



Cash in hand, want better looking mate: Significant resource cues raise men's mating standards

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ABSTRACT

Resources are a cardinal component of male mate value in the sexual exchange between men and women. Inspired by theories and research suggesting a link between mating and resource constructs as well as studies linking money and valuations of others, the current study tests the hypothesis that cues to resource availability may lead to higher mating standards for men, but not women. Participants were exposed to either stacks of paper, a small sum of money (104 Singapore dollars ~USD\$84), or a large sum of money (2600 Singapore dollars ~USD\$2100). Consistent with the hypothesis, after male – but not female – participants handled a large sum of money, they raised their minimum requirements for a date. We discuss how the results are consistent with an evolutionary perspective on mating and how future research can further investigate environmentally contingent self-assessments and strategies.

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“...the boy with the cold hard cash is always Mister Right.”

– Madonna, *Material Girl*

1. Introduction

As reflected by the above song lyrics, a colloquial yet perennial observation across various cultures is that wealthy men are highly desirable as romantic partners. Researchers adopting an evolutionary perspective have made significant contributions towards understanding this and related phenomenon by shedding light on the mating preferences of men and women. Drawing on Trivers (1972) seminal theory of parental investment, researchers have hypothesized that the interaction between ancestral females' parental investment of their own 'intrinsic' physiological resources, through gestation and lactation, and males' relatively 'extrinsic' investments of material resources, such as food, shelter and protection, led to evolved differences in mate preferences between the sexes (Buss & Schmitt, 1993; Kenrick, Groth, Trost, & Sadalla, 1993; Symons, 1979). Studies have supported this prediction, demonstrating that women, more so than men, value cues related to resources, while men tend to place higher value on cues to health

and fertility (e.g., Buss, 1989; Kenrick, Sadalla, Groth, & Trost, 1990; Kenrick & Keefe, 1992; Shackelford, Schmitt, & Buss, 2005).

Importantly, these sex-differentiated mate preferences may interact adaptively with environmental cues to guide the mate selection process. For instance, studies have recently examined how mating motives affect preferences for resources. When men, but not women, were primed with mating motives, they spent more on luxury items (products that are not considered essential and are associated with affluence; Giskevicius et al., 2007). When men were in the presence of women (but not the other way around), they were more likely to appraise money and being wealthy as very important (Roney, 2003). Similarly, after viewing pictures of attractive versus unattractive women, men – but not women – economically discounted the future (i.e., more greatly valued resources in the present; Wilson & Daly, 2004) and took more risks (Baker & Maner, 2008). Men have also been found to be more generous and to donate more money to charity if they are knowingly observed by an attractive female (Iredale, Van Vugt, & Dunbar, 2008). These studies highlight how mating cues may elicit responses linked to sex-differentiated mate preferences.

Studies from another line of research suggest that there are other important psychological links involving resources. Specifically, recent social psychological research has demonstrated that cues to resource availability may affect the way people view or value others. For instance, when primed with money, people became less prosocial and helpful, and less willing to seek help from

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others when facing difficulty (Vohs, Mead, & Goode, 2006). People primed with money also reported less distress after being subjected to social exclusion, whereby those primed with loss of money reported greater distress (Zhou, Vohs, & Baumeister, 2009). Given that cues to money – a key form of resources in modern societies – may affect how people view others and that resources play a central role in mate preferences and mating psychology, we postulated that cues to resource availability may affect how potential mates are valued.

1.1. The current study

The present research examines the importance of resources in relation to the evolved sexual exchanges between men and women. For both sexes, resources can be an end in itself (i.e., men and women can benefit from consuming resources strictly for themselves). However, because women place a premium on men's extrinsic worth (social status) and resources, there may be sexual selection pressure for men to demonstrate greater investment and generosity in order to court prospective mates. Therefore, for men more than women, resources may also be a means to increased mating opportunity. As such, we might expect men to be adaptively sensitive to the availability of significant resources in their immediate environment and to adjust their mating strategies accordingly.

This study hypothesizes that sensory stimuli from exposure to money may function as decision input cues resulting in raised standards for a potential mate in men but not in women. We sought to make an important extension to both the work of mating researchers, who have established causal links between the presence of desirable potential mates and valuations placed on wealth (e.g., Roney, 2003; Wilson & Daly, 2004), and work by other social psychologists, who have indicated a causal link between money and valuations of others (e.g., Vohs et al., 2006).

This study also presented an opportunity to test whether men or women are more selective towards a potential date, as the more selective sex will tend to have higher standards (Kenrick et al., 1990). Finally, the study allowed us to test for sex differences in mate preferences found in previous research (men placing greater value on physical attractiveness, women placing greater value on social status; e.g., Buss, 1989).

