

## A Study of Men and Women from Different Sides of Earth to Determine If Men Are from Mars and Women Are from Venus in Their Beliefs About Love and Romantic Relationships<sup>1</sup>

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### Introduction

Some popular writers have claimed that men and women are from two different planets, with different patterns of behaviors, feelings, and cognitions in close relationships (Gray, 1992; Tannen, 1990). Although research has found some reliable differences between men and women, particularly in their *attitudes* and *beliefs* about romantic relationships (e.g., Hendrick & Hendrick, 1995), the popular literature tends to exaggerate those differences. The fashionable paradigm of gender differences (i.e., men are from Mars, women are from Venus) is also problematic because it is frequently based on anecdotal evidence and tends to universalize what are mostly Western cultural patterns about men and women. Within this rather reductionist paradigm, gender alone is assumed to explain the complexities of emotions, feelings, and views that men and women hold about relationships. This body of work fails to recognize the complexity of social and cultural variables that shape love and romantic relationships across cultures.

Alternatively, in the social sciences a vast body of literature exists that seeks to compare men and women and explore the extent of gender differences in relationship beliefs and attitudes (for a review, see Winstead, Derlega, & Rose, 1997). However, one limitation of research examining gender differences in relationship beliefs is the failure to

consider at the same time how other social group memberships, including culture, race/ethnicity, and social class, also influence beliefs and attitudes. There are at least two important reasons to examine gender differences (and similarities) in beliefs about love and romantic relationships in conjunction with the influence of other social group memberships. First, it allows us to examine the importance of membership in a gender group as compared to membership in other social groups in explaining variation in beliefs about love and relationships. Second, a consideration of gender in combination with other social group memberships allows us to examine whether a particular gender effect depends on or differs on the basis of membership in other social groups. For example, differences between men and women in beliefs about love may be more pronounced in one culture or subculture than those in another. Hence, we can examine the universality of gender differences. Another limitation of the prior research upon which findings about gender differences in beliefs are based is that generally only one belief or set of beliefs has been examined in any one study. As a result, it is generally unknown how the strength of the effect of gender may vary across types of beliefs.

In this study, we overcome these limitations by examining gender differences and similarities

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in several relationship beliefs and also by considering cultural differences (data were collected in North America and China), and ethnic/racial and social class differences more specifically within the North American sample. The relationship beliefs we consider are love as a basis for marriage (e.g., Kephart, 1967), romantic beliefs (Sprecher & Metts, 1989), beliefs in a romantic destiny and/or fate (Goodwin & Findlay, 1997; Knee, 1998), and love styles (e.g., Hendrick & Hendrick, 1986).

## Review of the Literature

### *Love as a Basis for Marriage*

In the United States, Canada, and other Western cultures, it is generally assumed that two people will marry each other only if there is love between them. In the 1960s, Kephart (1967) asked more than 1,000 U.S. college students the following question: "If a boy (girl) had all the other qualities you desired, would you marry this person if you were not in love with him (her)?" Kephart found that 65% of the men but only 24% of the women said they would not. However, when the same question was posed to later cohorts of students, 80–90% of both genders indicated that they would not marry without love, and no gender differences were found (Allgeier & Wiederman, 1991; Levine, Sato, Hashimoto, & Verma, 1995; Simpson, Campbell, & Berscheid, 1986; Sprecher et al., 1994).

In two of the above studies (Levine et al., 1995; Sprecher et al., 1994), the Kephart question was posed to samples from more than one country, and some cross-cultural differences were found. Levine et al. (1995) reported that the percentage of respondents indicating that they would not marry someone they did not love was highest in the United States (85.9%), and, in the 10 other countries represented, ranged from a low of 24.0% (India) to a high of 85.7% (Brazil). Although China was not included in the sample, Thailand and Japan, countries similar to China in degree of collectivism, were included. The percentages of respondents in these two countries who said they would not marry someone they did not love were 33.8 and 62.6%, respectively, which were lower than that for the United States. Levine et al. (1995)

did not find any gender differences in responses, either overall or in any of the countries. However, one limitation of Levine et al.'s study was the small sample size within each country (*n*s ranged from 71 to 156; Levine et al., 1995).

Sprecher et al. (1994) included a version of the Kephart question in their cross-cultural study, which included respondents from the United States (*n* = 1,043), Russia (*n* = 401), and Japan (*n* = 223). No significant difference was found in the proportion of Japanese and U.S. respondents who said they would insist on love in a marriage partner (81% for the Japanese sample and 89% for the U.S. sample); however, respondents from Japan and the United States were significantly more likely to expect love in a mate than were respondents in the Russian sample (64%). Sprecher et al. (1994) found no gender differences in their total cross-national sample or in their Japanese and U.S. samples, but a greater proportion of Russian men than Russian women (70% vs. 59%) said they would insist on love in marriage.

The belief that love is necessary to *maintain* a marriage seems to be pervasive as well, although perhaps not as pervasive as the belief that love is necessary for entering marriage. In their survey study of U.S. college students (collected in both 1976 and 1984), Simpson et al. (1986) included the Kephart question and two questions on the importance of love for the maintenance of marriage. Although the respondents were less likely to agree that they would leave a marriage if love had disappeared than they were to agree that they would not marry without love, a greater proportion of respondents agreed than disagreed that love would be necessary for the maintenance of marriage. The belief that love is necessary for the maintenance of marriage was held less strongly in their 1984 sample than in their 1976 sample. Simpson et al. (1986) found no gender differences in beliefs about the importance of love for the maintenance of marriage.

In their cross-cultural study, Levine et al. (1995) also included the Simpson et al. (1986) questions about the importance of love for the maintenance of marriage and found cross-cultural variation in responses. Among the countries represented, the

U.S. sample was intermediate in its endorsement that love is necessary to maintain the marriage. The Japan and Thailand samples were more likely than the U.S. sample to agree with the statement, "If love has completely disappeared from a marriage, I think it is probably best for the couple to make a clean break and start new lives." Levine et al. (1995) did not find any gender differences in beliefs about love as necessary for the maintenance of marriage, either in the overall sample or in any of the separate country samples.

In commenting on Simpson et al.'s findings on the love-marriage connection, Berscheid and Meyers (1996) observed that Kephart's question referred to "in love" whereas the two questions assessing the importance of love for the maintenance of marriage referred to "love" (Kephart, 1967). They noted that there are differences between the experience of being "in love" and the experience of "love," with the former being a more passionate type of love and the latter being a more companionate type of love (for a discussion of the distinction between passionate and companionate love, see Berscheid & Walster, 1974; Sprecher & Regan, 1998). In this study, we include not only the three questions used in prior research (e.g., Simpson et al., 1986), but also two questions that assess the importance of passionate love (or sexual attraction) for the establishment of marriage and the maintenance of marriage.

