Gender-role egalitarianism predicts desirable traits of potential marriage partners: A cross-cultural comparison

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We examined whether gender-role egalitarianism predicted participants' rank-order preferences for traits in potential marriage partners of the opposite sex, and whether gender-role egalitarianism mediated cultural differences between participants from North America, Polynesia and East Asia. Participants completed the Sex-Role Egalitarianism Scale and ranked the following traits in terms of their importance in choosing a potential marriage partner: kindness, physical attractiveness, social level, athleticism, creativity and liveliness. Parallel analyses for male and female participants reveal that traditional males value physical attractiveness more than egalitarian males, and that traditional females value social level more and kindness less than egalitarian females. Gender-role egalitarianism fully mediated the effect of culture on kindness rankings, but no others. These results expand upon previous findings by accounting for individual differences regarding beliefs about traditional gender roles.

Key words: cross-cultural comparison, gender-role egalitarianism, mate preferences.

Introduction

Globalization has caused norms and beliefs, including gender attitudes, in many cultures to rapidly evolve (e.g. Tiwari & Ghadially, 2009). Since reproductive success partly results from the fit between one's traits and cultural expectations (Pines, 2001), it is important to examine how traditional and egalitarian beliefs about gender influence traits that we find desirable in others. The current study examines this relationship using the construct of gender-role egalitarianism (King & King, 1990) across samples from North America, Polynesia and East Asia.

Preferred traits in opposite sex mates

Mate-preference studies consistently show that women are attracted to signals of resource acquisition, such as 'earning capacity,' 'education level' and 'ambition' (e.g. Buss & Barnes, 1986; Li, Bailey, Kenrick & Linsenmeier, 2002). Both cross-cultural studies (e.g. Buss, 1989) and meta-analyses (e.g. Feingold, 1992) indicate that women value traits indicative of one's ability to acquire resources more than do men. Buss also found that females preferred men who were, on average, 3.42 years older. Desiring older

mates is thought to indicate an adaptive preference, in that older males have greater access to resources than younger males.

In contrast, men prefer youthfulness and physical attractiveness, which indicate fitness and fertility and would have reliably signalled a female's reproductive value throughout our evolutionary history (Buss & Schmitt, 1993). This preference also appears in both cross-cultural studies (Buss, 1989) and meta-analytic reviews (Feingold, 1990). Buss also reports that men sought younger potential mates, as compared to women, preferring to marry women who were about 25 years old, close to the peak of female fertility.

Although males and females show characteristic differences in their preference for certain mate characteristics, substantial overlap also exists. Specifically, traits only weakly related to evolutionary mate-selection pressures often show no gender difference. For instance, women and men show a comparable preference for characteristics like creativity and kindness (Li *et al*., 2002). While most mate-selection research utilizes self-report measures, many externally valid studies have produced results that parallel results in the self-report literature (e.g. Clark & Hatfield, 1989; Kenrick & Keefe, 1992).

Long-term versus short-term relationships

The current study involves the traits we find desirable in potential marriage partners. Buss and Schmitt (1993) differentiate between desirable characteristics of short-term mates versus those of long-term mates. Generally, individuals seeking short-term mates focus on obvious, outward

indicators of health (for males seeking females) and social status (for females seeking males), compared to those seeking long-term mates. This is partly because these characteristics are easier to detect than personality characteristics, and partly because these characteristics provide immediate rewards.

Because of the high reproductive investment inherent in mothering, women maintain a comparable set of standards for short-term and long-term mates, while men show less selectivity when it comes to short-term versus long-term mates (Buss & Schmitt, 1993). In fact, Buss and Schmitt hypothesized that women's short-term mating strategies often serves as a means of selecting long-term mates. Resource extraction and protection from aggressive males serve as additional goals of women's short-term mating strategies. Appropriately, women viewed physical strength as more desirable in short-term relationships than long-term relationships. They also viewed men who spent money on them as more attractive in short-term relationships than in long-term relationships (however, they valued future earning potential more in long-term versus short-term relationships).

Men valued physical attractiveness significantly more in short-term than long-term relationships (Buss & Schmitt, 1993). Conversely, a desire for commitment was viewed negatively when seeking a short-term mate, but viewed positively when seeking a long-term mate.