2. Method

2.1. Design

This study employed a between-subjects design consisting of two independent variables (participant sex – male or female; resource exposure – *Control*, *Small Resources*, or *Large Resources*) and one dependent variable (mating standards).

2.2. Participants

Students from Singapore Management University voluntarily enrolled to attain either course credits or a payment of S\$5. A total of 96 women and 81 men participated. Subsequently, 15 females and 9 males were omitted for misinterpreting the instructions of the counting and calculation task. Thus, 81 women and 72 men made up the final sample, and the mean male age was 22.5 years, while the mean female age was 20.7 years. The ethnic proportion was 79.2% Chinese, 9.1% Indian, 3.9% Malay, 2.6% Caucasian and 5.2% others.

2.3. Materials and procedure

Participants were primed with one of three resource exposure conditions: *Control*: 52 blank strips of paper (dimensions propor-

tionate to money notes), *Small Resources*: 52 S\$2 notes, or *Large Resources*: 52 S\$50 notes. Participants were presented with a set of questions they had to answer based on the resource condition. The first question asked the participant how many sheets of paper there are either in the stack of paper, S\$2 notes, or S\$50 notes. To further strengthen the priming exposure, the next four questions instructed the participant to carry out a series of simple calculations and measurements based on the money notes or paper (rulers were provided for the measuring task). These instructions were given on the pretext of assessing their cognitive counting performance and also served as a filler task to mask the intentions of the experiment.

Participants were run separately in private booths. After the manipulation, participants proceeded to fill out a mating standards survey measuring their minimum requirements on physical attractiveness, creativity, personality, and social level, for a date (Kenrick et al., 1990). When a participant completed the study, s/he was debriefed and thanked.

3. Results

To determine the effects of resource exposure on mating standards, a general linear model repeated measures analysis was used to analyze the data. A participant's overall 'mating standard' score was ascertained by finding the mean score of requirements for a date.

As predicted, there was a two-way interaction of *sex* × *resources* on participants' requirements for a date, $F(2, 147) = 3.17, p < .05, \eta_p^2 = .041$. The mating standards of men were significantly affected by the resource condition, $F(2, 147) = 4.58, p < .05, \eta_p^2 = .059$. Men had the highest standards for a date in the *Large Resources* condition ($M = 71.1, SD = 1.75$) compared to the *Small Resources* condition ($M = 65.1, SD = 1.69$), $p < .05$, and *Control* condition ($M = 64.2, SD = 1.83$), $p < .05$. Conversely, women's mating standards did not vary significantly across the three resource conditions $F(2, 147) = .769, p = .47, \eta_p^2 = .010$. The mean scores of women's requirements for a date in the *Large Resources* condition ($M = 71.1, SD = 1.62$) did not differ significantly from the *Small Resources* condition ($M = 73.1, SD = 1.65$), $p > 1.00$, or the *Control* condition ($M = 70.3, SD = 1.69$), $p > 1.00$ (see Fig. 1).

To gain further insight into the effects of resources on men's requirements for a date, we used each of the four minimum requirements for a date as a dependent variable in another set of general linear model analyses. For men, the effect of resource exposure was only significant on physical attractiveness, $F(2, 69) = 6.52, p < .01, \eta_p^2 = .159$. The *Large Resources* condition significantly raised men's physical attractiveness minimum requirement above that demanded by other male participants in both the *Control* condition ($MD = 8.2, SD = 2.95$), $F(1, 147) = 11.63, p < .01, \eta_p^2 = .073$, and the *Small Resources* condition ($MD = 9.6, SD = 2.36$), $F(1, 147) = 11.63,$

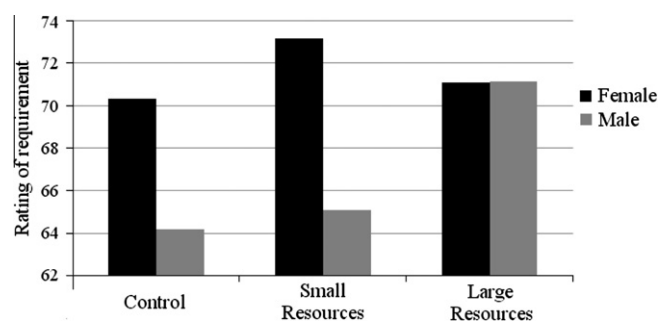


Fig. 1. Mean scores for dating requirements across conditions.