#### *Romantic Attitudes*

The belief that love should be a basis of marriage is only one of several romantic beliefs. A larger constellation of beliefs has been called the "romantic ideology" and includes such beliefs as love at first sight, there is only one true love, true love lasts forever, idealization of the partner and of the relationship, and love can overcome any obstacle (e.g., Knox & Sporkowski, 1968; Sprecher & Metts, 1989). In most studies on romantic attitudes, conducted primarily in the United States, men have been found to be more romantic than women (e.g., Knox & Sporkowski, 1968; Sprecher & Metts, 1989), although in some studies no gender differences have been found (e.g., Cunningham & Antill, 1981; Sprecher & Metts, 1999).

Sprecher et al. (1994) found that their U.S. and Russian samples scored higher on a Romantic Beliefs Scale (Sprecher & Metts, 1989) than their Japanese sample. However, they found no gender differences in romantic attitudes, either overall or in any of the three cultures. In another cross-cultural study, Simmons, Vomkolke, and Shimizu (1986) administered romanticism scales to university students in Japan, West Germany, and the United States. On some of the subscales, Japanese students scored lowest on Romanticism, whereas the West German students were most romantic. On other subscales, no cross-cultural differences were found. Overall, there were no gender differences in romantic attitudes, although Gender  $\times$  Culture interactions were found for some of the individual romanticism items.

#### *Belief in Destiny or Fate in Love*

Goodwin and Findlay (1997) have explored a concept specific to love in China, which is "yuan," the belief that a relationship is either destined to be "the one" or to fail (similar to the romantic belief there is only one true love). Thus, if a relationship works, it is because of fate, and not because of individual actions. As noted by Goodwin and Findlay (1997), yuan comes from traditional Buddhist beliefs. They found that Chinese respondents scored higher on the Yuan Scale than British respondents, although they found that the British respondents also scored high on many of the Yuan Scale items. Commenting on these findings, Hendrick and Hendrick (2000) wrote, "there remains a fascinating question about whether Eastern notions of fatalism as well as duty and obligation also can be found in Western concepts of love" (p. 212).

Goodwin and Findlay (1997) found no gender differences in scores on yuan, either in the Chinese or in the British samples. Knee (1998) developed a scale to measure a similar concept to yuan—a destiny belief—which was defined as a belief that "holds that potential relationship partners are either meant for each other or not" (p. 360). To our knowledge, the Knee (1998) Destiny Scale has not been used in cross-cultural research, and no gender differences have been found in either

his original study or any follow-up studies (Knee, personal communication, January 13, 2002).

#### Love Styles

Lee (1973) proposed a love taxonomy that included six styles of loving, also referred to as attitudes about love. Hendrick and Hendrick (1986) developed a scale to measure these six styles of love, which are Eros (romantic, passionate love), Ludus (game-playing love), Storge (friendship love), Pragma (logical, shopping-list love), Mania (possessive, dependent love), and Agape (selfless love). Across several studies, the most consistent gender difference found is that men score higher than women on Ludus. Furthermore, in several studies, women have been found to score higher than men on Storge, Pragma, and Mania (for a review of these findings, see Hendrick & Hendrick, 1992, 2000).

Sprecher et al. (1994), in their cross-cultural study, included a short version of the Hendrick and Hendrick Love scales (three items to measure each love style) and found cross-cultural differences in some of the styles. For example, they found that both the Japanese sample and the Russian sample were less erotic and storgic than the U.S. sample. They also found that gender differences varied by culture. For example, the U.S. men were more ludic than the U.S. women (a finding consistent with considerable previous research), whereas no gender differences were found on Ludus in Russia or Japan. In addition, women were more pragmatic than men in the U.S. sample, whereas no gender differences on Pragma were found in Russia or Japan. Finally, women were more manic than men in the U.S. sample, whereas in the Russian and Japanese samples, the reverse gender difference was found (men were more manic than women). Hence, their research with the love styles suggests that what have been considered to be robust and universal gender differences may, in fact, not be.

In an earlier cross-cultural study, Murstein, Merighi, and Vyse (1991) compared French students with U.S. students on love styles and found that French students had higher levels of Storge and Mania and lower levels of Agape. A comparison of men and women revealed no gender differences

in the U.S. sample and a higher score on Ludus for men than that for women in the French sample. The researchers concluded that "differences in nationality were more pronounced than gender differences within nationality" (p. 43).

Hendrick and Hendrick (1986) also compared ethnic groups within the United States. They found that Asian students, compared to students from other ethnic backgrounds, scored lower on Eros and higher on Storge and Pragma. They also found that Black respondents were less agapic as compared to other racial/ethnic groups. In a later study, Contreras, Hendrick, and Hendrick (1996) compared three groups of participants recruited from urban areas in Southwestern United States: Anglo Americans, Mexican Americans with a high level of acculturation, and Mexican Americans with a low level of acculturation. Ethnic differences were found in scores on Ludus, Pragma, and Mania. Among the three groups, Anglo (White) participants were least ludic and most manic, whereas the low-acculturation Mexican American group had the highest Pragma scores. However, to our knowledge, no other research has compared ethnic groups on the love styles or on other beliefs about love, and no analyses have been conducted to examine gender differences in relationship beliefs within different ethnic/racial groups.

#### Summary of the Purposes of This Investigation

Although researchers who study relationship beliefs have routinely examined gender differences, conclusions about the influence of gender on relationship beliefs are limited by the inability to compare the effect of gender across a variety of relationship beliefs (i.e., rarely are several beliefs examined in the same study), and by homogeneous samples limited to one culture and often only one subculture within the larger culture. In this study, on the other hand, we examine gender differences on several relationship beliefs in two very different cultures (North America and China), and also examine how gender differences (and similarities) depend on ethnic/racial and social class membership. As part of the investigation, we also examine

how the American sample differs from the Chinese sample in relationship beliefs and also how relationship beliefs may depend on race/ethnicity and social class within the American sample.

