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Interpersonal trust and market value moderates the bias in women’s preferences away from attractive high-status men.

Running head: Trust, market value and mate-choice

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Women appear to exhibit a subtle reluctance to engage in long-term relationships with physically attractive, high-status men. We propose that this bias away from men of very high market value is based on fear that these males may desert a relationship and also on the comparative self-perceived market value of the women. Therefore, interpersonal trust and perceived market value should moderate the extent of this counterintuitive bias. To test this proposal, we asked women with varying levels of interpersonal trust and mating success to consider physically-attractive and physically-average men of high, medium and low socioeconomic status and rate each in terms of attractiveness as a long-term partner. Results showed that women’s perceptions of their own desirability and their level of trust predicted their ratings of men with high-value in the mating market, and that women with combined high levels of both desirability and trust were less likely to show a bias away from high-value men.

1. Introduction

Men and women look for and value different characteristics in a potential long-term opposite sex partner (Buss, 1989). According to the principles of evolutionary biology, this is largely due to the substantial imbalance in the level of investment that each sex places in potential offspring. The costs of reproduction, in terms of both time and energy, are significantly greater for females than for males, and females should therefore be choosier than males in selecting potential partners (Trivers, 1972). Though both men and women prefer physically attractive individuals as mates (Walster, Aronson, Abrahams, & Rottman, 1966), women are willing to sacrifice some degree of physical attractiveness in return for other qualities in a potential long-term partner (e.g. Li, Bailey, Kenrick, & Linsenmeier, 2002). Indeed, a wealth of empirical evidence converges on the view that women consistently seek a broader range of characteristics than do men (for reviews, see Buss, 1989, 2000; Buss & Barnes, 1986). In a recent study that is typical of the work in this area, Furnham (2009) showed that men emphasise the importance of youth and physical attractiveness in potential partners while women look for a wider range of characteristics that invariably includes status and/or resource-holding potential. Status and resources are influential in determining male attractiveness; evidence from Pérusse (1993) shows that high-status men copulated more frequently than men of lower status while Hopcroft’s (2006) analysis of contemporary census data suggests that high-income men report a higher frequency of sex and have more offspring.
than low-income men. In fact, the impact of socioeconomic status on perceptions of men can be startlingly direct; women rate men as being more attractive when pictured in a luxury car than in a more pedestrian model (Dunn & Searle, 2010).

Despite the fact that status is generally accepted as a positive attribute for men, Chu, Hardaker and Lycett (2007) showed that high levels of status may be a hindrance to physically attractive men in the mating market. They asked women to contemplate a long-term relationship and then rate the overall appeal of men who systematically varied in both physical attractiveness and socioeconomic status. They found female respondents preferred attractive men of medium-status more than men of high-status. The proposed explanation for this unexpected pattern in preferences centred around female market value and fear of infidelity. That is, because physically attractive, high-status men are, at least theoretically, expected to be attractive to women generally, they may be more likely to devote more effort to a mating (rather than parenting) strategy and, therefore, be more likely to desert a relationship. There is certainly evidence that physically attractive men are more likely than unattractive men to invest time in mating rather than parenting efforts (Waynforth, 1999) and are more likely to engage in copulations outside of their partner-relationship (Gangestad & Thornhill, 1997). Coupled with the evidence that high-status men, regardless of physical attractiveness, have more sex and more offspring (Hopcroft, 2006; Perusse, 1993), it is apparent that men who combine both physical desirability and high status may be a risky proposition for potential partners. Chu et al. (2007) suggested that under those circumstances, women might settle for less and show a slight bias away from attractive high-status men. In other words, any benefits that might potentially accrue from high-quality men are weighed against costs of potential desertion.

