,108)	.11
Total	-.10	-.31**	7.96**	(2,101)	.14

Notes. Partner-directed insults were assessed by the Partner-Directed Insults Scale; mate value was assessed by the Trait Specific Dependence Inventory (see text).

* $p < .05$.

** $p < .01$.

*** $p < .001$.

partner's verbal insults (see Table 1). The overall model for the full-scale PDIS was significant. Investigation of the standardized regression coefficients indicated that men's but not women's mate value uniquely predicted men's partner-directed insults. To investigate whether women's and men's mate values uniquely predicted men's use of specific categories of partner-directed insults, we conducted four 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 insults within each of the four categories (see Table 1). All of the overall models were significant. Investigation of the individual standardized regression coefficients indicated that women's perceptions of their partner's (but not their own) mate value uniquely predicted women's reports of their partner's use of insults within the categories of Derogating Value as a Partner/Mental Capacity, Derogating Value as a Person, and Accusations of Sexual Infidelity. Neither women's perceptions of their own nor their partner's mate values uniquely predicted women's reports of their partner's use of insults within the category of Derogating Physical Attractiveness, although the relationships are in the hypothesized directions.

Based on the results of Hypothesis 2 and the multiple regressions, we present in the discussion a theoretical model for understanding the current results as reflecting an opportunity cost model of the trade-offs associated with men's use of partner-directed insults (see Fig. 1).

4. Discussion

The results of the current research indicate that both women's and men's mate values are related to men's use of partner-directed insults. Without exception, women who perceive themselves or their partners to be of lower mate value also report that their partners deploy more verbal insults than women who report themselves or their partners to be of higher mate value.

The content of insults leveled at women by their partners often references characteristics of the women (McKibbin et al., 2007; Starratt et al., 2008). The results of the current research are consistent with previous research, indicating that characteristics of the women being insulted, in this case represented by women's mate value, are related to men's use of partner-directed insults. Put differently, women's perceptions of their own mate value are correlated negatively with their reports of their partner's verbal insults such that women who perceive themselves to be of lower mate value also report that their partner's level more insults against them. Although it is possible that men of high mate value partners are reluctant to insult their valuable partners, as we originally suggested, McKibbin et al. (2007) suggest that men's use of

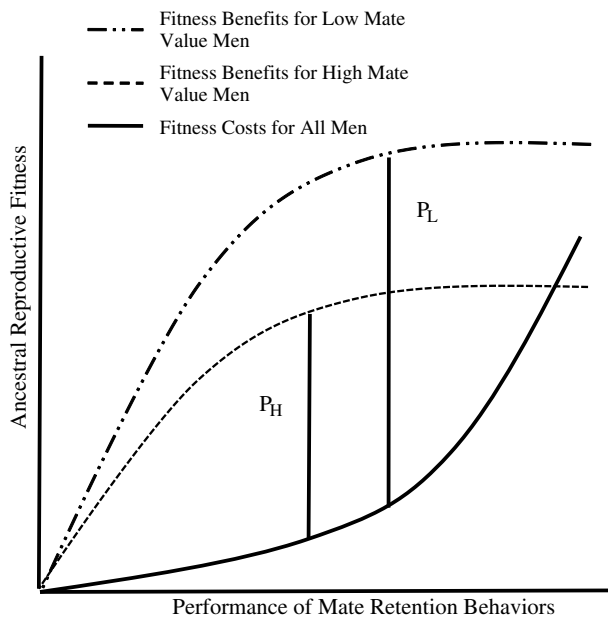


Fig. 1. An opportunity cost model of the relationship between performance of cost-inflicting mate retention behaviors and ancestral fitness gains for low mate value men and high mate value men, based on Hames (1992). P_H is the optimal level of performance of mate retention behaviors for high mate value men. P_L is the optimal level of performance of mate retention behaviors for low mate value men.

insults may cause a woman's self-esteem to decrease. These authors propose that the decrease in self-esteem may alter her perception of the likelihood of replacing her partner. Therefore, it may be more parsimonious to interpret the link between women's mate value and insults as an indication that men's use of partner-directed insults successfully decreases their partner's self-esteem. This result provides preliminary evidence that partner-directed insults may be an effective method of mate retention.

The results of the current research also indicate, however, that men's use of partner-directed insults is related to characteristics of the men leveling the insults. Women's perceptions of their partner's mate value are correlated negatively with women's reports of their partner's use of verbal insults. The current research establishes the first empirical links between men's mate value and men's partner-directed insults.

Although both men's and women's mate values are related to men's use of partner-directed insults, men's mate value, but not women's mate value, uniquely predicts men's use of partner-directed insults. Put differently, independent of their partner's mate value, men of low mate value deploy more partner-directed insults than men of high mate value. The current research documents a pattern of results for men's mate value and partner-directed insults similar to previous results which linked men's mate value to men's mate retention behaviors (Miner et al., 2009). The comparable pattern of results identified in the current and previous research is consistent with other work indicating that partner-directed insults are a form of mate retention, specifically cost-inflicting mate retention behaviors (McKibbin et al., 2007). The current research also is consistent with previous results indicating that men of lower mate value perform a more diverse set of mate retention behaviors to retain their partners than do men of higher mate value (Miner et al., 2009). The current results also are broadly consistent with the Competitively Disadvantaged Male hypothesis of male sexual coercion, which suggests that low mate value men may perform more sexually coercive behaviors than high mate value men because of

their relative inability to attract and retain faithful sexual partners (Figueredo & McCloskey, 1993).

The current results are consistent with an opportunity cost model of the proposed ancestral trade-offs associated with men's use of cost-inflicting mate retention behaviors. We suggest that the partners of low mate value men in the environment of evolutionary adaptedness were more likely to be unfaithful than the partners of high mate value men. For this reason, low mate value men have higher potential fitness gains from performing mate retention behaviors than high mate value men. This model is based on the assumption that the loss of a partner would have been similarly costly for low mate value men and high mate value men. If the cost curves were similar for all men, a greater performance of cost-inflicting mate retention behaviors would lead to an increased risk of female defection from the relationship. As depicted in Fig. 1, these relationships lead to differences in the ancestrally optimal performance levels of cost-inflicting mate retention behaviors such as partner-directed insults. Based on this model, low mate value men today should deploy more partner-directed insults than high mate value men.

The current research is limited by reliance on women's reports of their own and their partner's mate value and of men's use of partner-directed insults. Future research might investigate whether men and women provide consistent reports of relative mate value and of men's use of partner-directed insults. The current research also is limited by reliance on correlational analyses. Although we speculate that men of lower relative mate value insult their partners as a consequence of this lower mate value (which includes limited access to resources that may aid in mate retention), it may be that men who frequently insult their partners are subsequently—and as a consequence—perceived by their partners to have low relative value. Future research might investigate directly the causal nature of the relationship between men's mate value and men's partner-directed insults using a longitudinal design, potentially examining whether changes in a man's mate value (e.g., loss of job, promotion) cause corresponding changes in their use of insults. Future research might separately investigate the causal nature of the relationship between women's mate value and men's partner-directed insults using a longitudinal design, potentially examining if women's perceptions of their own mate value change as a result of men's partner-directed insults.

Previous research has linked both women's and men's mate value with men's mate retention behaviors. The current results are consistent with this previous research, while also indicating that men's deployment of partner-directed insults is a form of cost-inflicting mate retention behavior. In summary, men of lower relative mate value may resort to the use of partner-directed insults to retain their partners more frequently than men of higher relative mate value.

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