## Method

### Participants

The (North) American sample consisted of 693 university students most of whom were from a public, midwestern university in the United States ( $n = 484$ ). However, data also were collected from a midwestern private university ( $n = 27$ ), a university in southwestern United States ( $n = 77$ ), a university in eastern United States ( $n = 35$ ), and a university in Canada ( $n = 70$ ). Of the 693 American participants, 230 were male and 456 were female (and 7 did not specify their gender). The mean age of the American participants was 21.29 ( $SD = 5.11$ ). To a question asking about racial/ethnic background, 74.3% chose White, 11.7% chose Black, 8.5% chose Hispanic/Latino, and the remaining (5.5%) checked either Asian, American, Indian, or Other. To a question asking about the social class of their parental family during adolescent and teenage years, 3.9% chose upper class, 26.6% chose upper-middle class, 49.1% chose middle class, 11.8% chose lower-middle class, 6.5% chose working class, and 2.0% said lower class.

The Chinese sample consisted of 735 university students, primarily from Lanzhou University ( $n = 510$ ), which is a major university in Northwest China. Data also were collected at a Northwest National Minorities University ( $n = 151$ ) and a Medical school also located in Northwest China ( $n = 74$ ). Of the Chinese participants, 352 were male, 343 were female, and 40 did not respond directly to the gender question (the question on gender was located at the end of the questionnaire, and missed by some of the respondents). The mean age of the Chinese sample was 21.04 ( $SD = 4.62$ ). Standard questions on ethnicity/race and social class were not asked of the Chinese sample.

### Procedure

In the various locations in both cultures, the questionnaire was distributed in class under

anonymous and voluntary conditions. For the Chinese sample, the questionnaire was translated into Chinese. This was done by a professor from the Department of Sociology and Philosophy at Lanzhou University. Several drafts of the translation were conducted to ensure accuracy of items and scales. Once the questionnaire was translated into Chinese, two Chinese graduate students who were fluent in English were asked to review and check the translation for accuracy and clarity of language. In addition, at a later date, a third Chinese graduate student, who was studying in the United States and fluent in both languages (informally), back-translated each item and concluded that overall, the translation was good and highlighted for us some of the nuances.

## Measurement

### Love as a Basis for Marriage

Kephart's question "If a man (woman) had all other qualities you desired, would you marry this person if you were not in love with him (her)?" was the first question that appeared on the questionnaire (Kephart, 1967). Kephart (1967) and other researchers using this item have generally included either three options (no, yes, undecided) or two options (yes, no), whereas we provided five options: *strongly no*, *moderately no*, *undecided*, *moderately yes*, and *strongly yes*. We also asked another version of this question, which asked specifically about the importance of passionate love for entering marriage. This question was phrased, "If a man (woman) had all the other qualities you desired and you experienced a friendship/companionate love but not a sexual attraction or passionate love for him (her), would you marry him or her?" The same five response options were provided (ranging from *strongly no* to *strongly yes*). The responses to both items were recoded so that a higher score indicated a stronger love-marriage connection.

Also included in the questionnaire were two items designed by Simpson et al. (1986) to measure the role of love in the maintenance of marriage: (1) "If love has completely disappeared from a marriage, I think it is probably best for the couple

to make a clean break and start new lives." (2) "In my opinion, the disappearance of love is not a sufficient reason for ending a marriage, and should not be viewed as such." Each of the items was followed by a 5-point response scale: *strongly disagree*, *moderately disagree*, *neutral*, *moderately agree*, and *strongly agree*. Hence, a higher score for each of these items indicated a stronger importance of love for the maintenance of marriage. Because the items were conceptually similar and positively correlated ( $r = .68, p < .001$ , in the American sample;  $r = .29, p < .001$ , in the Chinese sample), they were combined. A third item was included that specifically assessed the importance of passionate love for maintenance of marriage: "In your opinion, if passionate love or sexual attraction has disappeared from a marriage, but the two still love each other in a companionate/friendship way, is it probably best for the couple to make a clean break and start new lives?" (the same 5-point response scale was used). Finally, participants were also asked about the importance of emotional satisfaction and physical pleasure for continuing a marriage. The two questions were (1) "How important is it to you that a marriage be emotionally satisfying in order for you to want to continue it?" (2) "How important is it to you that a marriage be physically pleasurable in order for you to want to continue it?" Five responses followed each item, ranging from *extremely important* to *not at all important*. These responses were re-coded so that higher scores indicated greater importance of emotional satisfaction and physical pleasure to marriage.

### Romantic Attitudes

The Sprecher and Metts (1989) Romantic Beliefs Scale was included as a measure of romantic attitudes or beliefs. This scale contains 15 items that measure a variety of romantic beliefs: love finds a way (e.g., "If I love someone, I know I can make the relationship work, despite any obstacles"), one and only (e.g., "There will be only one real love for me"), idealization (e.g., "I'm sure that every new thing I learn about the person I choose for a long-term commitment will please me"), and

love at first sight (e.g., "When I find my 'true love' I will probably know it soon after we meet"). Participants responded to each of the 15 items on a response scale ranging from 1 (*strongly disagree*) to 7 (*strongly agree*). Thus, the higher the score, the more romantic was the respondent. For the total scale, coefficient alpha was .81 for the American sample and .76 for the Chinese sample. In our analysis, we also considered three of the four subscales identified by Sprecher and Metts (1989), which were those that had an adequate coefficient alpha (.50) in our particular samples. These were as follows: love finds a way (.75 for the American sample and .68 for the Chinese sample), one and only (.69 for the American sample and .61 for the Chinese sample), and idealization (.71 for the American sample and .52 for the Chinese sample). (We did not present analyses for the subscale, love at first sight, because of its lower reliability in both samples.)

### Belief in Destiny or Fate

To measure the degree to which our respondents believed in destiny or fate, we included both the four items from Knee's belief in Destiny Scale and three items from the larger Goodwin and Findlay (1997) Yuan Scale (Knee, 1998). The items from Knee's scale were as follows: (1) "Potential relationship partners are either compatible or they are not," (2) "A successful relationship is mostly a matter of finding a compatible partner right from the start," (3) "Potential relationship partners are either destined to get along or they are not," and (4) "Relationships that do not start off well inevitably fail." The three items selected from the Goodwin and Findlay (1997) Yuan Scale were those that appeared, on the face of it, to best measure the concept of fate. These items were as follows: (1) "A relationship is something that develops outside human control," (2) "The relationship between two people has already been decided upon, even before they meet," and (3) "If a relationship fails, it is not the individuals who are at fault; it is the result of fate." Each of the seven items was followed by a response scale ranging from 1 (*strongly disagree*) to 7 (*strongly agree*).

The coefficient alpha for the combined seven items was .71 in the American sample and .60 in the Chinese sample. The coefficient alpha for the original four-item Knee (1998) Destiny Scale was .71 in the American sample and .40 in the Chinese sample. (Because the short scale had a coefficient alpha below .50 in the Chinese sample, only the combined scale will be used in analyses including the Chinese sample.)

