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Is Traditional Gender Ideology Associated with Sex-Typed Mate Preferences? A Test in Nine Nations

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Abstract Social role theory (Eagly, Wood, & Diekman, 2000) predicts that traditional gender ideology is associated with preferences for qualities in a mate that reflect a conventional homemaker-provider division of labor. This study assessed traditional gender ideology using Glick and Fiske's (1996, 1999) indexes of ambivalent attitudes toward women and men and related these attitudes to the sex-typed mate preferences of men for younger mates with homemaker skills and of women for older mates with breadwinning potential. Results from a nine-nation sample revealed that, to the extent that participants had a traditional gender ideology, they exhibited greater sex-typing of mate preferences. These relations were generally stable across the nine nations.

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It is well established that men and women differ in the importance they place on certain qualities in a mate (e.g., Buss, 1989). The preferences that we focus on in this article are that women, more than men, prefer older mates with resources and that men, more than women, prefer younger mates with good domestic skills (e.g., Eagly & Wood, 1999). Yet, these mean differences between the sexes are accompanied by substantial individual variability, and it is therefore not difficult to identify people who do not hold these conventional preferences. These individual differences within each sex invite explanation.[1] Our project was designed to examine whether individual differences in the qualities that people desire for their life partners are sculpted by the extent to which their ideology about male–female relations is traditional or nontraditional. Ideology consists of a cluster of attitudes and beliefs that are organized around a dominant cultural theme (Eagly & Chaiken, 1993) — in this case, the theme of traditional versus modern role relationships between the sexes. The attitudes that represent gender ideology in the present study are the positive and negative aspects of traditional attitudes toward women and men (Glick & Fiske, 2001).

The hypothesis that we tested is that traditional gender ideology fosters conventional sex differences in mate preferences, whereas nontraditional ideology reduces these differences. We also investigated whether associations between traditional gender ideology and sex-typed mate preferences are found in a range of nations that differ considerably in gender equality.

Social Role Theory of Cross-National and Individual Differences in Mate Preferences

Traditional gender ideology includes a preference for the conventional division of labor between male providers and female homemakers and for the associated patriarchal system that cedes more power and status to the male provider (Glick & Fiske, 2001). Understanding gender ideology in terms of preference for traditional social roles is compatible with the social role theory contention that the placement of men and women in different roles underlies many of the sex differences in preferences for long-term partners. Social role theorists thus argue that marital, familial, and occupa-

tional roles influence mate preferences through the formation of gender roles, by which people are expected to possess the characteristics that equip them for activities typical of their sex. For example, to facilitate child-rearing and other domestic responsibilities typical of women, they are expected to be nurturing, kind, and skilled at home-making activities. Gender roles, along with marital roles and other specific roles (e.g., occupational), then guide preferences for types of mates and relationships. These mate preferences reflect the efforts of women and men to maximize their outcomes, within the social structural context in which they are situated in society. Roles in turn affect behavior through various developmental and social-ization processes as well as through psychological and biological processes involved in social interaction and self-regulation (see Eagly, 1987; Eagly et al., 2000; Eagly, Wood, & Johannesen-Schmidt, 2004).

According to this social role logic, within the conventional family system based on a male provider and a female homemaker, women can maximize their outcomes by seeking a mate who is likely to be successful in the wage-earning role — in short, a good provider. In turn, men can maximize their outcomes by seeking a mate who is likely to be successful in the domestic role — in short, a good homemaker and child caretaker who will allow men to devote their attention to work outside the home.

It follows also from this social role logic that this traditional provider and homemaker division of labor underlies sex differences in spouses' preferred age. The older man and younger woman combination facilitates men's occupancy of the more powerful position, which is normative for the traditional form of marriage. Also, be-cause younger women tend to lack independent resources, they may be more willing to make a substantial commit-ment to the domestic role than they would be if they pos-sessed their own resources. Moreover, older men are more likely to have acquired sufficient resources to be good can-didates for the provider role. Older men and younger women thus fit the cultural template of male provider and female homemaker.

These principles have implications for variability in mate preferences across nations and across individuals. In nations in which the traditional division of labor is more extreme, men should show stronger preferences for younger wives with good domestic potential, whereas women should show stronger preferences for older husbands with good provider potential (Eagly & Wood, 1999). Within nations, individuals who subscribe to more traditional gender ideology should more strongly manifest these conventional mate preferences than those who do not.

Cross-national comparisons have supported the theory that the distribution of men and women into differing social roles is at the heart of sex differences in mate preferences.

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[1] In this article, the term *the sexes* denotes the grouping of people into female and male categories. The terms *sex differences and similarities* are applied to describe the results of comparing these two groups. The term *gender* refers to the meanings that societies and individuals ascribe to female and male categories. We do not intend to use these terms to give priority to any class of causes that may underlie sex and gender effects.