Gender-role egalitarianism and mate preferences

One could view traditional gender roles as products of evolution, such that dominant, resource-providing males and nurturing, healthy females frequently possess greater reproductive value than their opposites (Buss, 1989). However, since cultures differ in the degree to which they subscribe to traditional gender roles, individuals within these cultures should adhere to these preferences to varying degrees (Travaglia, Overall & Sibley, 2009). Eastwick *et al.* (2006), for example, found that the more one engaged in hostile and benevolent sexism, the more one desired opposite-sex romantic partners who were consistent with the ideal of the dominant male and the fecund female. Thus, mate selection preferences derived from evolutionary theory predict that females generally desire dominance and status in male targets and males generally value indicators of physical attractiveness and health in female targets, and cross-cultural research has found that the importance of these traits becomes magnified in traditional cultures.

Regional differences across the Pacific Rim

While substantial variance exists for individuals within cultures, cultures can dramatically differ from one another in the degree to which they endorse gender egalitarianism. Several studies (e.g. Suzuki, 1991) have found less egalitarianism among East Asians than Americans. More recently, the United Nations Development Programme (2013) generally reported smaller disparities between males and females in the United States in terms of secondary education (0.4%) and labour force participation (13.6%) as compared to East Asian countries, such as Japan (2.3%, 22.3% respectively), Korea (12.3%, 22.2% respectively) or China (15.6%, 13.4% respectively).

Although it possesses its own unique culture, modern Polynesia (especially Hawaii) is heavily influenced by both Asia and mainland United States. Although part of the United States, Hawaii has a large Asian population (almost half of Hawaii's residents who identify as a single ethnicity identify as Asian; U.S. Census Bureau, 2013), and Asian-Americans have a more traditional concept of gender roles than non-Asian Americans (Anderson & Johnson, 2003). As such, we expected gender-role attitudes of participants from Polynesia to reside somewhere between the poles of North America and East Asia.

A case for athleticism as a desirable characteristic

Sexual selection (i.e. the idea that the traits of some individuals allow them to out-reproduce competitors; Darwin, 1871) may have contributed to the development of sports in human culture by providing a platform for displaying desirable traits (e.g. physical ability, health, dominance) that has rules that minimize one's risk of injury and allows observers to assess the athletic prowess, and, by extension, genetic fitness, of an individual (Miller, 2000). In fact, athletes often are more reproductively successful than non-athletes (Faurie, Pontier & Raymond, 2004). While keeping physically fit and exercising to create a healthy appearance are effective mate attraction tactics for both sexes (Buss & Schmitt, 1993), males and females appear to find athleticism attractive for different reasons. Athleticism may allow males to attract females by indicating dominance and resource access, while athleticism allows women to indicate health and youthfulness, which reliably signal her reproductive value (Buss & Schmitt). Both motivations – asserting dominance for males and maintaining health for females – conform to traditional gender roles, so one would expect that gender-role egalitarianism should negatively correlate with desiring athleticism in a potential mate.

The current study

Utilizing samples from three regions, we examined the ability of gender-role egalitarianism to predict the traits that participants valued in potential marriage partners of the opposite sex. Consistent with previous research on sexism

and mate preferences (e.g. Travaglia *et al*., 2009), we expected gender-role egalitarianism to weaken preferences for the dominant, resource-rich male and the physically attractive, healthy female. The current research also differs from previous research in a few important ways. First, we examined gender-role egalitarianism (King & King, 1990) rather than sexism in order to focus on specific behaviours rather than general attitudes. Second, we asked participants about marriage partners, rather than 'mates' (Eastwick *et al*., 2006) or 'romantic partners' (Travaglia *et al*.) to see whether the established results on the effects of valuing traditional gender roles replicate for this longer-term designation. Third, participants used rankings rather than ratings in order to test the relative strength of participant preferences (i.e. one would not prioritize weak preferences to the same degree as strong preferences). Fourth, we included athleticism among the desirable traits because, while we did not expect it to be a dominant factor, it could be particularly influenced by one's perception of traditional gender roles. Finally, we examined gender-role egalitarianism both by itself and with a categorical measure of culture to see whether its inclusion rendered intercultural differences non-significant.

Hypotheses

1) Participants from North America will report more egalitarian attitudes than participants from East Asia.
2) Egalitarian male participants should value physical attractiveness and athleticism less than traditional male participants because those characteristics fit traditional gender roles.
3) Egalitarian female participants should value kindness more and social status and athleticism less than traditional female participants because those characteristics fit traditional gender roles.
4) Egalitarianism should mediate cross-cultural differences on these trait preferences.