### Love Styles

To measure the six love styles, we included the Hendrick, Hendrick, and Dicke (1998) short form of the Love Attitudes Scale (e.g., Hendrick & Hendrick, 1986). In the questionnaire distributed to the American sample, the participants responded to each of the 24 items on a response scale ranging from 1 (*strongly disagree*) to 5 (*strongly agree*). However, in the questionnaire translated into Chinese, a response scale similar to that used for the romanticism scale (a 7-point response scale ranging from *strongly disagree* to *strongly agree*) was inadvertently used. To allow for direct comparisons of scores between the two samples, item scores in the Chinese sample were mathematically transformed to have the same 5-point response scale (i.e., scores were multiplied by .714). Unfortunately, the coefficient alpha was below .50 for both the Eros and Ludus scales in the Chinese sample, and thus no analyses will be conducted on these two scales with the Chinese sample. However, the coefficient alphas for these scales in the American sample were adequate—.65 and .69, respectively. The other love styles had the following coefficient alphas for the American sample and the Chinese sample, respectively: Storge (.78 and .77), Pragma (.66 and .59), Mania (.60 and .52), and Agape (.80 and .79).

### Results

#### Gender Differences and Similarities in the North American Sample

First, we compared American men and women on the various love beliefs, through Independent *t* test analyses. To control for making a Type I error due to the number of comparisons made in

combination with the relatively large sample, the significance level was set to  $p < .01$ . The results are presented in the first two columns of Table 1.

#### Love–Marriage Connection

In response to Kephart's question, both men and women indicated that love would be necessary for entering marriage. However, women agreed to a significantly greater degree than did men that they would need to be in love to enter marriage. Both genders also agreed that a passionate love (or sexual attraction) would be necessary to experience before entering marriage, although men and women endorsed less strongly this item than the item asking about being "in love," as indicated by paired *t* tests, this difference was significant ( $p < .001$ ) for both men and women.

Both genders also tended to believe that love was important to maintain marriage, although felt less strongly about the importance of love for the maintenance of marriage than for entering marriage.<sup>2</sup> No gender differences were found on the two-item index of the importance of love for maintaining marriage or on the item asking about the importance of passionate love (sexual attraction) for maintaining marriage. To the latter item, men and women expressed more disagreement than agreement. That is, both men and women generally did not believe that the disappearance of passionate love or sexual attraction would be a sufficient reason for ending a marriage as long as the marriage still had companionate love.

Not surprising, both men and women judged emotional satisfaction to be more important than physical pleasure for maintaining a marriage, as indicated by paired *t* tests, this difference was significant ( $p < .001$ ) for both men and women. Although there was not a gender difference in the importance of physical pleasure, women rated emotional satisfaction to be significantly more important than did men.

#### Romantic Attitudes and Belief in Destiny

Men and women in the American sample did not differ from each other on the total score of the Romantic Beliefs Scale. However, men endorsed the Idealization dimension of this scale more

Table 1. Gender Differences in Love Beliefs in the North American Sample and in the Chinese Sample

|   | North American Sample |                    | Chinese Sample   |                    |
|---|-----------------------|--------------------|------------------|--------------------|
|   | Men<br>(n = 230)      | Women<br>(n = 456) | Men<br>(n = 352) | Women<br>(n = 343) |
| Love-marriage connection                                      |                       |                    |                  |                    |
| Importance of love for entering marriage                      | 4.22 (0.94)           | 4.45 (0.86)**      | 4.05 (1.16)      | 3.88 (1.16)        |
| Importance of passionate love for entering marriage           | 3.92 (1.05)           | 4.04 (0.98)        | 3.81 (1.18)      | 3.82 (1.20)        |
| Importance of love for maintaining marriage                   | 3.10 (1.03)           | 3.09 (1.15)        | 3.78 (1.04)      | 3.70 (0.93)        |
| Importance of passionate love for maintaining marriage        | 2.20 (1.00)           | 2.20 (1.03)        | 3.37 (1.43)      | 3.23 (1.41)        |
| Importance of emotional satisfaction for maintaining marriage | 4.23 (0.79)           | 4.54 (0.65)***     | 4.38 (0.62)      | 4.39 (0.62)        |
| Importance of physical pleasure for maintaining marriage      | 3.72 (0.84)           | 3.65 (0.82)        | 3.57 (0.85)      | 3.34 (0.90)***     |
| Romanticism   |                       |                    |                  |                    |
| Total Romantic Beliefs scale                                  | 4.49 (0.85)           | 4.36 (0.90)        | 4.94 (0.83)      | 4.74 (0.88)**      |
| Belief in love finds a way                                    | 5.25 (0.99)           | 5.15 (1.03)        | 5.31 (1.04)      | 4.97 (1.03)***     |
| Belief in one and only  | 3.86 (1.37)           | 3.90 (1.52)        | 4.67 (1.44)      | 4.71 (1.58)        |
| Belief in idealization  | 4.02 (1.37)           | 3.62 (1.31)***     | 4.49 (1.29)      | 4.35 (1.27)        |
| Belief in destiny and fate                                    |                       |                    |                  |                    |
| Destiny scale   | 4.19 (1.12)           | 4.03 (1.23)        | —                | —                  |
| Destiny + yuan items  | 3.74 (0.94)           | 3.71 (1.07)        | 3.53 (0.91)      | 3.72 (0.99)**      |
| Love styles   |                       |                    |                  |                    |
| Eros  | 3.65 (0.80)           | 3.87 (0.78)***     | —                | —                  |
| Ludus   | 2.56 (0.97)           | 2.10 (0.89)***     | —                | —                  |
| Storge  | 3.23 (1.00)           | 3.34 (1.03)        | 3.56 (0.95)      | 3.30 (1.02)***     |
| Pragma  | 2.29 (0.90)           | 2.45 (0.88)        | 2.68 (0.80)      | 2.53 (0.82)        |
| Mania   | 3.08 (0.84)           | 3.00 (0.87)        | 3.37 (0.79)      | 3.22 (0.83)        |
| Agape   | 3.58 (0.91)           | 3.16 (0.86)***     | 3.73 (0.82)      | 3.19 (1.01)***     |

Note: ANOVA indicated significant Gender  $\times$  Culture interactions for importance of love for entering marriage ( $p = .001$ ), importance of emotional satisfaction for maintaining marriage ( $p < .001$ ), Storge ( $p = .001$ ), and Pragma ( $p < .01$ ). The dash (—) indicates that data were not reported because of low reliability.