Based on United Nations indicators of gender equality (United Nations Development Programme, 2001), lesser gender equality was associated with larger sex differences in the conventionally sex-typed preferences for future mates' age and their earning capacity and domestic skills (Eagly & Wood, 1999). A conceptually related study demonstrated that women were more likely to prefer a mate with good provider qualities in nations in which women possessed fewer reproductive freedoms and educational opportunities (Kasser & Sharma, 1999).

Individual Differences in Mate Preferences

The relation of gender ideology to individual differences in mate preferences extends prior cross-national findings that correlated societal indicators of gender inequality with nation-level mate preferences. Although measures of societal gender equality assess important differences in women's opportunities to enact nontraditional roles, mate preferences are also a matter of individual choice. Those choices are, in turn, likely to be influenced by individuals' gender ideology. For instance, in a British sample, Koyama, McGain, and Hill (2004) found that rejection of feminist beliefs (as indexed by Morgan's, 1996, scale) was associated with traditional sex differences in mate preferences. Similarly, Johannesen-Schmidt and Eagly (2002) found that U.S. university students who endorsed traditional aspects of women's gender role had more traditionally sex-typed mate preferences.

A measure of gender ideology would be especially appropriate for predicting mate preferences cross-culturally if it were general enough to encompass traditional versus nontraditional attitudes toward both women and men. Glick and Fiske have introduced two instruments that together provide such a comprehensive approach: The Ambivalent Sexism Inventory (ASI; Glick & Fiske, 1996), which focuses on ideology about women, and the Ambivalence toward Men Inventory (AMI; Glick & Fiske, 1999), which focuses on ideology about men. We chose these measures for this research project.

The ASI assesses (a) *hostile sexism*, defined as negative attitudes toward nontraditional women and assessed by items such as "Women exaggerate problems they have at work"; and (b) *benevolent sexism*, defined as positive attitudes toward traditional women and assessed by items such as "Women, compared to men, tend to have a superior moral sensibility." Each set of items thus consists of evaluative belief statements that constitute a Likert attitude scale (Himmelfarb, 1993). The ASI contrasts with prior measures of traditional gender ideology in that it recognizes subjectively benevolent (as well as hostile) attitudes toward women. Glick and Fiske (2001) argued that, although hostile and benevolent sexism differ in subjective valence,

they represent psychologically consistent attitudes that jointly function to justify and reinforce traditional gender roles. Benevolent sexism idealizes and rewards women who remain in their conventional domestic role, whereas hostile sexism demeans and punishes women who take on roles traditionally held by men and compete directly with men (Glick, Diebold, Bailey-Werner, & Zhu, 1997). Thus, these attitudes can be seen as ideological justifications of traditional gender roles. Cross-national comparisons have revealed that these attitudes are positively correlated with each other and that both are negatively correlated with national indicators of gender equality (Glick et al., 2000, 2004).

Traditional ambivalent attitudes toward women represent only one-half of traditional gender ideology. Because conventional role relationships consist of the complementary roles of female homemaker and male provider, traditional attitudes toward men are as essential to conventional thinking about the sexes as are traditional attitudes toward women. Therefore, Glick and Fiske (1999) also developed measures of gender ideology that pertain to men. This effort yielded the Ambivalence toward Men Inventory (AMI), which has two subscales: (a) *hostility toward men*, defined as negative attitudes toward traditional men and assessed by items such as "Most men sexually harass women, even if only in subtle ways, once they are in a position of power over them"; and (b) *benevolence toward men*, defined as positive attitudes toward traditional men and assessed by items such as "Men are more willing to put themselves in danger to protect others."

In cross-national comparisons, hostility and benevolence toward men have been positively correlated with each other and with both of the ASI scales; they also (like the ASI scales) have correlated negatively with United Nations indicators of gender equality (Glick et al., 2004). These findings suggest that both AMI scales assess traditional gender ideology. Although hostility toward men expresses resentment of men's power, it assumes that male dominance (and, therefore, men's continued monopolization of powerful social roles) is both natural and inevitable. Benevolence toward men, like benevolent sexism, directly justifies the traditional division of labor in heterosexual marriage, in which men act as protectors and providers and women act as caretakers. The AMI thus complements the female-focused ASI. Together, these two measures, each with its negative and positive subscales, provide a comprehensive representation of gender ideology. Although the items from these scales do not address mate choice and only minimally pertain to close relationships, we nevertheless expected that, consistent with social role theory, all of these measures would relate positively to traditionally sex-typed mate preferences.

To make a convincing general case that gender ideology shapes mate preferences, this relation between ideology and

preferences should be investigated across a range of nations. In cultures more traditional than those of the United States (Johannesen-Schmidt & Eagly, 2002) and Great Britain (Koyama et al., 2004), the greater power that families often have over partner selection may reduce the influence of individual ideology on preferences. Also, it is conceivable that, because individual differences in gender ideology are minimal in cultures marked by very traditional gender ideology, associations between gender ideology and partner preferences are suppressed. Therefore, the question that we pursued in the present research is whether the prediction of mate preferences from gender ideology extends to a wide range of nations, including nations more traditional than the United States and Great Britain (see cross-national data in Glick et al., 2000, 2004).

