

Evolution and Human Behavior 25 (2004) 327-335

Evolution and Human Behavior

# Self-reported mate preferences and "feminist" attitudes regarding marital relations

N. F. Koyama<sup>a,\*</sup>, A. McGain<sup>b</sup>, R. A. Hill<sup>c</sup>

 <sup>a</sup>School of Biological and Earth Sciences, Liverpool John Moores University, Byrom Street, Liverpool L3 3AF, UK
<sup>b</sup>Department of Psychology, University of Liverpool, Eleanor Rathbone Building, Liverpool L69 7ZA, UK
<sup>c</sup>Evolutionary Anthropology Research Group, Department of Anthropology, University of Durham, 43 Old Elvet, Durham DH1 3HN, UK

Received 9 April 2003; accepted 17 June 2004

### Abstract

Despite huge interest in human mate choice in the last two decades, intraspecific variation in human mate preferences has received relatively little attention. We investigated individual variation in mate preferences in a group of university students (n = 292) relative to perceptions of equality and autonomy. If the constraints of societal role occupancy strongly influence sex differences in the ranking of mate preferences, then we predict that these sex differences should diminish with increasing endorsement of gender equality and autonomy. Women's mate preferences did not emulate men's with increasing endorsement of gender equality. The importance placed on "earning potential" in a potential mate decreased with increasing "feminist" attitude score, however, feminist attitude was not related to the importance of "physical attractiveness." Findings reflect the variation in women's mate preferences and are discussed in terms of evolved conditional strategies. © 2004 Elsevier Inc. All rights reserved.

Keywords: Mate preferences; Gender equality; Feminist attitudes; Evolutionary psychology

<sup>\*</sup> Corresponding author. Tel.: +44 151 231 2627; fax: +44 151 207 3224. *E-mail address:* n.f.koyama@livjm.ac.uk (N.F. Koyama).

<sup>1090-5138/04/\$ –</sup> see front matter @ 2004 Elsevier Inc. All rights reserved. doi:10.1016/j.evolhumbehav.2004.06.004

## 1. Introduction

The relative value of human mate preferences (people's beliefs about which characteristics are important in a potential mate) has been intensively researched over the past two decades with robust findings of sex differences: cross-culturally, women place greater importance than men on cues of a potential mate's ability to acquire resources, whereas men place greater importance on cues of fertility and reproductive value, such as physical attractiveness (Buss, 1989a; Kenrick & Keefe, 1992). Such preferences have been found to reflect mating behaviour (Pérusse, 1994). More recently, evolutionary explanations have emphasized phenotypic plasticity and the flexibility of mating preferences and strategies in response to socioenvironmental circumstances (Gangestad & Simpson, 2000; Pawlowski & Dunbar, 1999, 2001; Waynforth, 2001; Waynforth & Dunbar, 1995). There has been little empirical work on within-sex variation in female mate preference, and the need for such research has been voiced repeatedly (Gangestad & Simpson, 2000; Gowaty, 1992a, 1992b).

In contemporary Western society, differences traditionally exist in the paid occupations available to men and women. These differences in roles can be related to physical predispositions and the greater efficiency achieved when division of labour is established (Eagly & Wood, 1999; Mead, 1935, 1962; Wood & Eagly, 2000), such that women spend proportionately more time involved in childcare and domestic activities and men spend proportionately more time earning a wage. A positive feedback mechanism then operates as women and men adopt sex-specific skills to facilitate successful role performance: These stereotypical skills contribute to the formation of gender roles that mediate differences in paid occupations and role occupancy. Male gender roles have typically been associated with the greater power and status that emerge in patriarchal societies, where the relative value of women as exchange commodities is measured by their physical attractiveness. Men and women should therefore desire traits in a potential mate that complement the limitations and responsibilities of their social role. Consequently, the positions occupied by men and women in the society may strongly influence the value placed on "physical attractiveness" by men and "good earning potential" by women. So far, with one exception (Johannesen-Schmidt & Eagly, 2002), research examining the relationship between gender equality and mate preference has used only population-level indices (Buss, 1989b; Eagly & Wood, 1999; Gangestad, 1993; Glenn, 1989).