\*\*  $p \leq .01$ . \*\*\*  $p \leq .001$ .

strongly than did women. Hence, men were more likely than women to idealize the partner and the relationship. In general, men and women were moderately romantic overall.

In the American sample, no gender difference was found in the belief in romantic destiny. Scores on both Knee's four-item Destiny Scale and the expanded destiny scale, which also included three

items from the Goodwin and Findlay (1997) Yuan Scale, did not significantly differ between the genders (Knee, 1998). Both genders only moderately endorsed beliefs of destiny or fate.

#### Love Styles

Of the six love styles, gender differences were found on three in the American sample. Women



scored significantly higher than men on the Eros scale, whereas men scored significantly higher than women on the Ludus and Agape scales. No gender differences were found on the Storge, Pragma, and Mania scales.

### Gender Differences and Similarities in the Chinese Sample

Next, we compared Chinese men and women on the various love beliefs, also through Independent *t* test analyses, using  $p < .01$  as the significance level. The results are presented in the right portion of Table 1.

#### Love-Marriage Connection

In China, no gender differences were found in the importance of love for either entering or maintaining marriage. The Chinese, similar to the Americans, believed that love was important for marriage. Although the Chinese also believed that passionate love was slightly less important than being "in love" for entering marriage, the difference in the responses to the two items was significant ( $p < .001$ ) only for men. On the other hand, and similar to the findings in the American sample, passionate love (sexual attraction) was viewed as less important than "love" for maintaining marriage. Although love was considered to be more important for entering marriage than for maintaining marriage in the Chinese sample (as it was for the American sample), the difference was not large.

The Chinese, similar to the Americans, believed that emotional satisfaction was more important than physical pleasure for maintaining marriage, as indicated by paired *t* tests, the difference was significant ( $p < .001$ ) for both men and women. A gender difference was found in the importance of physical pleasure for the maintenance of marriage: Chinese men rated physical pleasure to be more important than did Chinese women. However, no gender difference was found in the importance of emotional satisfaction for maintaining marriage.

#### Romantic Attitudes and Belief in Destiny

In the Chinese sample, men had a higher score than women on the Romantic Beliefs Scale.

Specifically, Chinese men scored higher than Chinese women on the Love Finds a Way dimension of the romanticism scale, indicating that Chinese men were more likely to believe that love can overcome all obstacles. However, Chinese women scored higher than Chinese men on the expanded destiny scale, indicating that Chinese women were more likely to believe in destiny or fate in romantic relationships.

#### Love Styles

The results for only four love styles are presented for the Chinese sample (because of the low reliability for the Eros and Ludus scales). Gender differences were found for two of the four scales, with men scoring higher than women. Chinese men were more storgic and agapic in their love styles than were Chinese women.

#### The Combined Samples

Thus far, we have presented the results of analyses conducted with each sample separately. Next, with the combined samples, we conducted a 2 (gender)  $\times$  2 (culture) ANOVA on each relationship belief (that had adequate reliability in both samples) for the primary purpose of examining whether there were any significant Gender  $\times$  Culture interactions. A significant interaction would indicate that the effect of gender on a particular relationship belief depends on culture. The Gender  $\times$  Culture interaction was found to be significant (at the  $p < .01$  level) for four relationship beliefs: importance of love for entering marriage,  $F(1, 1372) = 11.70, p = .001$ ; importance of emotional satisfaction for maintaining marriage,  $F(1, 1373) = 17.25, p < .001$ ; Storge,  $F(1, 1356) = 10.96, p = .001$ ; and Pragma,  $F(1, 1361) = 9.79, p = .002$ . In each case, a gender difference was found in one sample that was not found (or was even reversed) in the other sample. The means are presented in Table 1 and were discussed earlier.

In addition, the ANOVA analyses indicated that the culture main effect was significant ( $p < .01$ ) for several relationship beliefs. The means for each sample (for men and women combined) are reported in Table 2. As compared to the Chinese sample, the American sample expressed

Table 2. Cultural Differences and Similarities in Love Beliefs

|  | North American Sample<br>(n = 693) | Chinese Sample<br>(n = 735) | F for Main Effect<br>of Culture |
|--|------------------------------------|-----------------------------|---------------------------------|
| Love-marriage connection   |                                    |                             |                                 |
| Importance of love for entering marriage                         | 4.38 (0.89)                        | 3.98 (1.16)                 | 42.01***                        |
| Importance of passionate love<br>for entering marriage           | 4.00 (1.01)                        | 3.81 (1.18)                 | 7.45**                          |
| Importance of love for maintaining marriage                      | 3.10 (1.11)                        | 3.76 (0.98)                 | 124.29***                       |
| Importance of passionate love<br>for maintaining marriage        | 2.21 (1.02)                        | 3.31 (1.42)                 | 255.53***                       |
| Importance of emotional satisfaction<br>for maintaining marriage | 4.43 (0.72)                        | 4.38 (0.62)                 | 0.01                            |
| Importance of physical pleasure<br>for maintaining marriage      | 3.66 (0.84)                        | 3.46 (0.88)                 | 22.99***                        |
| Romanticism  |                                    |                             |                                 |
| Total Romantic Beliefs scale                                     | 4.40 (0.88)                        | 4.85 (0.86)                 | 73.71***                        |
| Belief in love finds a way                                       | 5.18 (1.02)                        | 5.15 (1.06)                 | 1.18                            |
| Belief in one and only   | 3.88 (1.47)                        | 4.71 (1.50)                 | 97.23***                        |
| Belief in idealization   | 3.75 (1.34)                        | 4.44 (1.28)                 | 69.50***                        |
| Belief in destiny and fate                                       |                                    |                             |                                 |
| Destiny scale  | —                                  | —                           | —                               |
| Destiny + yuan items   | 3.72 (1.02)                        | 3.63 (0.97)                 | 3.40                            |
| Love styles  |                                    |                             |                                 |
| Eros   | —                                  | —                           | —                               |
| Ludus  | —                                  | —                           | —                               |
| Storge   | 3.30 (1.02)                        | 3.43 (1.00)                 | 6.63                            |
| Pragma   | 2.39 (0.89)                        | 2.62 (0.84)                 | 24.56***                        |
| Mania  | 3.02 (0.86)                        | 3.30 (0.81)                 | 29.27***                        |
| Agape  | 3.30 (0.90)                        | 3.47 (0.96)                 | 3.29                            |

Note: The dash (—) indicates that the data were not reported because of low reliability in Chinese sample.  
\*\*  $p \leq .01$ . \*\*\*  $p \leq .001$ .

a stronger love-marriage connection in response to Kephart's question and also believed that passionate love was a more important prerequisite for entering marriage. However, the Chinese sample was more likely than the American sample to believe that love and passionate love were important for maintaining marriage (the difference between the cultures was particularly large on the item measuring the importance of passionate love for maintaining marriage). On the other hand, Americans rated physical pleasure as being more

important for maintaining marriage than did the Chinese.