Hypotheses

The present study presents data on mate preferences in nine diverse nations: Germany, Italy, Mexico, Singapore, Spain, Syria, Taiwan, Turkey, and the United States. Sex differences were expected to take the form of (a) men desiring a mate younger than themselves, (b) women desiring a mate older than themselves, (c) women placing more importance than men on a mate with good financial prospects, (d) men placing more importance than women on a mate who is a good cook and housekeeper. Across nations, these sex differences were expected to be larger to the extent that the status of women is lower (Eagly & Wood, 1999).

Across all nine nations, we predicted that traditional gender ideology (as assessed by the AMI and the ASI) would be associated with traditional sex-typed preferences for a younger or older partner and for homemaker or provider qualities. This hypothesis was tested by examining, within each sex, the correlations between each index of traditional gender ideology and mate preferences. For each sex, traditional gender ideology was expected to have an especially strong positive relation to the mate qualities favored by that sex—that is, to good financial prospects among female participants and to good housekeeper and cook among male participants.

These relations between gender ideology and partner preferences may be positive, but weaker, in the other sex—that is, traditional ideology may relate positively to men's preference for a female mate with good financial prospects and women's preferences for a male mate who is a good housekeeper and cook. These relations may be present because more traditional participants may have idealized expectations for their mate and thus express desires for a wide range of mate qualities, albeit showing especially strong preferences for conventional qualities. Alternatively, people with traditional gender ideology may be more likely

to choose partners based on a "wish-list" of relatively objective characteristics rather than concerns about personality compatibility and the feeling that they are "in love." Consistent with this reasoning, Simpson, Campbell, and Berscheid (1986) argued that the increase over time in women's reluctance to marry someone with whom they were not "in love" reflected increased gender equality, which allows mate selection to be based on love rather than on pragmatic considerations. In any case, because there is little reason for traditional men to value poor financial prospects in a spouse or for traditional women to value poor domestic skills, social role theory does not predict that associations for provider and homemaker qualities would have opposite signs for male and female participants. The critical prediction is that the associations of traditional gender ideology with domestic skills and financial resources would be moderated by participant sex. Specifically, endorsement of traditional gender ideology ought to be more strongly predictive of men's (as compared to women's) preference for mates who are good homemakers and of women's (as compared to men's) preference for mates who are good providers.

In contrast to this possibility that respondent sex moderates the strength but not the direction of relationship between traditional ideology and preference for provider or homemaker qualities, we expected that for the preferred age of one's spouse, traditional gender ideology has an opposite impact on men and women. In other words, given that the older man and younger woman combination is associated with the conventional division of labor, traditional gender ideology should be associated with the preference for an older mate among women but a younger mate among men.

Materials and Methods

Participants and Procedure

The 1,606 male and 2,076 female participants were from nine nations: Germany, Italy, Mexico, Singapore, Spain, Syria, Taiwan, Turkey, and the United States. An analysis of the U.S. ASI and mate preference data appeared in Johannesen-Schmidt and Eagly (2002). An analysis of the ASI and AMI data, but not the mate preference data, for all but U.S. sample appeared in Glick et al. (2004).

The samples consisted of university students who participated to fulfill course requirements or earn extra credit, with two exceptions. In Spain, the participants were a representative sample of adults from Galicia (a northwestern province) who were selected by a random-digit dialing telephone survey; 305 of the 309 Spanish participants were over the age of 25. In Taiwan, about one-half of the

participants were university students; the other one-half were adults who were taking continuing education classes or who were recruited through snowball sampling at their places of employment; 170 of the 323 Taiwanese participants were over the age of 25. Across all nine nations, 80% of the participants were between 18 and 25 years old.

Measuring Instruments

Ambivalent gender ideology. The ASI (Glick & Fiske, 1996) and AMI (Glick & Fiske, 1999) were labeled as a survey about "relationships between men and women." Participants used a 6-point rating scale anchored by "disagree strongly" and "agree strongly" to respond to 42 items that assess four dimensions of gender ideology. The ASI consisted of two variables: (a) hostile sexism, $\alpha = 0.85$, which assesses sexist antipathy toward women (e.g., "Feminists really want women to have more power than men"), and (b) benevolent sexism, $\alpha = 0.82$, which assesses sexist positivity toward women (e.g., "A good woman should be set on a pedestal by her man"). The AMI consisted of two variables: (a) hostility toward men, $\alpha = 0.78$, which assesses sexist antipathy toward men (e.g., "Men will always fight to have greater control in society than women"), and (b) benevolence toward men, $\alpha = 0.84$, which assesses sexist positivity toward men (e.g., "Men are more willing to take risks than women").

Collaborators in non-English speaking countries translated and back-translated the ASI and the AMI. Previous cross-cultural work with the ASI (Glick et al., 2000) has revealed the difficulty in translating reverse-worded items. Therefore, reverse-worded items appeared only in the questionnaire administered to the U.S. sample; all items appeared in nonreversed wording for the remaining eight samples.