However, while women seem to care about the qualities men possess, it is likely that women vary in their willingness to engage in potentially risky but high-benefit relationships. Here we examine the question of whether the bias away from attractive, high-status men pertains to all women. If some women do not exhibit this bias, what are the characteristics of those who do not? We propose that if fear of infidelity is a basis of the bias, then women who are more trusting of others should show less reluctance to engage in long-term relationships with attractive, high-status men than less trusting women. A second implicated factor is likely to be women’s self-perceived market value (SPMV); women who perceive themselves to be attractive and desirable to men may be less likely to fear infidelity.
than women who perceive themselves to have a lower market value. This prediction follows directly from a recent finding that, in socially anxious individuals, having a low perception of one’s market value reduces willingness to engage with individuals of a higher perceived market value (Wenzel & Emerson, 2009). In the mating market, women adjust the extent of their demands to their own market value – women with more to offer demand more of potential partners (e.g. Buss & Shackelford, 2008; Pawlowski & Dunbar, 1999) – and, in general, it follows that being more demanding may also encompass an increased willingness to engage with men who themselves have more to offer.

The present study therefore directly addresses the issue of individual variation within the female population and the extent to which the individual characteristics of interpersonal trust and perceived mating success affect these mate-choice preferences. Following Chu et al. (2007), we presented women with pictures of physically attractive or physically average men of either high, medium or low socioeconomic status, and asked for ratings of attractiveness as a long-term partner. We also measured interpersonal trust and SPMV in women, and predicted that women would show a preference bias away from physically-attractive, high-status men but that the extent of the bias would be mediated by individual levels of trust and SPMV.

2. Method

2.1. Participants

101 volunteer female participants, with a mean age of 21 (range: 18 – 29 yrs), were recruited from the undergraduate student population at the University of Central Lancashire as well as the general population in the northwest U.K.

2.2. Materials

We used the Self-Perceived Mating Success Scale (Landolt, Lalumiere, & Quinsey, 1995) to measure individual perceptions of their own desirability to the opposite sex (e.g. ‘Members of the opposite sex notice me’). The scale consisted of eight items and participants rated their agreement with each item from 1 (strongly agree) to 7 (strongly disagree). We
measured interpersonal trust using the Interpersonal Trust Scale (Rotter, 1967) which consisted of 40 items (e.g. ‘Most people can be counted on to do what they say they will do’) where participants rated their agreement from 1 (strongly agree) to 5 (strongly disagree). While this scale measures global trust rather than specific relational trust, Couch and Jones’ (1997) large-scale comparison of several trust scales indicated that measures of relational trust are more related to measures of unstable relationship constructs (e.g. happiness with current romantic partner) rather than trust as a character trait. However, global trust is more related to stable personality traits than relationship constructs and it was the former that we sought to measure. In any case, Couch and Jones (1997) provide evidence that, whilst global trust and relational trust are generally distinct constructs, measures of the two are also significantly correlated. It is important to note that trust and self-perceived desirability are separate constructs; the former relates to a general expectation of how people will behave while the latter relates to a perception of how attractive one generally appears to opposite-sex others. Nevertheless, whilst we conceive of these variables as being distinct, there is evidence that they covary to some degree (Ambwani & Strauss, 2007; Cash, Theriault, & Annis, 2004). In fact, Ambwani and Strauss (2007) have shown that a combined measure of trust and jealousy may predict body esteem in women.

Twenty male faces that varied in attractiveness were selected from internet dating websites. All faces were full face, with gaze directed at the camera, neutral expression and no facial hair, piercings, tattoos or other facial adornments. All pictures were cropped to a uniform size to show only the head and neck. All pictures were then rated by 25 women on a 1 (very unattractive) to 9 (very attractive) scale. The three faces with the highest mean rating (all mean ratings greater than 7) and three faces with a medium mean rating (all mean ratings between 4 and 6) were selected for use as physically attractive and physically average target faces.

Following the procedure described in Chu et al. (2007), we used descriptors compiled by the U.K. Office for National Statistics (The National Statistics Socio-economic Classification User Manual, 2002) to select six occupations, two of which were high socioeconomic status (doctor, architect), two of medium status (teacher, social worker), and two of low status (postman, call centre operator). Using combinations of regularly used phrases in published lonely-hearts newspaper advertisements, six lonely hearts adverts were compiled to resemble standard adverts commonly seen in newspapers. Four independent
raters informally assessed the fictional advertisements for approximate equivalence in attractiveness and distinctiveness and final adverts were created by inserting an occupation, e.g. ‘Laid-back architect, 26, good sense of humour, into socialising, would like to meet outgoing girl for fun and friendship’. To obscure the systematic manipulation of physical attractiveness and status, four distracter adverts were created which did not include an occupation and these were attached to four faces from the original face set. Photos and adverts were printed on separate pages and experiment presentations were created by inserting pictures and adverts into opposite pages of a booklet. The six target face and status combinations were varied for each participant such that any particular target face appeared equally often with each of the six target occupations. The four distracter face-advert combinations did not change. The use of all materials and protocols were granted ethical approval by the UCLan School of Psychology.