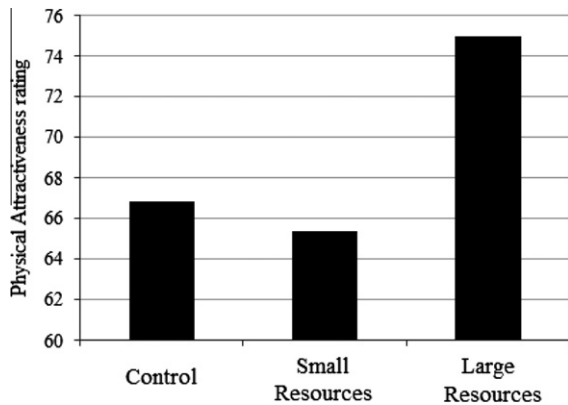


Fig. 2. Dating requirement ratings for physical attractiveness of male participants across conditions.

$p < .01$, $\eta_p^2 = .073$ (see Fig. 2). For women, the effect of resources was not significant on any of the dating requirements.

Further general linear model analyses also show that women had significantly higher mating standards than males, $F(1, 147) = 11.38$, $p = .001$, $\eta_p^2 = .072$. This was true for the *Control* condition ($MD = 6.1$, $SD = 2.49$), $F(1, 147) = 6.07$, $p < .05$, $\eta_p^2 = .040$, and the *Small Resources* condition ($MD = 8.1$, $SD = 2.36$), $F(1, 147) = 11.63$, $p < .01$, $\eta_p^2 = .073$. Men raised their mating standards to meet that of women only when primed with the S\$50 notes in the *Large Resources* condition ($MD = .07$, $SD = 2.39$), $F(1, 147) < .001$, $p = .98$, $\eta_p^2 < .001$.

Comparing the sexes on their requirements for specific traits across all conditions, men valued physical attractiveness more than women ($MD = 3.6$, $SD = 1.76$), $p < .05$, while females prized *Creativity* ($MD = 9.2$, $SD = 2.56$), $p < .001$, and *Social Level* ($MD = 9.9$, $SD = 2.32$), $p < .01$, more than men (see Fig. 3).

4. Discussion

The results of this study provide evidence that resource cues have the capacity to influence mate preferences in a sex-differentiated manner consistent with an evolutionary perspective on mating. Indeed, only a large sum of money (holding $52 \times S\$50 = S\2600 and thumbing through the notes was a novel experience for the majority) induced this effect of raised mating standards in men; the influence of an equally thick stack of small notes on male

participants' subsequent requirements for a date was not significantly different from when they were exposed to just blank strips of paper, and the male participants in these two conditions reported lower requirements. In particular, male participants' minimum requirements for physical attractiveness in a date drove the effect of resource cues most strongly. This is consistent with an evolutionary account of mate preferences whereby men adaptively value physical attractiveness in a mate relatively more than women. Physical cues signal information about a woman's youth and health, which are factors related to fertility or reproductive value (e.g., Buss, 1989; Kenrick et al., 1990; Kenrick & Keefe, 1992; Shackelford et al., 2005).

This study provides important support for the possibility that human males have evolved mental modules tasked with strategically guiding behavior in response to changes in their access to resources. In such a situation, men may face a trade-off between either using the resources directly for oneself (e.g., buying food or practical items), or using the resources to attain better quality mates (e.g., splurging on an expensive dinner on a date or buying gifts for a potential mate). An increase in mating standards could be an instinctive way of strategically resolving this dilemma: take action to pursue a mate only if the mate is of high quality; otherwise, consume resources for the self to avoid a low mating payoff. Women, on the contrary, are not expected to alter their mate quality preferences when primed with resource cues as women do not need to use resources to attain mates (Buss & Schmitt, 1993).

This study also confirmed that there are cognitive links between resources and mating and provided preliminary evidence that this connection is bidirectional, i.e., not only can mating goals lead to alterations in the perception of wealth and resources (e.g., Wilson & Daly, 2004), but resource cues can conversely lead to alterations in mating psychology. More specifically, this finding, as well as the findings on preferences for specific traits, also supports the literature on the greater importance of resources for female versus male long-term mate preferences, and physical attractiveness for male versus female preferences (Buss & Schmitt, 1993; Kenrick et al., 1993; Li, Bailey, Kenrick, & Linsenmeier, 2002; Symons, 1979). Lastly, parental investment theory (Trivers, 1972) asserts that the sex that has a greater biological investment in offspring will evolve to be choosier with whom they mate. Women are thus expected to be more discriminating in mating, as the biological obligation of pregnancy and care for offspring makes human females the more investing parent. Our finding that women, overall, had significantly higher mating standards than men supports this theory and is con-