Feminist theories are concerned with how gender impacts individuals' ability to control their own and others' resources, lives, and power (Gowaty, 1992a). Historically, much feminist empiricist writing has attempted to dispel gender stereotypes by emphasizing a lack of sex differences in behaviour (e.g., Bohan, 1993; Maccoby & Jacklin, 1974; see Eagly, 1995a, 1995b). Consequently, those with a stronger feminist attitude may be expected to self-present their beliefs despite the constraints and biases of social structure. We might expect female and male rank orderings of mate choice criteria to become more similar with increasing endorsement of gender equality. Here, we use a subset of questions from a scale of liberal feminist attitude, focusing on beliefs about equality and autonomy, to investigate variation in the rank ordering of mate preferences with attitudes towards gender equality. We predict that women with higher "feminist" attitude scores will value

resource acquisition potential less (Prediction 1) and physical attractiveness more (Prediction 2) in potential mates than will women with lower scores. Men's value of matepreference characteristics are not expected to vary with feminist attitude score, although it is possible that the importance that men place on physical attractiveness may decrease with increasing endorsement of gender equality as perceptions of women as objects of exchange weaken.

## 2. Methods

Participants were 218 female (mean age  $20.1\pm3.6$  years) and 74 male undergraduates (mean age  $19.99\pm1.68$  years) recruited from various degree programmes at universities in the Liverpool region. A two-page questionnaire was designed to assess feminist attitudes and an individual's preferences in a potential mate. Participants first answered questions on their age and sex. Mate preferences were gauged using respondents' rank ordering of preferences of the 13 criteria from Buss and Barnes (1986) giving a "1" for the *most desirable characteristic*, down to a "13" for the *least desirable*, with no ties. This procedure has been shown to be highly robust and consistent across cultures (Buss, 1989a; Schmitt, in press). In addition, a second column had participants rate themselves for the same 13 characteristics, with a score between 1 (*not at all applicable*) and 10 (*extremely applicable*). Participants were told that a score of 10 was indicative of being extremely attractive for the physical attractiveness were deemed most relevant to our analyses, as female perception of own financial prospects may influence ranking of earning potential in a mate, and female perception of own physical attractiveness may influence perceived market value.

Feminist attitudes were gauged using the Liberal Feminist Attitude and Ideology Scale (LFAIS) of Morgan (1996), which was designed to assess liberal feminism rather than Marxist or radical feminism (Jaggar, 1983) and, as such, reflects feminist thought predominating popular writings and beliefs in the general population (Morgan, 1996). A subset of 18 questions (Appendix) was selected (approximately 25% of the complete questionnaire) based upon their applicability to a UK sample and relevance to gender roles. Questions addressing detailed ideological issues, those that were culturally specific, and those relating to the sisterhood that displayed low reliability were excluded (Morgan, 1996). Hereafter, our scale of feminist attitude refers to beliefs about equality and autonomy. Responses were coded on a seven-point Likert-type scale ranging from 1=strongly agree to 7 = strongly disagree. Mean responses to this subset of questions did not differ from those for the entire LFAIS questionnaire for a sample of 22 females (Wilcoxon z = -0.933, n = 22, p > .30), regardless of whether the 18 questions were included or excluded in computing the mean feminism score for the entire questionnaire. The presentation order of mate-preference questions and our feminist attitude scale was counterbalanced to minimize potential order effects. Mate-preference characteristics were presented in alphabetic (n=168) and counteralphabetic orders (n=124) and were presented either before (n=71) or after (n=221) the LFAIS questions.