Method

Participants

Two hundred and seven undergraduate psychology students (111 females, 96 males) completed the study in exchange for extra credit. Fifty-six participants were from North America, 92 were from Polynesia and 58 were from East Asia. Most participants from East Asia were taking psychology classes taught exclusively in English. We asked those who were not to indicate their level of English proficiency using a Likert scale. The mean age of participants was 23.29 years (*SD* = 4.64). We discarded data from seven participants because they preferred same-sex romantic partners, which was not relevant to the current analysis.

Also, we discarded data from 17 participants due to either low English proficiency, failure to follow directions, or because participants were from locations other than the regions of interest.

Procedure

Participants completed a questionnaire asking them to identify their gender, age and sexual preference (1 = 'only males', 5 = 'only females'). We then asked participants to rank six traits (physical attractiveness, social level, creativity, liveliness (i.e. energy, enthusiasm), kindness and athleticism) in order of importance when evaluating 'a potential marriage partner of the opposite sex', from 1 ('most important') to 6 ('least important'). Previous research (e.g. Li *et al*., 2002; Li & Kenrick, 2006) identified these factors as important predictors of mate preferences.

Region of origin. We asked participants, 'In what country did you primarily grow up?' and for participants who indicated the United States we asked, 'In what state did you primarily grow up?' This allowed us to divide the sample into individuals from East Asia, Polynesia and North America. We will refer to this as the 'Region' variable.

The Sex-Role Egalitarianism Scale. Participants completed the 25-item short-form (Form BB) of the Sex-Role Egalitarianism Scale (SRES; King & King, 1990). This scale requires respondents to read a series of statements (e.g. 'When a child awakens at night, the mother should take care of the child's need') and indicate their level of agreement using a five-point, Likert-like scale (1 = 'strongly disagree', 5 = 'strongly agree'). This form previously has shown high internal consistency ($\alpha = 0.94$) and high test-retest reliability ($r = 0.88$; King & King). The internal consistency for the current sample was also high ($\alpha = 0.89$). Separately, the samples from East Asia ($\alpha = 0.81$), Polynesia ($\alpha = 0.88$) and North America ($\alpha = 0.93$) all fell well within the accepted range for internal consistency scores. Lower SRES scores indicate more egalitarian attitudes.

Results

We conducted separate path analyses (Kenny, Kashy & Bolger, 1998) for males and females (see Fig. 1). In Path 1,
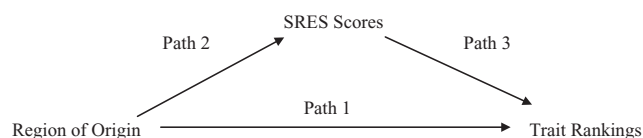
Figure 1 Path analysis.

we conducted MANOVAs to examine the effect of Region on the six trait rankings (in which lower values indicate greater desirability). In Path 2, we conducted one-way ANOVAs to examine the effect of Region on SRES scores (in which lower values indicate greater egalitarianism). In Path 3, we conducted multiple regressions to examine the effect of SRES scores on trait rankings. Finally, we included SRES scores as covariates in MANOVAs with Region to see whether they mediated the effects from Region in Path 1. For the sake of clarity, we only report significant main effects ($p < 0.05$).

Female participants

For Path 1, Region significantly predicted the MANOVA, *Wilks'* $\Lambda = 0.70$, $p < 0.01$, $r = 0.40$. Regarding between-subjects effects, Region significantly predicted Social Level, $F (2, 102) = 18.22$, $p < 0.01$, $r = 0.51$, and Kindness rankings, $F (2, 102) = 4.58$, $p = 0.01$, $r = 0.29$. Bonferroni tests on Social Level revealed significant differences between participants from East Asia ($M = 2.71$, $SD = 1.19$) and North America ($M = 4.85$, $SD = 1.20$), $p < 0.01$, as well as between participants from East Asia and Polynesia ($M = 4.06$, $SD = 1.58$), $p < 0.01$ (see Table 1). Differences between Social Level rankings of participants from North America and those from Polynesia approached significance, $p = 0.06$. Bonferroni tests on Kindness rankings revealed a significant difference between participants from Polynesia ($M = 1.26$, $SD = 0.68$) and East Asia ($M = 1.84$, $SD = 1.27$), $p = 0.02$, and another between participants from North America ($M = 1.26$, $SD = 0.71$) and East Asia, $p = 0.05$. Differences in Kindness rankings between participants from North America and Polynesia were non-significant.

