

### Original Article

## Socioeconomic Development and Shifts in Mate Preferences

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**Abstract:** Mate preferences shift according to contexts such as temporal duration of mateship sought and ecological prevalence of parasites. One important cross-cultural context that has not been explored is a country's socioeconomic development. Because individuals in less developed countries are generally less healthy and possess fewer resources than those in more developed countries, displays of health and resources in a prospective long-term partner were hypothesized to be valued more in populations in which they are rare than in populations in which they are more common. We also predicted negative correlations between development and preferences for similar religious background and a desire for children. We found strong support for the health hypothesis and modest support for the resource acquisition potential hypothesis. We also found an unpredicted positive correlation between development and importance ratings for love. Discussion addresses limitations of the current research and highlights directions for future cross-cultural research on mating psychology.

**Keywords:** mate preference shifts, cross-cultural, socioeconomic development, evolutionary psychology.

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### Introduction

Mate preferences are context sensitive, and this context-sensitivity is expected from an evolutionary psychological perspective (Buss, 2004, for a review). Preferences have been found to shift as a function of parasite prevalence in the ecology, operational sex ratio, and other culturally variable factors (Gangestad and Buss, 1993; Stone, Shackelford, and

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Buss, 2007). Previous research on the context sensitivity of mate preferences indicates that men and women also place differential importance on certain characteristics in a mate depending on the temporal context of the desired relationship (Buss and Schmitt, 1993; Kenrick, Groth, Trost, and Sadalla, 1993; Schmitt and Buss, 1996).

Although sex differences in importance of mate preference characteristics are frequently predicted and discovered empirically, the effects of culture on mate preferences are potentially generally greater than those of biological sex (Buss et al., 1990; Gangestad, Haselton, and Buss, 2006). One variable that may serve as a baseline in comparing different cultures is a country's level of socioeconomic development. Socioeconomic development is a variable that cuts across different modes of production, types of government, and geographic regions to present a broad picture of problems people confront in daily life across cultures that would otherwise be incomparable. Men and women evaluating potential partners in different cultures face different problems associated with socioeconomic development. We therefore expect that men and women may place differential importance on characteristics in a long-term mate that solve the different problems encountered by individuals in each context.

#### *Contextual Problem of Finding a Healthy Partner*

In general, individuals in more socioeconomically developed countries are healthier (Marmot, 2005). Therefore, encountering a healthy potential partner is less likely in less developed countries. We hypothesize that men and women in less developed countries will rate a potential partner's health as more important than those in more developed countries. Additional characteristics indicative of good health are predicted to be more important to both sexes in less developed countries than in more developed countries, including preferences for refinement/neatness and chastity. Men and women who are more refined and neat—conceptualized as clean—are more likely to be healthy, relative to individuals who are less refined and neat. Although the sterile environments of some very developed nations may yield weakened immune responses, cleanliness (and refinement and neatness) is far more likely to be related to healthful outcomes than filthiness across a wide range of cultures. Also, men and women who are chaste, or who have had no previous sex partners, are much less likely to carry a sexually transmitted disease. In addition, because women are traditionally associated with the performance of domestic labors, including a characteristic related to eating and living healthfully—cooking and housekeeping—we predict that only men will increase importance ratings for a partner who is a good cook and housekeeper in less developed countries. The sexual division of labor is a feature found universally in human societies (Brown, 1991), and we mean only to note that these are tasks traditionally (and throughout cultures universally) adopted by women, and they should be especially important to men in less developed societies where women are indeed less likely to be in the workforce (South, 1988).

*Hypothesis 1:* The importance that men and women place on characteristics indicative of good health will be negatively correlated with socioeconomic development.

*Prediction 1:* The importance that men place on a potential partner's health, refinement/neatness, chastity, and being a good cook and housekeeper will be negatively correlated with socioeconomic development.

*Prediction 2:* The importance that women place on a potential partner's health, refinement/neatness, and chastity, will be negatively correlated with socioeconomic

development.

*Contextual Problem of Finding a Partner with Ample Resources*

Individuals in less socioeconomically developed countries are less likely to have access to resources, and so may place particular importance on associated characteristics in a mate. These characteristics may include good financial prospects, status, ambition and industriousness, and education and intelligence.

*Hypothesis 2:* The importance that men and women place on characteristics related to wealth, including good financial prospects, status, ambition and industriousness, and education and intelligence, will be negatively correlated with socioeconomic development.