Because participants in the Spanish and U.S. samples did not complete the AMI ($n = 511$), the analyses of the AMI data included only participants from the remaining seven nations.

Mate characteristics. All participants rated the importance of 19 mate characteristics on a scale from 0 "irrelevant or unimportant" to 3 "indispensable". These characteristics consisted of the 18 items adopted by Buss (1989) from Hill (1945) plus one additional item (*desire for home and kids*).

Researchers who have used the Hill (1945) inventory of mate preferences have sometimes organized the data using a factor analysis or principal components analysis of the importance ratings (e.g., Johannesen-Schmidt & Eagly, 2002). However, because factor analytic solutions were not stable across the nine nations, we report data for the individual items *good financial prospects* and *good cook and housekeeper*. These items were chosen for their relevance to social role theory and for parallelism to earlier

work that also reported analyses on single items (Buss, 1989; Eagly & Wood, 1999).[2]

Ideal age difference. Participants from all nations except Singapore indicated the ideal age difference in years between self and spouse as well as whom they would prefer to be older. Responses were coded so that positive numbers indicate a preference for a spouse older than the self and negative numbers indicate a preference for a spouse younger than the self. A preference for a same-age spouse was coded as 0. Several large positive outliers in these data suggested that some participants gave ages rather than age differences. Therefore, we calculated Tukey's outer fences separately for men and women and considered values outside of this range ($n = 16$) to be missing (Myers & Well, 1995; Tukey, 1977).

United Nations indexes of gender equality. Two measures represented nations' gender equality (United Nations Development Programme, 2001).[3] The Gender Empowerment Measure (GEM) increases to the extent that women have the opportunity to participate in economic, political, and decision making roles. GEM is a composite index of the percentage of managers, administrators, and professional workers who are women; the percentage of members of parliament who are women; and the ratio of women's to men's earned income. The Gender Development Index (GDI) is a composite of economic, education, and health indicators relevant to development, and it is adjusted downward to the degree that women fare worse than men on these indicators. Because the United Nations does not calculate either statistic for Taiwan, we represented Taiwan by the values assigned to the culturally similar nation of China.

Results

Sex Differences

Means and standard deviations within each sex, *t*-test comparisons between the sexes, and effect sizes in the *d* (standardized difference) metric appear in Table 1 for the

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[2] Although most of the Hill (1945) mate preferences were also positively associated with traditional gender ideology in the present study, they did not (nor were they predicted to) show a differential association by sex. Only the items good financial prospects and good cook and housekeeper yielded clear predictions from the social role logic.

[3] The cross-cultural mate preference data were collected in 2001. The GDI and GEM numbers were from the 2001 version of the UN report with two exceptions: Syria's and Taiwan's (i.e., China's) GEM scores, which were unavailable in the 2001 report, came from the 1999 report.

Table 1 Means and standard deviations for men's and women's traditional ambivalent gender ideology and mate preferences.

| | Participant sex | | | | Sex difference | |
| | Men | | Women | | | |
Measure	M	SD	M	SD	t	d
Traditional gender ideology						
Hostile sexism	2.89	0.93	2.24	0.94	20.68***	0.69
Benevolent sexism	2.74	0.94	2.69	1.06	1.49	0.05
Hostility toward men	2.51	0.80	3.03	0.87	−17.41***	−0.62
Benevolence toward men	2.86	1.00	2.36	1.10	13.40***	0.47
Mate preferences						
Age difference	−2.16	2.92	2.80	2.79	−46.28***	−1.74
Good financial prospects	1.21	0.92	1.64	0.89	−14.03***	−0.48
Good cook and housekeeper	1.45	0.96	1.32	0.91	3.98***	0.14

ns ranged from 1,258 to 1,606 men and 1,611 to 2,075 women. On a 0 to 5 scale, higher numbers indicate more traditional gender ideology. For age difference (in years), positive values indicate a preference for an older mate, whereas negative values indicate a preference for a younger mate. On a 0 to 3 scale, higher numbers indicate greater preference for good financial prospects or good cook and housekeeper in a mate.
d = difference between the men's and women's means divided by the pooled standard deviation.
***$p < .001$.

four scales that assess traditional gender ideology and for the three that assessed mate preferences. Men were more likely than women to exhibit hostile attitudes toward women and benevolent attitudes toward men. Women were more likely than men to exhibit hostile attitudes toward men, but they did not differ from men in benevolent attitudes toward women. As anticipated, the difference between men's and women's age preferences was significant: Men preferred to be older than their spouse, whereas women preferred to be younger. As shown by the effect size, this sex difference in age preferences was especially large. In terms of specific mate characteristics, women placed more importance than men did on good financial prospects, whereas men placed more importance than women did on good cook and housekeeper.