2.3. Procedure

Participants were approached individually and asked to view and rate each of the 10 men in terms of potential willingness to enter into a long-term relationship with them on a scale of 1 (not at all willing) to 9 (extremely willing). After rating the face-advert combinations, participants completed the Self-Perceived Mating Success Scale and the Interpersonal Trust Scale before being debriefed and thanked for their help.

3. Results

Figure 1 shows the mean overall rating for each combination of appearance and status and the pattern of preferences appears to be consistent with the results from Chu et al. (2007). This pattern was confirmed statistically: all target ratings from each participant were entered into a 2 (male appearance: physically attractive, physically average) x 3 (male status: high, medium, low) repeated-measures analysis-of-variance. As expected, there was a significant main effect of appearance, \( F(1,100) = 107.59, p < 0.001, \eta^2_p = 0.52 \), where attractive-looking men (mean rating = 6.01, S.E. = 0.10) generally attracted higher ratings than average-looking men (mean rating = 4.46, S.E. = 0.12). Status also exerted a significant effect on ratings, \( F(2,200) = 151.54, p < 0.001, \eta^2_p = 0.60 \), and post-hoc Bonferroni comparisons showed that high status men (mean rating = 6.20, S.E. = 0.13) generally received higher ratings than
medium-status men (mean rating = 5.76, S.E. = 0.13) who, in turn, received higher ratings than low status men (mean rating = 3.75, S.E. = 0.10). Analyses also revealed a significant interaction between appearance and status, \( F(2,200) = 43.88, p < 0.001, \eta^2_p = 0.30 \), and a simple effects analysis showed that, for average-looking men, high-status attracted higher ratings than medium-status which in turn attracted higher ratings than low-status. In contrast however, for attractive-looking men, medium-status received higher ratings than high-status which in turn received higher ratings than low status (all \( p < 0.01 \)). Thus, these data fit with previous findings that demonstrate a bias in preferences away from physically attractive, high-status men as potential partners in long-term relationships.

Given that we again found that good-looking men of medium status attracted higher ratings than good-looking men of high-status, we proceeded to examine the question of whether trust and SPMV moderated women’s ratings of men in these two combinations of appearance and status. First, we aimed to test the prediction that female trust and SPMV would moderate women’s ratings of the attractive-looking, high-status men by performing a hierarchical regression analysis with trust and SPMV on the first step and the interaction on the second step. Prior to the analysis, we centred the predictors by subtracting the mean from each participant’s score. Step 1 was significant, \( F(2,98) = 23.97, p < 0.001 \), accounting for 33% of the variance (\( R^2 = .33 \)). Trust and SPMV both predicted attractiveness ratings, \( \beta = .32, t = 3.32, p < .001 \) and \( \beta = .33, t = 3.43, p < .001 \), respectively. Step 2, when the interaction entered, was also significant, supporting our prediction for an interaction, \( \Delta R^2 = .03, \Delta F(1,97) = 4.17, p < 0.05 \). We plotted the form of the interaction using the method described by Aiken and West (1991) and Holmbeck (2002), and this is shown in Figure 2. We plotted the full regression equation at high (+1SD above the mean) and low (-1SD below the mean) trust and SPMV. Post-hoc probing of the interaction followed Holmbeck’s method and tested the relation between trust and ratings of attractiveness at high and low levels of SPMV. The significance of these simple slopes was then calculated, which allowed us to determine the standardized \( \beta \) and \( t \) values (see Figure 2). The prediction was supported such that women who perceived themselves as desirable to the opposite sex (high in SPMV) rated physically-attractive high-status men more highly than did women who perceived themselves as less desirable (low in SPMV). In addition, interpersonal trust was influential in the ratings of both less desirable and more desirable women. However, it appears that whilst increasing women’s trust generally had a positive effect on ratings of attractive-looking high-status men,
this effect was much more striking in women who perceived themselves to be less desirable rather than more desirable.