For Path 2, we conducted a one-way ANOVA, with Region significantly predicting SRES scores, $F (2, 107) = 16.09$, $p < 0.01$, $r = 0.48$. Bonferonni tests revealed that participants from East Asia ($M = 2.07$, $SD = 0.42$) showed significantly higher SRES scores than participants from North America ($M = 1.56$, $SD = 0.40$), $p < 0.01$ and Polynesia ($M = 1.61$, $SD = 0.38$), $p < 0.01$. Differences in SRES scores between participants from North America and Polynesia were non-significant.

For Path 3, SRES scores showed significant positive relationships with Kindness, $F (1, 104) = 8.06$, $p = 0.01$, $r = 0.27$, and Liveliness, $F (1, 104) = 3.99$, $p = 0.05$, $r = 0.19$, and a significant negative relationship with Social Level, $F (1, 104) = 14.46$, $p < 0.01$, $r = 0.35$. However, since Region failed to significantly predict Liveliness in Path 1, we will not discuss it further.

With SRES scores included as a covariate, Region significantly predicted the MANOVA, *Wilks'* $\Lambda = 0.78$, $p = 0.01$, $r = 0.34$, while SRES scores failed to significantly predict the MANOVA, $p = 0.08$. Regarding between-subjects effects, SRES scores only significantly predicted Kindness, $F (1, 101) = 6.46$, $p = 0.01$, $r = 0.24$, such that traditional females valued kindness less than egalitarian females. Region remained a significant predictor of Social Level, $F (2, 101) = 13.13$, $p < 0.01$, $r = 0.45$.

Male participants

For Path 1, Region failed to significantly predict the MANOVA ($p = 0.22$). Regarding between-subjects effects, Region significantly predicted Athleticism rankings, $F (2, 89) = 4.28$, $p = 0.02$, $r = 0.30$. Bonferroni tests revealed a significant difference between rankings of participants from North America ($M = 4.67$, $SD = 1.20$) and East Asia

Table 1 Mean rankings for desirable traits in potential opposite-sex marriage partners

	North America	Polynesia	East Asia	Total
Males				
Traits:				
Kindness	1.67 ($SD = 1.13$)	1.76 ($SD = 1.20$)	1.59 ($SD = 0.97$)	1.68 ($SD = 1.11$)
Physical attractiveness	2.33 ($SD = 0.87$)	2.59 ($SD = 1.07$)	2.30 ($SD = 1.03$)	2.43 ($SD = 1.01$)
Liveliness	3.42 ($SD = 1.25$)	2.98 ($SD = 1.26$)	3.44 ($SD = 1.09$)	3.23 ($SD = 1.21$)
Creativity	4.08 ($SD = 1.56$)	4.07 ($SD = 1.51$)	3.96 ($SD = 1.74$)	4.04 ($SD = 1.58$)
Social level	4.83 ($SD = 1.49$)	4.73 ($SD = 1.61$)	4.30 ($SD = 1.20$)	4.63 ($SD = 1.47$)
Athleticism	4.67[a] ($SD = 1.20$)	4.88[ab] ($SD = 0.90$)	5.41[b] ($SD = 0.75$)	4.98 ($SD = 0.98$)
Females				
Traits:				
Kindness	1.26[c] ($SD = 0.71$)	1.26[c] ($SD = 0.68$)	1.84[d] ($SD = 1.27$)	1.43 ($SD = 0.93$)
Liveliness	2.70 ($SD = 0.99$)	2.87 ($SD = 1.17$)	3.35 ($SD = 1.56$)	2.97 ($SD = 1.27$)
Physical attractiveness	3.44 ($SD = 1.12$)	3.53 ($SD = 1.27$)	3.16 ($SD = 1.27$)	3.40 ($SD = 1.23$)
Social level	4.85[e] ($SD = 1.20$)	4.06[e] ($SD = 1.58$)	2.71[f] ($SD = 1.19$)	3.87 ($SD = 1.59$)
Creativity	4.22 ($SD = 1.67$)	4.34 ($SD = 1.42$)	4.94 ($SD = 1.44$)	4.49 ($SD = 1.51$)
Athleticism	4.52 ($SD = 4.52$)	4.94 ($SD = 1.11$)	5.00 ($SD = 0.93$)	4.85 ($SD = 1.13$)

Note: Cells with different superscripts differ significantly from each other. Lower numerical rankings indicate greater desirability.