## 3. Results

The mean rankings of each mate-preference characteristic were highly correlated with those reported previously by Buss and Barnes (1986) for both females ( $r_s = .967$ , n = 13, p < .0001) and males ( $r_s = .911$ , n = 13, p < .0001), suggesting that the sample here is highly representative of those previously published. Furthermore, sex differences in mate preference were also consistent with those previously reported (Table 1). Females ranked "good earning capacity" as significantly more important than males did (Mann–Whitney test  $n_{\text{fem}}=218$ ,  $n_{\text{male}} = 73$ , z = -3.14, p < .002), while males ranked "physical attractiveness" significantly more important ( $n_{\text{fem}}=218$ ,  $n_{\text{male}}=73$ , z=-3.4, p<.001). Contrary to Buss and Barnes, however, females also ranked "kind and understanding" as more important than was ranked by males did ( $n_{\text{fem}}=218$ ,  $n_{\text{male}}=73$ , z=-4.95, p<.001). All other differences in rankings between male and female preferences were nonsignificant. Substantial variation exists within the mate preferences of both males and females, with the standard deviations of mean ranks ranging from 1.77 to 2.76 for females and from 2.05 to 2.72 for males for the 13 matepreference characteristics. Thus, the possibility exists that some of this variation may be explained in terms of the variation in feminist attitudes. The mean ( $\pm$ S.D.) feminist attitude scale score for females was 5.3 ( $\pm 0.5$ ) and for males was 4.6 ( $\pm 0.5$ ), indicating that females had stronger feminist attitudes.

Table 1

Mean ranks (S.D.) of mate preference characteristics in which the lower the mean rank, the more important the trait, for males and females, and Spearman's rank correlation coefficients between mate preference relative rankings and average score of the 18-item feminist attitude scale (LFAIS), in which the higher the rating, the greater the endorsement of feminist attitude

Characteristic	Females $(n = 218)$		Males $(n = 73)$	
	Mean rank (±S.D.)	rs	Mean rank (±S.D.)	rs
College Graduate	9.8±2.3	.09	9.9±2.3	20
Creative	$7.6 \pm 2.6$	20**	$7.2 \pm 2.4$	.01
Easygoing	$4.2 \pm 2.2$	.05	$4.1 \pm 2.5$	.15
Exciting Personality	$3.3 \pm 2.3$	.13	$3.5 \pm 2.4$	35**
Good Earning Potential	8.1±2.7	.16*	9.2±2.5	.02
Good Heredity	$10.4 \pm 2.1$	01	$10.0 \pm 2.5$	.10
Good Housekeeper	$10.1 \pm 1.8$	01	$9.7 \pm 2.3$	.07
Healthy	$5.7 \pm 2.4$	04	$5.8 \pm 2.1$	.04
Intelligent	$4.5 \pm 2.0$	.08	$4.1 \pm 2.3$	.12
Kind and Understanding	2.3±1.9	24**	3.5±2.3	.04
Physically Attractive	4.7±2.2	08	3.7±2.2	.02
Religious	$11.9 \pm 2.4$	.05	$11.6 \pm 2.7$	12
Wants Children	$8.4 \pm 28$	.03	$8.9 \pm 2.6$	04

A negative correlation indicates that the importance of this characteristic increases as feminist attitude increases. Characteristics in bold indicate a significant difference (p < .05) between male and female rankings. Asterisks indicate significant correlations.

\*\* <.01.

The relative ranks males assigned to the majority of the mate-preference criteria were unrelated to their feminist attitude scores, with only a single significant negative correlation between feminist attitude and "exciting personality" ( $r_s = -.35$ , n = 73, p < .01; Table 1). The stronger males' feminist attitude, the more value they placed on the trait "exciting personality" in a potential mate. Overall, men's feminist attitude was unrelated to their mate preferences, and we did not find that men's value of physical attractiveness decreased with stronger beliefs in gender equality ( $r_s = .02$ , n = 73, p = .9).

For females, the importance of "good earning potential" decreased with increasing feminist attitude ( $r_s$ =.16, n=218, p=.02), supporting Prediction 1. Furthermore, with increasing feminist attitude (higher ratings on the LFAIS items), what increases in importance are the traits "kind and understanding" ( $r_s$ =-.24, n=218, p<.001) and "creative" ( $r_s$ =-.20, n=218, p<.004), with a trend in the same direction but marginally significant for "exciting personality" ( $r_s$ =-.13, n=218, p<.055). We did not find any evidence to support Prediction 2, that females placed more male–like importance on the trait of "physical attractiveness," with increasing feminist attitude ( $r_s$ =.08, n=218, p>.05).