The Chinese sample scored higher than the American sample on the Romantic Beliefs Scale, as well as on two specific dimensions of romanticism, belief in One and Only and Idealization. However, no cultural differences were found in the belief in a romantic destiny, as indicated by scores on the expanded destiny scale. On the love styles, cultural differences were found on two of the four scales for which analyses were possible.

Table 3. Gender Differences and Similarities in Love Beliefs in Both Samples Combined

|   | Men<br>(n = 582) | Women<br>(n = 799) | F for Main Effect<br>of Gender |
|---|------------------|--------------------|--------------------------------|
| Love-marriage connection                                      |                  |                    |                                |
| Importance of love for entering marriage                      | 4.12 (1.08)      | 4.21 (1.04)        | 0.34                           |
| Importance of passionate love for entering marriage           | 3.85 (1.13)      | 3.94 (1.09)        | 0.98                           |
| Importance of love for maintaining marriage                   | 3.51 (1.09)      | 3.35 (1.11)        | 0.62                           |
| Importance of passionate love for maintaining marriage        | 2.90 (1.40)      | 2.64 (1.31)        | 0.88                           |
| Importance of emotional satisfaction for maintaining marriage | 4.32 (0.70)      | 4.47 (0.64)        | 19.55***                       |
| Importance of physical pleasure for maintaining marriage      | 3.62 (0.85)      | 3.52 (0.87)        | 10.19**                        |
| Romanticism   |                  |                    |                                |
| Total Romantic Beliefs scale                                  | 4.76 (0.87)      | 4.52 (0.91)        | 11.41**                        |
| Belief in love finds a way                                    | 5.28 (1.02)      | 5.07 (1.03)        | 14.63***                       |
| Belief in one and only  | 4.35 (1.47)      | 4.25 (1.60)        | 0.25                           |
| Belief in idealization  | 4.30 (1.34)      | 3.93 (1.34)        | 13.87***                       |
| Belief in destiny and fate                                    |                  |                    |                                |
| Destiny scale   | —                | —                  | —                              |
| Destiny + yuan items  | 3.61 (0.93)      | 3.71 (1.04)        | 1.96                           |
| Love styles   |                  |                    |                                |
| Eros  | —                | —                  | —                              |
| Ludus   | —                | —                  | —                              |
| Storge  | 3.43 (0.98)      | 3.33 (1.02)        | 1.42                           |
| Pragma  | 2.53 (0.86)      | 2.48 (0.88)        | 0.00                           |
| Mania   | 3.25 (0.82)      | 3.09 (0.86)        | 6.36                           |
| Agape   | 3.67 (0.86)      | 3.17 (0.93)        | 92.03***                       |

Note: The dash (—) indicates that the data were not reported because of low reliability in Chinese sample.

\*\*  $p \leq .01$ . \*\*\*  $p \leq .001$ .

The Chinese sample scored higher on the Pragma and Manic scales.

The main effect of gender from these analyses was significant for importance of emotional satisfaction (higher for women), importance of physical pleasure (higher for men), Total Romantic Beliefs Scale (higher for men), belief in Love Finds a Way (higher for men), belief in Idealization (higher for men), and Agape (higher for men). Table 3 gives means for men and women from the combined samples.

We also compared the eta-square (i.e., effect size, or the proportion of variance in the dependent variable that is attributable to a particular effect) for the gender main effect, the culture main effect, and the Gender  $\times$  Culture interaction effect. The effect size for gender was greatest for Agape (.06). Otherwise, gender's effect size was either .00 or .01 (the mean eta-square for gender was .007). Eta-square was higher for culture; it ranged from .00 to .16 (importance of passionate love for marriage); the mean eta-square was .035. Finally, the

proportion of variance (i.e., eta-squared) attributed to the Gender  $\times$  Culture interaction was also low (mean = .003; see Table 4).

### Gender and Other Subcultures Within the American Sample

As indicated earlier, gender interacted with culture for four specific relationship beliefs. With the

American sample, we also examined the possibility that the effect of gender depended on (or interacted with) other subculture memberships (i.e., race/ethnicity and social class). We used the standard significance level ( $p < .05$ ) for these analyses because the smaller size of the minority groups in the American sample reduces statistical power for detecting differences.

Table 4. Eta-Square (Effect Size) for Main Effect of Gender, Main Effect of Culture, and Gender  $\times$  Culture Interaction

|  | Eta-Square<br>for Gender | Eta-Square<br>for Culture | Eta-Square for the<br>Gender $\times$ Culture<br>Interaction |
|--|--------------------------|---------------------------|--|
| Love-marriage connection   |                          |                           |  |
| Importance of love for<br>entering marriage                      | .00                      | .03                       | .01  |
| Importance of passionate love<br>for entering marriage           | .00                      | .01                       | .00  |
| Importance of love<br>for maintaining marriage                   | .00                      | .08                       | .00  |
| Importance of passionate love<br>for maintaining marriage        | .00                      | .16                       | .00  |
| Importance of emotional<br>satisfaction for maintaining marriage | .01                      | .00                       | .01  |
| Importance of physical pleasure<br>for maintaining marriage      | .01                      | .02                       | .00  |
| Romanticism  |                          |                           |  |
| Total Romantic Beliefs scale                                     | .01                      | .05                       | .00  |
| Belief in love finds a way                                       | .01                      | .00                       | .00  |
| Belief in one and only   | .00                      | .07                       | .00  |
| Belief in idealization   | .01                      | .05                       | .00  |
| Belief in destiny and fate                                       |                          |                           |  |
| Destiny scale  | —                        | —                         | —  |
| Destiny + yuan items   | .00                      | .00                       | .00  |
| Love styles  |                          |                           |  |
| Eros   | —                        | —                         | —  |
| Ludus  | —                        | —                         | —  |
| Storge   | .00                      | .01                       | .01  |
| Pragma   | .00                      | .02                       | .01  |
| Mania  | .00                      | .02                       | .01  |
| Agape  | .06                      | .00                       | .00  |

Note: The dash (—) indicates that the data were not reported because of low reliability in Chinese sample.

\*\* $p \leq .01$ . \*\*\* $p \leq .001$ .