($M = 5.41$, $SD = 0.75$), $p = 0.02$, as well as a difference that approached significance between participants from Polynesia ($M = 4.88$, $SD = 0.90$) and East Asia, $p = 0.08$. Differences in Athleticism rankings between participants from North America and Polynesia were non-significant.

For Path 2, Region significantly predicted SRES scores, F (2, 93) = 3.16, $p = 0.05$, $r = 0.25$. Bonferonni tests revealed a lone result that approached significance: participants from East Asia ($M = 2.23$, $SD = 0.55$) showed higher SRES scores than participants from Polynesia ($M = 1.93$, $SD = 0.46$), $p = 0.07$.

For Path 3, SRES scores showed a significant negative relationship with Physical Attractiveness, F (1, 90) = 5.37, $p = 0.02$, $r = 0.24$. However, since Region failed to significantly predict this trait in Path 1, it will not be discussed further. SRES scores failed to predict Athleticism ($p = 0.17$). Since Region and SRES scores failed to predict the same traits, there was no reason to conduct the MANOVA using both factors.

Discussion

We examined the relationship between gender-role egalitarianism and desirable traits of potential marriage partners of the opposite sex, with the expectation that a preference for traditional gender roles would magnify mate preferences predicted by evolutionary theory. We also examined whether gender-role egalitarianism could explain cultural differences regarding these trait preferences. Concerning the first goal, SRES scores predicted preferences among females, such that traditional females valued social level more and kindness less than egalitarian females. For male participants, traditional males valued physical attractiveness more than egalitarian males. These results replicate previous findings, that traditional males value physical attractiveness and traditional females value social status and dominance (as opposed to kindness; e.g. Eastwick *et al.*, 2006), and extend these findings to include marriage partners, in addition to 'romantic partners' and 'mates'.

Regarding whether gender-role egalitarianism mediated the effects of culture, we found some positive evidence among the female participants' responses. Cultural differences existed among participants in terms of kindness and social level, and including SRES scores in the analysis fully

mediated culture's effect on kindness and partially mediated its effect on social level. As for males, we found only one significant cross-cultural difference (for athleticism), and SRES scores failed to predict rankings for that construct.

Athleticism rankings failed to perform as predicted. Although we anticipated that they would be ranked low among mate preferences, we expected more of an influence from SRES scores. Athleticism lingered at or near the bottom of most participants' rankings, and it is possible that using ratings, rather than rankings, would produce a greater variability of responses for this construct, and a significant effect. We established a cross-cultural difference regarding the degree to which males value this construct, but according to our results, gender-role egalitarianism is not responsible for that difference.

The current study examined desirable characteristics in long-term relationships ('marriage partners'). Females would likely to value kindness less in short-term relationships, and emphasis on social level may manifest itself differently in relationships of shorter duration (e.g. short-term rewards versus long-term prospects; Buss & Schmitt, 1993), but otherwise, as was found in studies featuring 'mates' (Eastwick *et al.*, 2006) or 'romantic partners' (Travaglia *et al.*, 2009), a preference for traditional gender roles tended to magnify the participants' desire for the mate-preferences predicted by evolutionary theory. In the future, it would be worth examining whether males value athleticism more in long-term mates (i.e. because of its association with long-term fitness) or in short-term mates (i.e. because it involves an immediately observable quality).

As is common in cross-cultural research, the sample (urban college students) does not best represent the respective cultures. However, we anticipate that, if anything, the samples used (in particular, Asian students who took classes in English) truncated the effects for culture and gender-role egalitarianism that we found. Another issue is that the single-item measures for traits failed to provide much nuance in determining a person's preference for these constructs.

Ultimately, these results provide support for previous findings on trait preferences of opposite-sex mates using an alternative methodology. They also illustrate that a cultural factor, gender-role egalitarianism, can mediate the importance of certain mate preferences predicted by evolutionary theory.

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