As participants were asked to rate themselves from 1 to 10 (where 10 = extremely*applicable*) on each of the 13 characteristics, we were able to examine females' professed perceptions of their own value. Women's self-ratings of own financial prospects ranged from 1 to 10, with a mean ( $\pm$ S.D.) of 7.5 ( $\pm$ 1.1), and ranged from 4 to 10 for physical attractiveness, with a mean ( $\pm$ S.D.) of 7.4 ( $\pm$ 1.9). There were no significant correlations between the scale of feminist attitude and females' self-ratings of financial prospects ( $r_s = .06$ , n=213, p=.4) or physical attractiveness ( $r_s=.1$ , n=214, p=.2), and hence, these scales appeared to be accessing different aspects of belief systems. However, self-ratings of financial prospects were related to self-ratings of attractiveness ( $r_s = .32$ , n = 213, p = .001). Moreover, the higher women rated their own financial prospects, the more importance they placed on physical attractiveness as a mate-preference criterion ( $r_s = -.17$ , n = 214, p = .02). There was no significant correlation between self-ratings of own financial prospects and earning potential in a mate  $(r_s = -.13, n = 214, p = .85)$ . Finally, the higher women's self-ratings of their own physical attractiveness, the more importance they placed on both earning potential  $(r_s = -.15, n = 214, p < .05)$  and physical attractiveness  $(r_s = -.25, n = 214, p < .01)$  as matepreference criteria.

#### 4. Discussion

Overall, we did not find that sex differences, in the mean ranks of importance assigned to traits, diminished with increasing endorsement of gender equality. Men's feminist attitude correlated only with the importance of "exciting personality" in a potential mate, whereas within women, increasing feminist attitude was correlated with decreasing importance of "good earning potential" and increasing importance of the traits "kind and understanding" and "creative" in a mate. Higher self-ratings of women's own earning capacity were associated with increased importance of attractiveness, and higher self-ratings of women's own attractiveness.

As far as we are aware, our study is the first to examine the relationship between feminist attitude and self-reported mate preferences. Despite the comparatively small sample in this study, the participants' mate preferences were consistent with those previously reported (Buss & Barnes, 1986), and previous robust findings concerning sex differences in mate preference (Buss, 1989a; Greenlees & McGrew, 1994; Kenrick & Keefe, 1992; Waynforth & Dunbar, 1995; Wiederman, 1993) were replicated. Thus, it is unlikely that the findings reported here are due to the local characteristics of our sample.

We did not expect men's feminist attitude to be related to the relative ranks of their mate preferences and found this to be the case for all but one trait, where a stronger endorsement of feminist attitude was associated with increasing importance of "exciting personality." In women, mate preferences do not appear to have evolved as fixed algorithms, as a stronger feminist attitude correlated with decreasing importance of "good earning potential" (Prediction 1) in a potential mate and increasing importance of the traits "kind and understanding" and "creative." Such personality features may be indicative of qualities relating to paternal childcare and/or may facilitate the stability of a long-term pair bond. We did not find support for Prediction 2, that women placed greater value on physical attractiveness in potential mates with increasing feminist attitude. With greater endorsement of values reflecting equality and autonomy, women's mate preferences do not appear to converge with those of men. Our findings agree to some extent with those of Johannesen-Schmidt and Eagly (2002), who found that with increasing approval of the traditional female role, women placed more importance on a mate's good earning potential. However, it is not clear from their findings whether women who scored low on the approval of female traditional role index still valued good earning potential more highly than men do.

We found no correlation between women's self-ratings of financial prospects and importance placed on earning potential. This would seem to conflict with previous findings of Townsend (1989) and Wiederman and Allgeier (1992), where female students expecting a substantial personal income after completion of their university education continued to place greater emphasis on their potential spouse's earning capacity relative to their classmates. However, the methodological differences between these studies and ours could account for these conflicting results. Contrary to a social role perspective (e.g., Eagly, 1987; Eagly & Wood, 1999; Mead, 1935, 1962), women's mate preferences did not become more similar to those of men when financial constraints are relaxed, as we did not find that higher self-ratings of financial prospects were related to decreasing importance of earning potential in a mate. In line with previous research (Bereczkei, Voros, Gal, & Laszlo, 1997; Pawlowski & Dunbar, 1999; Waynforth & Dunbar, 1995), women appeared to vary their demands according to perceptions of their own market value in terms of physical attractiveness.