In our examination of differences based on racial/ethnic group (to be referred to as race), we compared only the races having the most members in this sample, which were Whites ( $n = 463$ ), Blacks ( $n = 78$ ), and Hispanic/Latinos ( $n = 56$ ). We also had eliminated the small Canadian subsample because it consisted primarily of White respondents.

As indicated by the ANOVAs, no significant Gender  $\times$  Race interactions were found for any of the relationship beliefs, indicating that the effect of gender was similar across the three races. However, a significant main effect for race was found for five relationship beliefs. The means of the relationship beliefs for each major race are reported in Table 5. First, a race main effect was found for

Table 5. Racial/Ethnic Differences in Love Beliefs (Within the U.S. Sample)

|   | Whites ( $n = 463$ )      | Blacks ( $n = 78$ )      | Hispanic/Latino<br>( $n = 56$ ) | F for Main<br>Effect of Race |
|---|---------------------------|--------------------------|---------------------------------|------------------------------|
| Love-marriage connection                                      |                           |                          |                                 |                              |
| Importance of love for entering marriage                      | 4.42 (0.84)               | 4.36 (0.93)              | 4.34 (0.92)                     | 1.02                         |
| Importance of passionate love for entering marriage           | 4.07 (0.95)               | 3.90 (1.04)              | 3.91 (1.23)                     | 1.59                         |
| Importance of love for maintaining marriage                   | 3.12 (1.06)               | 2.94 (1.28)              | 3.04 (1.34)                     | 1.65                         |
| Importance of passionate love for maintaining marriage        | 2.19 (0.99)               | 2.23 (1.12)              | 2.09 (1.13)                     | 0.34                         |
| Importance of emotional satisfaction for maintaining marriage | 4.47 (0.70)               | 4.35 (0.75)              | 4.50 (0.74)                     | 0.57                         |
| Importance of physical pleasure for maintaining marriage      | 3.69 (0.82)               | 3.67 (0.82)              | 3.55 (0.87)                     | 0.56                         |
| Romanticism   |                           |                          |                                 |                              |
| Total Romantic Beliefs scale                                  | 4.38 (0.86)               | 4.37 (0.88)              | 4.29 (1.04)                     | 0.03                         |
| Belief in love finds a way                                    | 5.17 (1.02)               | 5.28 (0.89)              | 4.99 (1.30)                     | 1.00                         |
| Belief in one and only  | 3.86 (1.41)               | 3.71 (1.53)              | 3.89 (1.71)                     | 0.24                         |
| Belief in idealization  | 3.70 (1.29)               | 3.65 (1.39)              | 3.71 (1.55)                     | 0.50                         |
| Belief in destiny and fate                                    |                           |                          |                                 |                              |
| Destiny scale   | 4.10 (1.15)               | 3.99 (1.27)              | 3.69 (1.41)                     | 2.88                         |
| Destiny + yuan  | 3.68 (0.97)               | 3.86 (1.05)              | 3.47 (1.28)                     | 3.04*                        |
| Love styles   |                           |                          |                                 |                              |
| Eros  | 3.85 (0.79)               | 3.64 (0.87)              | 3.73 (0.73)                     | 1.89                         |
| Ludus   | 2.21 (0.93)               | 2.33 (0.94)              | 2.48 (1.06)                     | 4.33*                        |
| Storge  | 3.24 <sub>a</sub> (1.01)  | 3.56 <sub>a</sub> (1.02) | 3.42 (1.01)                     | 3.08*                        |
| Pragma  | 2.34 <sub>a</sub> (0.89)  | 2.64 <sub>a</sub> (0.83) | 2.58 (0.91)                     | 5.77**                       |
| Mania   | 3.03 (0.86)               | 3.00 (0.86)              | 2.84 (0.83)                     | 0.67                         |
| Agape   | 3.39 <sub>ab</sub> (0.86) | 2.99 <sub>a</sub> (0.93) | 2.96 <sub>b</sub> (0.95)        | 8.40***                      |

Note: The same subscripts within a row indicate significant differences between the two cultures on the basis of follow-up Bonferonni tests. A preliminary 3 (race)  $\times$  2 (gender) ANOVA indicated no significant Race  $\times$  Gender Interactions.

\* $p \leq .05$ . \*\* $p \leq 0.01$ . \*\*\* $p \leq .001$ .

the expanded destiny belief scale. Whites had the highest score and Hispanic/Latinos had the lowest scores, although a follow-up Bonferonni test indicated no group was significantly different from another group. Second, a significant race effect was found for Ludus, and Hispanics/Latinos had the highest scores. However, a follow-up Bonferonni test indicated that no group was significantly different from another group. Third, a significant race effect was found for the Storge love style. Blacks had the highest Storge scores, whereas Whites had the lowest scores. A follow-up Bonferonni test indicated that a significant difference existed, more specifically, between Whites and Blacks. Fourth, a significant race effect was found for the Pragma love style scale. Blacks and Hispanic/Latinos scored higher than Whites on Pragma (the follow-up Bonferonni test indicated that the difference was significant between Whites and Blacks). Finally, a significant main effect for race was found for the Agape scale. The mean was highest for Whites and lowest for Blacks; a follow-up Bonferonni test indicated that the scores of White respondents scored significantly higher than both Black respondents and Hispanic/Latino respondents. The eta-square attributed to each effect (gender, race, Gender  $\times$  Race), however, was quite low; that is,  $<.01$ .

For the purpose of examining the possible effect of social class on relationship beliefs, we divided our North American sample (including the Canadians) into two groups: (1) those who identified their family's social class as either upper class (3.9%), upper-middle class (26.6%), or middle class (49.1%); and (2) those who identified their family's social class as either lower-middle class (11.8%), working class (6.5%), or lower class, working poor (2.0%). As indicated by a 2 (gender)  $\times$  2 (social class) ANOVA, no significant Gender  $\times$  Social Class interactions were found for any of the relationship beliefs, indicating that the effect of gender was similar in the different social classes.

However, a significant main effect for social class was found for five relationship beliefs. Those of the middle/upper classes scored higher than those of the lower classes on the item that passionate love is necessary for entering marriage, on the

total romanticism scale, on the idealization component of romanticism, on the expanded destiny scale, and on Pragma. The means are presented in Table 6. The eta-square attributed to each effect (gender, social class, Gender  $\times$  Class) was quite low; that is,  $<.01$ .

## Discussion

This study contributes in several ways to our knowledge base about the influence of gender on relationship beliefs. Below, we first discuss general findings on the basis of our comparisons across genders, cultures, race and social class, and relationship beliefs. Second, we highlight and discuss our findings on beliefs related to the love-marriage connection. Third, we provide an interpretation of some of our findings unique to China by discussing recent changes in this country. Last, we note the limitations of the study.