*Contextual Problem of Finding a Partner Desirous of Children*

Men and women in less developed countries have more children than do men and women in more developed countries (Aarssen, 2005). This may be because children in less developed countries are an economic asset to the extent they are able to help the household with farming or herding, relative to more developed countries in which children may be a net financial drain. Indeed, parents appear to explicitly perceive the value of children as a greater net benefit (psychologically as well as economically) in less socioeconomically developed countries (Kağitçibaşı, 1982). In addition, life history theorists studying the demographic transition find that the cost of raising successful, competitive children negatively affects the optimal family size and positively affects amount of resources allocated per child (Mace, 2000). Thus, men and women have more children in less developed countries, and may do so because they perceive children to be a greater net economic and psychological benefit to the household. In the current research, we investigate whether a greater valuation of children, as reported in Kağitçibaşı, extends to characteristics important in a mate among individuals in less developed countries. And to the extent that children are a net benefit at the household level, individuals in less developed countries are predicted to place greater importance on a potential partner's desire for home and children than men and women in more developed countries.

*Hypothesis 3:* The importance that men and women place on a potential partner's desire for home and children will be negatively correlated with socioeconomic development.

*Contextual Problem of Finding a Partner with a Similar Religious Background*

Khallad (2005) suggests that religion may be particularly important in the day-to-day life of people in less developed countries, and some evolutionary psychological accounts of religion stress that it may function, in part, to allay people's anxieties about death (Atran, 2002; Atran and Norenzayan, 2004). To the extent that individuals living in a less socioeconomically developed country experience higher infant mortality, lower life expectancy, and are less healthy (Marmot, 2005), people are predicted to place greater importance on religion—and religious similarity in a potential mate—in less developed countries if indeed religion serves, in part, to allay anxieties about death. We therefore hypothesize that men and women in less developed countries will place more importance on finding a partner who shares their religious background.

*Hypothesis 4:* The importance that men and women place on a potential partner having a similar religious background will be negatively correlated with socioeconomic development.

We used a descriptive measure of differences between countries—socioeconomic development—to test hypotheses and derivative predictions of variance in importance ratings of 18 characteristics in a prospective long-term mate. Although this mate preference database has been analyzed to produce several articles (e.g., Buss, 1989; Buss et al., 1990), the current article presents the results of new analyses designed to test different hypotheses and predictions.

## **Materials and Methods**

### *Participants*

Participants were 4,499 men and 5,310 women residing in 36 cultures located on six continents and five islands. Men ranged in age from 17 to 30 years, with a mean age of 23.3 years. Women ranged in age from 17 to 30 years with a mean age of 22.6 years (see Buss, 1989, for additional details).

### *Materials and Procedure*

The survey used to assess mate preferences was adapted from Hill (1945). In this survey, participants rate the importance of 18 mate preference characteristics (see Table 1) on the following 4-point scale: *3 points = indispensable*, *2 = important*, *1 = desirable, but not very important*, and *0 = irrelevant or unimportant*. Instructions were provided to each collaborator for translating the instrument into the appropriate language for their sample (see Buss, 1989, for additional details).

We calculated an index of socioeconomic development according to the method prescribed in South (1988), as he used four common development indicators and found this measure to strongly mediate women's marital opportunities. We summed standardized scores for the country's Gross National Product (GNP), infant survival rate, life expectancy, and the percentage of the population that is urban, and achieved an acceptable alpha ( $\alpha = 0.82$ ). Because the mate preference data were collected in the mid-1980s, we collected socioeconomic development data for a comparable year (i.e., 1985). GNP data were obtained from the United States Bureau of the Census (2002) for the year 1990, and remaining demographic data were obtained from the United Nations (2004) for the year 1985. Stone et al. (2007) present each country's calculated Development Index. Additionally, because Stone et al. found mate preference shifts according to a country's sex ratio, we controlled for sex ratio in partial-order correlations (see Table 1).

## **Results**

Table 1 presents the zero-order correlations and partial correlations between all of the 18 preference characteristics, including those unrelated to the hypotheses, and the Development Index. Predictions 1 and 2 of Hypothesis 1 were supported. Importance ratings of health ( $p < .01$  for men,  $p < .05$  for women) and health-related characteristics, including refinement/neatness ( $ps < .01$ ), chastity ( $ps < .01$ ), and good cook and housekeeper (for men,  $p < .001$ ), correlated significantly and negatively with Developmental Index (see Table 1).