Women who rated their own earning capacity as high attached greater importance to physical attractiveness in a potential mate. This may indicate that women who anticipate financial autonomy value a mate not for their financial wealth but for their "good genes" (Gangestad, 1993), or, it may simply be that financially independent women are choosier about a mate's attractiveness. The higher women rated their own attractiveness, the more importance they placed on earning potential and attractiveness in a potential mate. This

supports a marital assortment argument (e.g., Buston & Emlen, 2003), as women may display preferences for partners with similar attributes.

In conclusion, this research highlights the flexibility of women's mate preferences as conditional strategies and supports the view of evolved sex differences in mate preferences.

## Acknowledgments

We would like to thank Martin Daly, Margo Wilson, and three anonymous referees for their valuable comments on drafts of this manuscript.

## Appendix. Feminist Attitude and Ideology Questions

Our scale of feminist attitude refers to beliefs about equality and autonomy. The final questions selected from the LFAIS of Morgan (1996) are numbered as in the original questionnaire, with responses coded on a seven-point Likert-type scale ranging from 1=strongly agree to 7=strongly disagree, except for reverse-scored items denoted with an asterisk.

- (1)\* It is insulting to the husb and when his wife does not take his last name.
- (2)\* If the husb and is the sole wage earner in the family, the financial decisions should be his.
- (3) When they go out, a man and a woman should share dating expenses if they both have the same income.
- (4)\* As head of the household, the father should have final authority over his children.
- (5) Both husb and wife should be equally responsible for the care of your children.
- (6)\* The first duty of a woman with young children is to home and family.
- (7) A man who has chosen to stay at home and be a house-husb and is not less masculine than a man who is employed full time.
- (8) An employed woman can establish as warm and secure relationship with her children as a mother who is not employed.
- (9) A woman should not let bearing and rearing children st and in the way of a career if she wants it.
- (10)\* Women should be more concerned with clothing and appearance than men.
- (19) Men and women should be able to freely make choices about their lives without being restricted by gender.
- (26) Abortion is an issue of women's rights.
- (29) If men were the sex who got pregnant, more reliable and convenient birth control would be available.
- (33) It is reasonable to boycott a company's product if you think that their commercial are sexist.
- $(35)^*$  There is no such thing as rape between a man and his wife.

- (45)\* People who complain that pornography treats women like objects are overreacting.
- (46) Men still don't take women's ideas seriously.
- (50) All men receive economic, sexual, and psychological benefits from male domination.