National Differences

Across the nine nations, we examined whether nations' mean level of mate preferences varied systematically with nations' level of gender equality. Because these analyses were severely limited by the small number of nations ($N = 9$), the relations were not significant for preferences for good financial prospects and good housekeeper and cook. Yet, the expected relations were significant for preferred age difference. For men, the mean preferred age difference correlated positively with both GEM, $r(6) = .71$, $p = .05$, and GDI, $r(6) = .77$, $p = .03$. For women, the mean preferred age difference correlated negatively, albeit not significantly, with both GEM, $r(6) = −.54$, $p = .17$, and GDI, $r(6) = −.57$, $p = .14$. Thus, as gender equality increased, men's tendency to prefer a spouse younger than themselves weakened

significantly and women's tendency to prefer a spouse older than themselves also weakened but not significantly.

To test the significance of the difference between the men's and women's associations, we calculated the average sex difference within each nation by subtracting the mean age preference for male participants from the preference for female participants. The negative correlations between this national sex difference and the GEM, $r(6) = −.66$, $p = .08$, and GDI, $r(6) = −.71$, $p = .05$, indicate that as nations' gender equality increased, the sex difference in preferred spouse age decreased.

Individual Differences

Correlations between mate preferences and each of the four components of traditional gender ideology are presented separately for men and women in the top half of Table 2, with the data combined across the nations. The significance of the difference between each of the men's and women's associations was tested in the combined sample of men and women by the interaction term in a regression equation that entered the relevant gender ideology, participant sex, and their interaction as predictors (Cohen, Cohen, West, & Aiken, 2003). The t statistics that correspond to these interactions appear in Table 2.

The correlations between preferred age difference and all four components of traditional gender ideology were significant in the predicted direction for both men and women: Men who exhibited traditional ideology preferred a younger mate, whereas women who exhibited traditional ideology preferred an older mate. In all four regressions, these associations between age preference and sexism

Table 2 Correlations between traditional ambivalent gender ideology and mate preferences.

Ambivalent gender ideology	Age difference			Good financial prospects			Good cook and housekeeper		
	Men	Women	t for comparison	Men	Women	t for comparison	Men	Women	t for comparison
Zero-order correlations									
Hostile sexism	−.11***	.15***	6.92***	.22***	.23***	0.05	.29***	.10***	−6.16***
Benevolent sexism	−.17***	.20***	9.94***	.15***	.32***	4.01***	.26***	.19***	−3.40**
Hostility toward men	−.07*	.09***	3.77***	.12***	.28***	3.79***	.18***	.17***	−0.88
Benevolence toward men	−.23***	.14***	9.17***	.17***	.30***	3.01**	.42***	.17***	−8.43***
Partial correlations									
Hostile sexism	−.04	.11***	7.02***	.14***	.16***	0.22	.24***	.06*	−6.37***
Benevolent sexism	−.03	.09***	10.06***	.05*	.24***	4.00***	.18***	.12***	−3.37**
Hostility toward men	.00	.07*	4.05***	.06*	.20***	3.68***	.12***	.11***	−1.25
Benevolence toward men	−.09**	.06*	9.11***	.07**	.22***	3.30**	.35***	.08***	−8.08***

*n*s ranged from 1,012 to 1,600 for men and from 1,344 to 2,067 for women. *t*s test the interaction of participant sex and ambivalent gender ideology (with sex coded men = 0 and women = 1) in a regression equation that entered participant sex, the given gender ideology, and their interaction as predictors. Higher numbers indicate greater ambivalent sexism. For age difference, positive values indicate a preference for an older mate and negative values a preference for a younger mate. Higher numbers indicate greater importance of good financial prospects and good cook and housekeeper. Partial correlations had the effect of nation removed through the addition of a set of effect-coded nation variables.
*p < .05; **p < .01; ***p < .001.

differed significantly between men and women (see Table 2).[4]

The correlations between good financial prospects and all four traditional gender attitudes were positive and significant for both men and women. In addition, for 3 of the 4 indexes of traditional ideology, the women's association was significantly larger than the men's association (see Table 2). Likewise, the correlations between good cook and housekeeper and all four traditional gender attitudes were positive and significant for both men and women. In addition, for three of the four indexes of traditional ideology, the men's association was significantly larger than the women's association (see Table 2).

To illustrate further the form of the interaction between participant sex and traditional gender ideology, Fig. 1 displays separately for male and female participants the regression slopes that predicted mate preferences from one of the gender ideology scales (benevolent sexism, which was representative of the type of relationship each of the four scales exhibited). All three panels reveal a similar pattern:

The discrepancy between men's and women's ratings of preferred age difference, good financial prospects, and good cook and housekeeper was larger for participants with higher levels of benevolent sexism. In other words, men and women who exhibited more benevolent sexism reported more conventional, sex-typed mate preferences. In contrast, men and women who exhibited less benevolent sexism reported more similar mate preferences.