**Table 1.** Correlations between development index and 18 mate preference characteristics

<u>Mate preference</u>	<u>Zero-order correlations</u>		<u>Partial correlations</u>	
	<u>Men</u>	<u>Women</u>	<u>Men</u>	<u>Women</u>
Good cook and housekeeper	-.54***	-.15	-.53***	-.16
Pleasing disposition	.12	.12	.14	.14
Sociability	-.07	-.03	-.03	-.04
Similar educational background	-.16	-.30	-.15	-.29
Refinement, neatness	-.50**	-.51**	-.48**	-.50**
Good financial prospect	-.27	-.32	-.27	-.32
Chastity	-.51**	-.43**	-.53***	-.50**
Dependable character	.07	.14	.05	.13
Emotional stability and maturity	-.07	-.11	-.02	-.08
Desire for home and children	-.40*	-.36*	-.38*	-.36*
Favorable social status or rating	-.50**	-.51***	-.49**	-.52***
Good looks	-.09	-.25	-.12	-.28
Similar religious background	-.37*	-.45**	-.36*	-.44**
Ambition and industriousness	-.40*	-.29	-.38*	-.28
Similar political background	-.17	.08	-.15	.07
Mutual attraction—love	.62***	.48**	.62***	.46**
Good health	-.42**	-.39*	-.41*	-.40*
Education and intelligence	-.39*	-.37*	-.31	-.38*

*Note.* Partial correlations control for the country’s sex ratio (see Stone, Shackelford, and Buss, 2007, for list of development indices and sex ratios).

\*  $p < .05$ , \*\*  $p < .01$ , \*\*\*  $p < .001$

Hypothesis 2 was partially supported: importance ratings for status significantly and negatively correlated with Development Index for both sexes ( $p < .01$  for men,  $p < .001$  for women), as did the characteristic education and intelligence for both sexes ( $ps < .05$ ). As hypothesized, ambition and industriousness was significantly negatively correlated with Development Index for men ( $p < .05$ ), but not for women (although the correlation was marginally significant,  $p < .10$ ). Finally, importance ratings for good financial prospects were not significantly negatively correlated with Development Index ( $ps > .05$ ), although these relationships were in the predicted direction for both men and women, and for women this relationship was marginally significant ( $p < .10$ ; see Table 1).

Men’s and women’s importance ratings for desire for home and children correlated significantly and negatively with Development Index ( $ps < .05$ ), providing support for Hypothesis 3 (see Table 1). Hypothesis 4 also was supported: across cultures, importance

ratings for similar religious background correlated significantly and negatively with Development Index for both men ( $p < .05$ ) and women ( $p < .01$ ; see Table 1).

An additional unpredicted significant correlation emerged: men's and women's importance ratings for the characteristic "mutual attraction—love" correlated significantly and positively with Development Index ( $p < .001$  for men,  $p < .01$  for women; see Table 1). Controlling for sex ratio did not result in partial correlations that differed significantly from the corresponding zero-order correlations (see Table 1; by Fisher's  $r$ -to- $z$  transformation; all  $z$ s  $< 1.50$ , all  $p$ s  $> .10$ ; analyses available on request).

## **Discussion**

Consistent with Hypothesis 1, men and women in less developed countries placed greater importance on health and health-related characteristics in a potential long-term mate. This corroborates the results of previous research indicating a positive relationship between the prevalence of parasites and the importance that men and women place on attractiveness in a potential partner (Gangestad and Buss, 1993). Gangestad and Buss found that wealth may have confounded their results, and additionally, a country's level of socioeconomic development is a conceptually distinct context from parasite prevalence. Accordingly, the current investigation of the relationships between importance ratings and socioeconomic development yielded non-significant results for the characteristic of good looks. Men's and women's relatively stable preference for attractiveness indicates that, although health (and healthy behaviors) in a prospective long-term mate is variably important, the value attached to attractiveness does not shift across this context.

The results partially supported Hypothesis 2: although men's and women's preferences for a mate with good financial prospects did not change, men and women in less developed countries rated a potential partner's status and education and intelligence as more important, relative to ratings provided by individuals in more developed countries. The failure to find support for a shift in preferences for good financial prospects might be attributable, in part, to the fact that men and women in less developed countries are less wealthy, and thus are not able to secure mates who do have good financial prospects. They might instead place increased importance on related characteristics that *are* attainable in potential partners in less developed countries, such as status and education and intelligence, a speculation corroborated by the current results. In addition, in less developed countries financial prospects may be less important indicators of resources than the possession of cows, sheep, and goats, for example, which those in high status may possess. It is worth noting, however, that the correlation between good financial prospects and Development Index is in the predicted direction, and is marginally significant for women. Finally, there were sex-differentiated shifts in preferences for the characteristic ambition and industriousness—men in less developed countries placed relatively more importance on this characteristic. This may be somewhat unsurprising, given that in less developed countries, men need women to work hard and to be industrious in gathering, housework, hauling firewood and water, and other important domestic tasks.