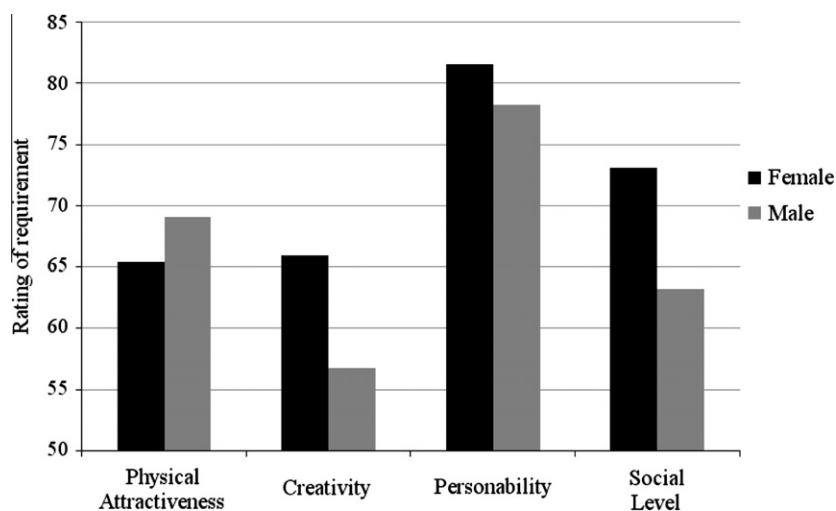


Fig. 3. Sex differences for dating requirements across traits.

sistent with previous research on minimum criteria for romantic partners (e.g., Kenrick et al., 1990).

4.1. Limitations and future directions

A limitation of the current study is that we examined mating standards only in the context of a date. In the mate preference literature, an important distinction is made between long- and short-term mating (e.g., Buss & Schmitt, 1993; Kenrick et al., 1990). For instance, Li and Kenrick (2006) showed that male resources tend to be more highly valued in a long-term context than a short-term one, where physical attractiveness is highly valued by both sexes. At the same time, cash on hand, which signals the availability of high resources, has also been shown to be useful to men in the context of short-term mating to fund conspicuous consumption to attract short-term mates (Sundie et al., 2011). Thus, future research can investigate if the effects found presently are especially pronounced in either a specifically long- or short-term mating context.

Future research is also needed to understand more precisely how resource cues affect mating behavior. One way is to uncover variables that might mediate the stimulus (money) to the output (raised mating standards). Considering that an increase in self-sufficiency has been proposed as an explanation for the effects of money on how others are viewed (Vohs et al., 2006), a possible mediator in the case of raised mating standards could be one's self-perceived mate value, a construct that may be closely related to one's relative standing on traits desired by the opposite sex (Gutierrez, Kenrick, & Partch, 1999). Thus, resource availability could affect men's, but not women's, self-perceived mate value, which in turn affects mating standards.

It is also important to replicate this study with other populations, such as with people across different levels of socioeconomic statuses and with other cultures, especially if a claim is to be made that this sensitivity towards resource cues is a generalizable evolved trait in men. Although we utilized cash as a priming stimulus, the underlying construct of interest is resource cues. Thus, it would also be desirable to examine whether exposure to non-monetary resource cues (e.g., credit cards, cars, poker chips) can induce similar effects. If other wealth-related items can conjure the same effects found by the \$50 notes, then the overarching category of resource cues will be strengthened.

This study adopted the measurement of minimum standards to see if what participants minimally required for a date would be altered by exposure to different amounts of resources. It may also be useful to measure mate preferences using a budget allocation framework (Li et al., 2002), whereby participants reveal their relative valuation of various traits under different levels of constraints. This would allow researchers to examine the extent to which people's mate preference priorities (e.g., what they value first and foremost) change in response to resource exposure.

By focusing on resources, the current study highlighted the effect of money cues on men. Finding out what may influence mating standards for women will provide a more complete picture of how mating behavior is affected by relevant cues in one's environment. For instance, as research has shown that physically attractive women demand more from their mates (Buss & Shackelford, 2008), it would be interesting to see if an increase in self-perceived physical attractiveness might induce changes in women's mating standards.

Finally, although our study is couched in an evolutionary theoretical framework, it is possible that our male participants have been socially and culturally conditioned to feel empowered by money, as resources are a proxy for status. Specifically, men, but not women, may have learned that money is desirable to the oppo-

site sex, and thus, enhances their mate value. Such explanations, however, may be compatible with an evolutionary perspective by focusing on more proximate factors rather than more ultimate ones (e.g., Mayr, 1961; Tinbergen, 1963). Future researchers are encouraged to investigate this distinction further.

5. Conclusion

In summary, we have shown that handling a significant amount of cash may make men think they are Mr. Right, at least in terms of their mating standards. This effect, whereby our participants raised their requirements for a date, was found even though they did not actually own the large sums of money they were primed with. In line with evolutionary logic, this study suggests the existence of evolved cognitive subroutines that are adaptively fine-tuned to take into account relevant environmental input to guide strategic mating and survival behavior.

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