Following this, we examined the same influence of trust and SPMV on ratings of physically-attractive men of average status. Again, we performed a hierarchical regression as described above, but with attractiveness ratings for physically-attractive, medium-status men regressed onto trust and SPMV and their interaction. Step 1 was significant, $F(2,98) = 23.97$, $p < .05$, accounting for 7% of the variance ($R^2 = .07$). However, neither trust nor SPMV reached significance in predicting attractiveness ratings, $\beta = .06, t = 0.56, p = .58$ and $\beta = .22, t = 1.88, p = .06$, respectively, although the predictive power of SPMV was moderate. The interaction was significant, and accounted for 14% of the variance, $\Delta R^2 = .14, \Delta F(1,97) = 17.19, p < 0.001$. The form of the interaction was plotted and is shown in Figure 3, along with the simple slopes. Self-perceived desirable women rated physically-attractive medium-status men more highly overall than did self-perceived less desirable women. However, trust was significantly more influential in the ratings of low-SPMV women than high-SPMV women. Specifically, varying the level of trust exerted no effect on the ratings from self-perceived desirable women but significantly increased the ratings from self-perceived less desirable women.

Because we were interested in the difference between the kinds of ratings women give to these two types of men (attractive-looking high-status, attractive-looking medium-status), we regressed the ratings for physically attractive men with high status onto the ratings for physically attractive men with average status to obtain a residualized change score rather than delta (Cronbach & Furby, 1970). We then repeated the hierarchical regression (as above), regressing the change score onto trust, SPMV, and their interaction. Step 1 was significant, $F(2,98) = 18.58, p < 0.001$, accounting for 27% of the variance ($R^2 = .27$). Both trust and SPMV predicted the change in attractiveness ratings, $\beta = .32, t = 3.15, p < .001, \beta = .28, t = 2.79, p < .01$, respectively. The interaction was not significant, $\Delta R^2 = .00, \Delta F(1,97) = .43, p = .51$. This is illustrated in Figure 4 which shows predicted change in ratings from attractive medium-status men to attractive high-status men given by women with varying combinations of trust and self-perceived desirability. Women scoring low in both trust and SPMV showed a distinctly negative shift in ratings when moving from attractive medium-status to attractive high-status men; that is, for these women, as the status of an attractive-looking man increased, his attractiveness as a potential long-term partner tended to reduce. When either
trust or SPMV increased in women, the change in their ratings of men became negligible. Of importance, when both trust and SPMV increased, the change in women’s ratings of men became distinctly positive. That is, from women with high levels of trust and self-perceived desirability, ratings of physically-attractive men tended to increase along with their status.

4. Discussion

We asked women to rate a number of different men in terms of how attractive they seemed as a long-term partnership prospect; the men varied in physical attractiveness and socio-economic status. We replicated the findings of Chu et al. (2007) which showed that women demonstrate a subtle bias away from physically-attractive, high-status men, and towards physically-attractive medium-status men. Further, we also collected data on the individual levels of interpersonal trust and self-perceived market value in our female sample to investigate the proposal that these characteristics would mediate the bias. Analyses showed that women’s levels of interpersonal trust and self-perceived desirability do affect their ratings of men with these combinations of status and physical attractiveness. In examining the change in ratings as women shift from considering medium-status men (say, an attractive teacher) to high-status men (say, an attractive lawyer), it is clear that only women who are both trusting and perceive themselves to be desirable find the lawyer more attractive than the teacher, while the reverse is true for women who are neither trusting nor see themselves as being desirable.

We expected women with low perceived market value would be less willing to engage in relationships with high-value men (e.g. Pawlowski & Dunbar, 1999), while women who perceived themselves to be more desirable would be less likely to show this bias. This prediction was supported; specifically, SPMV predicted ratings for both good-looking high-status and medium-status men although the latter was a weaker relationship and only approached significance. In both cases, women who perceived themselves to be desirable to the opposite sex gave higher ratings to these men than women with lower perceptions of their own desirability.