Finally, we generated ipsative measures of our two mate characteristic dependent variables by subtracting each participant's mean preference rating across all 19 traits from his or her preference ratings of good financial prospects and good cook and housekeeper. In other words, these ipsative measures indicate the extent to which a participant desired good financial prospects (or good cook and housekeeper) more (positive values) or less (negative values) than other characteristics in a mate. Table 3 contains the correlations between traditional gender ideology and these two ipsative measures of mate preferences as well as the *t* statistics that tested the significance of the difference between the men's and women's associations. The correlations between good financial prospects and all four measures of traditional gender ideology were positive and significant for women, whereas the parallel correlations were inconsistent in direction for men. In addition, for all four indexes of traditional ideology, the women's association was significantly (or marginally) larger than the men's association (see Table 3). Likewise, the correlations between good cook and housekeeper and all four measures of traditional gender
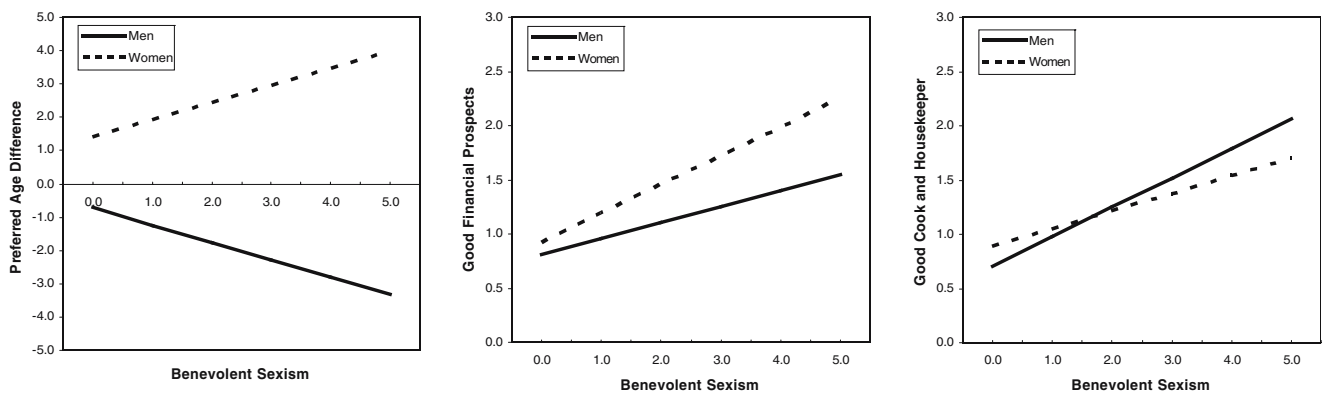
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[4] We examined whether gender ideology mediated the associations between the national indicators of gender equality (GEM and GDI) and preferred age difference in a mate (Baron & Kenny, 1986). For men, benevolence toward men yielded significant mediation; for women, hostile sexism, benevolent sexism, and hostility toward men yielded significant mediation, and benevolence toward men marginal mediation. Although for women the correlations between the national indicators and preferred age difference were not significant, this relation has been established elsewhere with a larger sample of nations (Eagly & Wood, 1999).

Fig. 1 Regression slopes of mate preferences predicted from benevolent sexism. The *left panel* displays the regression slope of preferred age difference, the *middle panel* displays the regression slope of good financial prospects, and the *right panel* displays the slope of good cook and housekeeper. Regression slopes are presented separately for men (*solid lines*) and women (*dashed lines*). Higher numbers indicate greater benevolent sexism. For age difference, positive values indicate a preference for an older mate and negative values a preference for a younger mate. Higher numbers indicate greater importance of good financial prospects and good cook and housekeeper.

ideology were positive and significant for men, whereas the parallel correlations were not significant for women. In addition, for all four indexes of traditional ideology, the men's association was significantly larger than the women's association.

Individual Differences Across Nations

To demonstrate that the correlations between traditional gender ideology and mate preferences were consistent cross-nationally after we merged the data across the nations, we conducted analyses to show that (a) the relationships reflected participant-level individual differences, and not merely between-nation differences, and (b) were stable across the nations.

To address the possibility that the correlations in the combined sample might reflect cross-national differences, the bottom one-half of Table 2 contains the correlations between traditional gender ideology and mate preferences with the effect of nation partialled out as a set of effect-coded variables (Darlington, 1990). This analysis removed between-nation mean differences from the independent and dependent variables.[5] Also, the t statistics that tested the significance of the difference between the men's and women's associations were recalculated in a regression equation that also included these effect-coded nation variables. These procedures reduced the size of some of the

correlations, and the set of effect-coded variables accounted for a small but significant increase in R^2 in each of the newly calculated regressions. However, none of the correlations changed direction, and the t statistics that tested the significance of the difference between the men's and women's correlations did not change appreciably for preferred age difference, good financial prospects, or good cook and housekeeper. This analysis suggests that the associations between ambivalent gender ideology and mate preferences are not attributable to between-nation differences.