The results supported Hypothesis 3: men and women in less developed countries placed greater importance on a potential partner's desire for home and children than did men and women in more developed countries. These results corroborate the results of previous research indicating that individuals living in less developed countries perceive a

greater benefit from having more children, as they also place more importance on this mate preference characteristic. These results also suggest that there is a psychological foundation for cross-cultural variation in family size—manifested in mate preferences—that eschews explanations concerning a relative lack of contraception in less developed countries.

The results also supported Hypothesis 4, in that men and women in less developed countries placed greater importance on a potential partner's similar religious background, than did men and women in more developed countries. These results are consistent with Khallad's (2005) contention that people in less developed countries place greater importance on religion than do people in more developed countries. These results also are broadly consistent with evolutionary psychological arguments that highlight the role of religion in reducing existential anxieties (Atran, 2002; Atran and Norenzayan, 2004). These results appear not to be consistent with predictions derived from hypotheses that religious beliefs are a by-product of other psychological mechanisms that serve no substantive role in alleviating anxiety (Boyer, 2003).

One unpredicted result emerged: men and women in more developed countries placed greater importance on "mutual attraction/love" than did individuals in less developed countries. This cross-cultural shift in importance of mutual attraction/love might reflect cultural differences in the *functions* of long-term mating relationships (Smits, Ultee, and Lammers, 1998). Men and women in less developed countries may perceive long-term relationships as an economic transaction. In some less developed cultures, for example, marriages involve a trade between families of cows, sheep, or goats for a valuable mate (Borgerhoff Mulder, 1988), or the formation of an economic alliance between two extended families (Hart and Pilling, 1960). In some cultures, such as traditional India, married couples do not spend much time together, preferring to socialize primarily with members of their own sex (Buss, 2003). Individuals in more developed countries often have more latitude for individual choice, and perceive the functions of long-term mateships to include mutual socializing, companionship, and close emotional commitment (Buss, 2003; Fisher, 2004). The somewhat different functions of long-term mateships in developed versus less developed cultures may be responsible for the differential emphasis placed on mutual attraction/love—a hypothesis that awaits additional empirical testing. Future research might investigate directly cross-cultural differences in perceptions of the functions and benefits of long-term mateships.

Alternatively, the reported shifts in preferences may not reflect true differences in mate preference characteristics, but rather a limitation of the study design. Li, Bailey, Kenrick, and Linsenmeier (2002) proposed a model of mate preferences that includes a trade-off between necessities and luxuries. This trade-offs model suggests that real individuals do not possess equal amounts of the characteristics measured in mate preference studies, but that these characteristics are unevenly distributed. In the real world, men and women must choose certain characteristics over others. Accordingly, men and women in more developed countries may not find characteristics related to a potential partner's health and wealth to be any less important than do individuals in less developed countries. Rather, men and women might universally consider characteristics of health and wealth to be necessities, but because men and women in developed countries may take these characteristics for granted relative to individuals in less developed countries, they rated them as less important in the current study. Future research investigating cross-cultural mate preference shifts might profitably assess differences in the necessities and

luxuries of mate preferences.

Additionally, we note that, except for the one predicted sex difference in preferences for healthiness operationalized in preferences for a good cook and housekeeper, we identified few sex-differentiated mate preference shifts associated with socioeconomic development. The lack of sex-differentiated shifts according to the context of socioeconomic development does not contradict previous research documenting sex differences in mate preference characteristics (e.g., for characteristics indicating access to resources or social status; Buss, 1989). Indeed, there is no theoretical reason for other sex differences to shift according to socioeconomic development—for example, women place relatively more importance than men on indicators of potential resources across this context, although both sexes place more importance on this characteristic in less developed countries than do individuals in more developed countries.

Finally, because the nature of this study is correlational, a causal relationship between these variables cannot be inferred. Future research might investigate other variables that may be related to cross-cultural shifts in mate preferences, such as differences in women's economic power, or a country's type of government (see Gangestad, Haselton, and Buss, 2006).

In summary, the results of the current study provide initial support for cross-cultural mate preference shifts according to differences in socioeconomic development. These shifts predictably occur in domains related to health, wealth, traditional values related to religion and the desire for children, as well as love. These findings contribute to a growing body of evidence that links important ecological, temporal, and cultural contexts with shifts in mate preferences.

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