According to Chu et al. (2007), the main source of the bias in preferences away from good-looking high-status men was implicit mistrust associated with the increased risk that
these men would desert the relationship. Embedded in this explanation was the proposition that higher levels of interpersonal trust in females would engender lesser fear of infidelity and thus negate the bias. Our data supported this proposition and trust only predicted women’s ratings for high-status men and not medium-status men; that is, women’s levels of trust predicted their ratings of men who were more likely to cheat or to desert a relationship, but not men who were less likely to do so. Trust was also more influential generally in the ratings from less desirable women; for women with less to offer in the mating market, increasing trust resulted in significant increases in ratings for attractive men of both medium- and high-status. By comparison, for desirable women, increasing trust only affected their ratings of high-status men. Taken together, this is strong evidence that interpersonal trust and SPMV mediate the influence of risk of infidelity or desertion on perceptions of attractiveness as a long-term partner.

We initially proposed that interpersonal trust (or more specifically, a lack of trust) would form the basis of the bias in preferences away from high-value men in the mating market. However, it appears that, of the two characteristics, it is women’s perceptions of their own desirability that is more influential in determining how attractive they find physically-attractive men as prospective partners. Interpersonal trust is more influential when women’s desirability is at a lower level. Buss (e.g. Buss, 1989; Buss & Shackleford, 2008) has described physical attractiveness as the ‘cardinal indicator’ of female mate value and the ability to bring value to the mating market allows women to make greater demands of potential partners. However, this is not to say that trust (that is, the expectation that others will behave in a particular manner) is not influential. In this context, trust is less to do with an expectation of how others will behave, but more an expectation of how others will behave towards you. Therefore, interpersonal trust is necessarily bound up in how one sees oneself as well as how one sees others, and while a woman’s perception of her own desirability strongly affects the demands she feels able to make in the mating market, it also affects her perception of how she expects others to behave towards her. Thus, it is difficult to separate the different influences of trust and desirability on women’s expectations of whether a high-value male will be faithful.

However, one limitation to these data lies in the fact that we did not survey the relationship status of our respondents and cannot therefore assess whether they were single or in a relationship, nor how this may have impacted on the nature of their preference ratings.
The experiment instructions were clear that they should imagine themselves to be single and consider each man with regard to a long-term relationship. We have no reason to believe that our respondents who were in a relationship could not place themselves in the position of someone who was not. Nevertheless, the lack of data on this question leaves open the possibility that responses may have been influenced by respondent relationship status. A further limitation to this investigation, and indeed many others in this vein, is that it addresses theoretical mate-choice preferences rather than actual mate-choice decisions. As such, we do not know whether the stated preferences of our sample of women accurately reflect the actual decisions that they would make were they to be placed in the unusual position of actually making the choices that we presented to them. In fact, Eastwick and Finkel (2008) provide interesting evidence that what men and women believe to be influential in their own mate-choice decisions may well be uninformative when it comes to predicting the mate-choice decisions that they actually make in real life.

We proposed that the bias away from high-value men was based on women's trust and women's fear of male infidelity, and we examined this proposal from the point of view of the women by assessing the impact of varying levels of interpersonal trust and self-perceived desirability on their ratings of high-value men as potential long-term partners. An alternate approach to addressing this question would be to present a version of the study which was able to rule out future infidelity as a possibility. For example, presenting potential partnership prospects along with a descriptive vignette which characterised them as having always been completely faithful, removes (or at least minimises) the fear of desertion as a determining factor in his attractiveness. We would expect that such a manipulation would make little difference to the ratings from trusting, desirable women but would this knowledge of men's fidelity history affect the ratings from less desirable and/or less trusting respondents?

We confirmed that women generally show a subtle bias in preferences away from attractive high-status males and further showed that this counterintuitive pattern of preferences is mediated by both interpersonal trust and self-perceived market value in females. The precise mechanism for this is unclear but it is likely that higher levels of trust reduce the fear of infidelity whilst a more positive sense of market value increases the demands that females feel able to make on the quality of potential partners. In combination, these factors strongly affect women's ratings of physically-attractive eligible men and moderate the bias away from the men in the mating market with the highest value.
References


Figure 1. Mean overall ratings of physically attractive and physically average men of high, medium and low socioeconomic status.

Figure 2.