To examine the cross-national stability of these relationships, regression analyses tested the significance of the three-way interaction of traditional gender ideology, participant sex, and nation. For each of the three dependent variables, regressions were calculated for each of the four components of traditional gender ideology for a total of 12 analyses. Each regression predicted the one mate preference dependent variable from one component of traditional gender ideology, participant sex, the eight effect-coded nation variables, all two-way interactions, and all three-way interactions.[6] The eight three-way interactions were pooled to test whether as a set they accounted for significant variability in the dependent variable. A significant F for a pooled set of three-way interactions would indicate that the

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[5] This analysis could potentially have been conducted using multilevel modeling procedures that treated participant variables as Level 1 variables nested within nation, a Level 2 variable. However, with only a convenience sample of nine nations, we cannot claim that our sample is representative of all nations; this limitation makes multilevel modeling procedures inappropriate in this context.

[6] The effect-coded nation variables were not allowed to interact with each other. It would be meaningless, for instance, to allow the effect-coded variable for Spain to interact with the effect-coded variable for Turkey. Also, the number of nation effect-coded variables included in each of the regressions differed slightly by analysis because participants in Singapore did not report their age preferences and participants in Spain and the United States did not complete the AMI. The maximum number of effect-coded nation variables is only eight because one nation (Syria) served as the reference category (see Darlington, 1990).

Table 3 Correlations between traditional ambivalent gender ideology and ipsative mate preferences.

Ambivalent gender ideology	Good financial prospects			Good cook and housekeeper		
	Men	Women	t for comparison	Men	Women	t for comparison
Hostile sexism	.07**	.15***	1.95†	.16***	−.02	−5.25***
Benevolent sexism	.00	.15***	4.14***	.14***	−.01	−4.41***
Hostility toward men	.02	.12***	2.37***	.10***	−.01	−2.88**
Benevolence toward men	−.06*	.12***	4.95***	.25***	−.03	−8.07***

ns ranged from 1,350 to 1,600 for men and from 1,798 to 2,067 for women. ts test the interaction of participant sex and ambivalent gender ideology (with sex coded men = 0 and women = 1) in a regression equation that entered participant sex, the given gender ideology, and their interaction as predictors. Higher numbers indicate greater ambivalent sexism. Higher numbers indicate greater importance of good financial prospects and good cook and housekeeper relative to the average importance placed on all 19 mate preferences (e.g., financial prospects − average importance).
†$p < .10$; *$p < .05$; **$p < .01$; ***$p < .001$.

critical two-way interaction between participant sex and the relevant component of gender ideology interaction was not consistent across the nations.

Only three of the 12 regressions revealed a significant pooled three-way interaction: (a) the interaction for benevolent sexism that predicted financial prospects, $F(8, 3630) = 2.25$, $p = .02$, (b) for hostility toward men that predicted financial prospects, $F(6, 3124) = 3.22$, $p = .004$; and (c) for benevolence toward men that predicted good cook and housekeeper, $F(6, 3122) = 3.24$, $p = .004$. To explore these three significant effects further, regressions were calculated separately for each nation (e.g., financial prospects predicted from hostility toward men, sex, and their interaction). Inspection of the two-way interaction term for each nation revealed that in many nations this term was significant, whereas in other nations it was not. However, in no nation did the interaction term reverse its expected sign.

Discussion

This study was designed to explore sex differences in mate preferences, specifically whether conventionally sex-typed preferences for providers or homemakers and for younger or older partners were present and associated with traditional ideology about men and women across nine different nations. As expected, these data replicated well-known sex differences in mate preferences: In general, women preferred a mate older than themselves, men preferred a mate younger than themselves, women placed greater importance on financial prospects in a mate, and men placed greater importance on good cook and housekeeper qualities in a mate. Also, even with this small sample of nations, these cross-national data replicated the finding that the sex difference in the preferred age of one's mate decreased with increasing gender equality (Eagly & Wood, 1999).

At the participant level of analysis, these data confirmed our predictions about the relationship between traditional gender ideology and mate preferences. First, for preferred age difference in a mate, all four forms of traditional gender ideology were associated with sex-typed preferences: Women with traditional attitudes preferred an older mate than did women with less traditional attitudes, whereas men with traditional attitudes preferred a younger mate than did men with less traditional attitudes. These men's and women's associations were significantly different from one another. Second, although traditional gender ideology was positively associated with the importance of good financial prospects in a mate for both men and women, for three of the four ideology measures it was a stronger predictor of women's preferences. Third, although traditional gender ideology was positively associated with the importance of good cook and housekeeper qualities in a mate for both men and women, for three of the four ideology measures it was a stronger predictor of men's preferences. In addition, an ipsative analysis revealed results consistent with the social role logic: To the extent that participants held traditional gender ideologies, women preferred good financial prospects in a mate more than other characteristics and men preferred a good cook and housekeeper more than other characteristics. These findings lend support to the hypothesis that traditional attitudes toward the roles of men and women serve to guide mate choice by fostering sex-typed mate preferences.