### References

- Bereczkei, T., Voros, S., Gal, A., & Laszlo, B. (1997). Resources, attractiveness, family commitment; reproductive decision in human mate choice. *Ethology*, 103, 681–699.
- Bohan, J. S. (1993). Regarding gender: essentialism, constructionism and feminist psychology. Psychology of Women Quarterly, 17, 5–21.
- Buss, D. (1989a). Sex differences in human mate preference: evolutionary hypotheses tested in 37 cultures. *Behavioral and Brain Sciences*, 12, 1–14.
- Buss, D. (1989b). Toward an evolutionary psychology of human mating. *Behavioral and Brain Sciences*, 12, 39–46.
- Buss, D. M., & Barnes, M. (1986). Preferences in human mate selection. Journal of Personality and Social Psychology, 50, 559–570.
- Buston, P. M., & Emlen, S. T. (2003). Cognitive processes underlying human mate choice: the relationship between self-perception and mate preference in Western society. *Proceedings of the National Academy of Sciences*, 100, 8805–8810.
- Eagly, A. H. (1987). Sex differences in social behavior: a social role interpretation. Hillsdale, NJ: Lawrence Erlbaum Associates.
- Eagly, A. H. (1995a). The science and politics of comparing men and women. *American Psychologist*, 50, 145–158.
- Eagly, A. H. (1995b). Reflections on the commenter's views. American Psychologist, 50, 169-171.
- Eagly, A. H., & Wood, W. (1999). The origins of sex differences in human behavior. *American Psychologist*, 54, 408–423.
- Gangestad, S. W. (1993). Sexual selection and physical attractiveness: implications for mating dynamics. *Human Nature*, 4, 205–235.
- Gangestad, S. W., & Simpson, J. A. (2000). The evolution of human mating: trade-offs and strategic pluralism. Behavioural and Brain Sciences, 23, 573–644.
- Glenn, N. D. (1989). Inter-societal variation in the mate preferences of males and females. *Behavioral and Brain Sciences*, 12, 21–23.
- Gowaty, P. (1992a). Evolutionary biology and feminism. Human Nature, 3, 217-249.
- Gowaty, P. (1992b). What if within-sex variation is greater than between-sex variation? *Behavioral and Brain Sciences*, *15*, 389–390.
- Greenlees, I. A., & McGrew, W. C. (1994). Sex and age differences in preferences and tactics of mate attraction: analysis in published advertisements. *Ethology and Sociobiology*, 15, 59–72.
- Jaggar, A. M. (1983). Feminist politics and human nature. Totowa, NJ: Rowman and Allanheld Press.
- Johannesen-Schmidt, M. C., & Eagly, A. H. (2002). Another look at sex differences in preferred mate characteristics: the effects of endorsing the traditional female gender role. *Psychology of Women Quarterly*, 26, 322–328.
- Kenrick, D. T., & Keefe, R. C. (1992). Age preferences in mates reflects sex differences in human reproductive strategies. *Behavioral and Brain Sciences*, 15, 75–133.
- Maccoby, E. E., & Jacklin, C. N. (1974). The psychology of sex differences. Palo Alto, CA: Stanford U. P.
- Mead, M. (1935). Sex and temperament in three primitive societies. New York: Morrow.
- Mead, M. (1962). Male and female: a study of the sexes in a changing world. Middlesex: Penguin.

#### 334

- Morgan, B. L. (1996). Putting the feminism into feminism scales: introduction of a Liberal Feminist Attitude and Ideology Scale (LFAIS). Sex Roles, 34, 359–390.
- Pawlowski, B., & Dunbar, R. I. M. (1999). Impact of market value on human mate choice decisions. Proceedings of the Royal Society of London, Series B, 266, 281–285.
- Pawlowski, B., & Dunbar, R. I. M. (2001). Human mate choice decisions. In: R. Noe, P. Hammerstein, & J. A. R. A. M. van Hooff (Eds.), *Economic models of human and animal behaviour* (pp. 187–202). Cambridge: Cambridge University Press.
- Pérusse, D. (1994). Mate choice in modern societies: testing evolutionary hypotheses with behavioural data. *Human Nature*, 5, 255–278.
- Schmitt, D. P. (in press). Sociosexuality from Argentina to Zimbabwe: a 48-nation study of sex, culture, and strategies of human mating. *Behavioral and Brain Sciences*.
- Townsend, J. M. (1989). Mate selection criteria: a pilot study. Ethology and Sociobiology, 10, 241-253.
- Waynforth, D. (2001). Mate choice trade-offs and women's preference for physically attractive men. *Human Nature*, 12, 207–219.
- Waynforth, D., & Dunbar, R. I. M. (1995). Conditional mate choice strategies in humans: evidence from lonely hearts advertisements. *Behaviour*, 132, 75–779.
- Wiederman, M. W. (1993). Evolved gender differences in mate preferences: evidence from personal advertisements. *Ethology and Sociobiology*, 14, 331–352.
- Wiederman, M. W., & Allgeier, E. R. (1992). Gender differences in mate selection criteria: sociobiological or soicoeconomic explanation? *Ethology and Sociobiology*, 13, 115–124.
- Wood, W., & Eagly, A. H. (2000). Once again, the origins of sex differences. *American Psychologist*, 55, 1062–1063.