These results were not merely a byproduct of between-nation differences: The differences between the men's and women's associations remained significant after we controlled for nation-level mean differences in the traditional gender ideology and mate preferences measures. In addition, appropriate regression analyses indicated that sex differences in the relationship of gender ideology to mate preferences varied significantly across nations only for three of the 12 critical relationships. In these cases, the relationship merely became nonsignificant in some nations

but did not reverse in direction. Therefore, these findings are consistent with this study's main theoretical premise that traditional gender ideology, whose components are sexist attitudes toward the roles of women and men, guides mate choice by fostering sex-typed mate preferences.

Traditional men did not devalue the importance of good earning potential in a mate, nor did traditional women devalue good cook and housekeeper qualities in a mate. Instead, traditional gender ideology was associated with greater importance of good financial prospects and good cook and housekeeper qualities among both male and female participants. The tendency for the relationships between gender ideology and the specific mate qualities to be positive suggests that traditional gender ideology encourages men and women to be generally more demanding about good qualities in their mate. Perhaps people with traditional gender ideology have more idealized standards for mates. Alternatively, perhaps individuals who are more traditional are more likely to value relatively objective attributes and skills, rather than personality compatibility or being "in love" (see Simpson et al., 1986).

Evolutionary Psychology as a Theory of Mate Selection

One influential theory of mate selection does not assume a relationship between preferences for certain qualities in a mate and gender ideology. Specifically, evolutionary psychologists have contended that these sex differences in mate preferences reflect the unique adaptive problems experienced by men and women as they evolved (e.g., Buss, 1989; Kenrick, Trost, & Sundie, 2004). The sexes presumably developed different strategies to ensure their survival and to maximize their reproductive success. Buss and his colleagues interpreted the results of the 37 cultures study (Buss, 1989) as providing evidence that sex differences in preferred mate characteristics are universal and therefore reflect evolved tendencies that are general to the human species. However, demonstrations of systematic cross-cultural variation in the magnitude of sex differences have raised questions about this interpretation (Eagly & Wood, 1999; Kasser & Sharma, 1999).

Evolutionary psychologists have given some attention to within-sex individual differences in preferences and behavior, although they have not acknowledged the importance of gender ideology or other predictors derived from social role theory (but see Schmitt, 2005). In general, they have conceptualized individual differences in terms of "conditional universals" that reflect contingent evolved dispositions, with alternative forms of a disposition triggered by particular environments and developmental experiences (e.g., Gangestad & Simpson, 2000; Geary, 2000). Given

that the environments of our respondents differ considerably across the nine nations of our sample, perhaps a contingency explanation could be crafted for between-nations differences in mating preferences, but it is doubtful that such an explanation would also account for individual differences within nations in samples composed largely of university students.

In critiques of role predictors, evolutionary psychologists have noted that women's preferences for resources in mates are unrelated to their own economic resources (e.g., Kenrick & Keefe, 1992; Townsend, 1989). For example, Wiederman and Allgeier (1992) found that women who themselves anticipated a high income still valued financial resources in their mates. However, given strong tendencies for people to marry within their own socioeconomic group—that is, homogamy in relation to education, occupation, and social class—men as well as women who themselves have higher income generally select partners from their own higher socioeconomic group (e.g., Kalmijn, 1994, 1998; Mare, 1991). Moreover, women's economic prospects have become a positive predictor of their marriage prospects in the United States in recent decades, with men and women demonstrating similar positive relations between their earnings and marriage (Sweeney, 2002). Some greater importance of earnings to men's marital prospects remains, however, probably because, consistent with gender role expectations, many women even in industrialized nations still regard themselves as secondary wage earners within their families.

Limitations and Strengths

Although this study makes an important contribution to understanding the mate preferences of women and men, it is limited in its use of one particular self-report method of assessing mate preferences. Future researchers might also include behavioral indicators of mate preferences. For instance, traditional attitudes toward gender might be associated with the characteristics of participants' actual dating partners, especially in serious romantic relationships. Another limitation of the data is their correlational nature, which leaves the casual direction of the relationships ambiguous.

This study, however, also has several strengths that further the research literature on mate preferences. Most important, it addresses two shortcomings of previous studies of attitudinal correlates of mate preferences: limited evidence of generalizability across nations and across different measures of gender ideology. To produce evidence of generalizability across nations, this study had a nine-nation sample with thousands of participants. This design yielded evidence that the associations between sex differences in

mate preferences and traditional ambivalent attitudes toward women and men are not limited to the United States or even to highly industrialized nations. Also, this study used four different measures of traditional gender ideology. By assessing positive and negative attitudes toward both men and women, this study captured a broader construct of gender ideology than in past research.

These data confirmed predictions derived from social role theory at the individual level of analysis. These individual difference findings proved to be quite robust: Our supplementary analyses confirmed the stability of these findings across nations and suggested that the hypothesized associations do in fact reflect the psychology of individual participants. Future researchers should investigate at what specific point in the process of mate selection this ideology comes into play. Such an extension of the present work promises to add to the growing body of empirical research on social role determinants of mate preferences and to produce a more nuanced theory of the psychological processes underlying mate choice.

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