## Some General Findings

One issue we examined was the importance of gender relative to other cultural and subcultural memberships in influencing relationship beliefs. In comparing the effects of gender with the effects of culture (China vs. North America) on the relationship beliefs, we found that there were more differences based on culture than those based on gender. This finding suggests that the social conditions that influence relationship beliefs are likely to differ more for members of two very diverse cultures than for men and women within a culture. In our comparison of subgroups within the American sample, approximately as many ethnic/race and social class differences were found as gender differences, as indicated in the bivariate analyses. In the multiple regression analyses, in which all the social group membership variables were included as predictors, gender was least often a significant predictor. These results suggest that gender may be overrated as a social group membership variable likely to lead to differences in relationship beliefs and phenomena.

A second issue we examined was whether gender differences were similar (or different) in the two cultures as well as in the subcultures

Table 6. Social Class Differences in Love Beliefs (Within North American Sample)

|  | Lower/Working<br>Classes (n = 140) | Middle/Upper<br>Classes (n = 548) | F for Main Effect<br>of Social Class |
|--|------------------------------------|-----------------------------------|--------------------------------------|
| Marriage-love connection   |                                    |                                   | 3.00                                 |
| Importance of love for entering marriage                         | 4.26 (1.00)                        | 4.41 (0.86)                       |                                      |
| Importance of passionate love<br>for entering marriage           | 3.80 (1.09)                        | 4.05 (0.97)                       | 6.15*                                |
| Importance of love for maintaining marriage                      | 3.11 (1.23)                        | 3.09 (1.08)                       | 0.09                                 |
| Importance of passionate love<br>for maintaining marriage        | 2.14 (1.01)                        | 2.22 (1.02)                       | 0.36                                 |
| Importance of emotional satisfaction<br>for maintaining marriage | 4.43 (0.74)                        | 4.44 (0.71)                       | 0.29                                 |
| Importance of physical pleasure<br>for maintaining marriage      | 3.55 (0.79)                        | 3.70 (0.84)                       | 2.50                                 |
| Romanticism  |                                    |                                   | 5.26*                                |
| Total score  | 4.26 (0.90)                        | 4.44 (0.87)                       |                                      |
| Belief in love finds a way                                       | 5.09 (1.15)                        | 5.20 (0.98)                       | 1.21                                 |
| Belief in one and only   | 3.70 (1.41)                        | 3.92 (1.48)                       | 2.94                                 |
| Belief in idealization   | 3.48 (1.29)                        | 3.82 (1.34)                       | 8.71**                               |
| Belief in destiny and fate                                       |                                    |                                   | 2.40                                 |
| Destiny scale  | 3.93 (1.20)                        | 4.12 (1.19)                       |                                      |
| Destiny + yuan items   | 3.57 (1.06)                        | 3.76 (1.01)                       | 4.29*                                |
| Love styles  |                                    |                                   | 1.33                                 |
| Eros   | 3.72 (0.81)                        | 3.82 (0.79)                       |                                      |
| Ludus  | 2.18 (1.00)                        | 2.27 (0.92)                       | 1.68                                 |
| Storge   | 3.32 (1.03)                        | 3.30 (1.02)                       | 0.04                                 |
| Pragma   | 2.24 (0.83)                        | 2.44 (0.90)                       | 4.59*                                |
| Mania  | 2.97 (0.89)                        | 3.04 (0.86)                       | 0.47                                 |
| Agape  | 3.26 (0.93)                        | 3.31 (0.89)                       | 0.29                                 |

Note: A 2 (social class)  $\times$  2 (gender) ANOVA indicated no significant Social Class  $\times$  Gender interactions.

\* $p \leq .05$ . \*\* $p \leq .01$ .

based on race/ethnicity and social class within the American sample. In both the Chinese and the American samples, several gender differences were found in relationship beliefs, but with only one exception, the gender differences found in the American sample were not the same as the gender differences found in the Chinese sample. (The ANOVA results indicated a significant Gender  $\times$  Culture interaction more specifically for four relationship beliefs.) These results, combined with other cross-cultural studies that have examined gender differences

in relationship beliefs in diverse cultures (e.g., Sprecher et al., 1994), suggest that the gender differences that have consistently been found in North American and West European samples may not be found in other cultures. On the other hand, we found gender differences and similarities to be generally consistent in the different subcultures within the American sample. We found no Gender  $\times$  Race or Gender  $\times$  Social Class interactions, which indicate that the gender effect was the same regardless of these other subcultural memberships.

Because we included measures of several relationship beliefs in this study, a third issue we could examine is how the strength of the gender effect varied across types of relationship beliefs. It was clear that the effect of gender differed in strength across relationship beliefs, although as already noted, these differences were not the same in the Chinese sample as those in the American sample. In general, for the samples combined, the largest effect for gender (the greatest variance explained) was for *Agape*.

### The Love–Marriage Connection

We highlight some of our findings for the beliefs about the love–marriage connection because we included new measures in this study resulting in new insights on the topic. Furthermore, we found an interesting gender difference that was the reverse of what has been found in past research.

Kephart (1967) found in the 1960s that women were more willing than men to marry without love, but Simpson et al. (1986) found no gender differences with samples from the 1970s and 1980s. Generally, other studies conducted in the 1990s that included the Kephart question on the importance of love–marriage connection also did not find a gender difference (e.g., Sprecher et al., 1994). Interestingly, in this American sample, obtained in 1999–2001, a gender difference was found, but a reverse one of that found by Kephart in the 1960s. Both men and women believed it was important to be in love with the person they married, but women felt more strongly about this than did men. The explanation provided for the gender difference found by Kephart in the 1960s was that women needed to be pragmatic about marriage choices because their husband often determined their financial security and social status. Simpson et al. (1986), in discussing why they found no gender differences in the samples they obtained from college students in 1976 and 1984, highlighted changes in society since the mid-1960s, including greater proportions of women seeking college education and entering the workforce. The cohort of young adults represented in this study not only experienced the opportunities that women in the 1960s did not have, but also were socialized by

mothers who had these opportunities. Thus, it is possible that when women are unconstrained by practical considerations and are free to emphasize emotional considerations in a marriage partner, they actually emphasize love as a prerequisite for marriage to a greater degree than do men. In fact, our findings that the middle- and upper-class respondents were more likely than the lower-class respondents to have a stronger passionate love–marriage connection also suggests that financial stability contributes to the freedom to focus on love, particularly passionate love, in marriage choices.

Although the gender difference found to the Kephart question in this sample was significant, it was a small difference compared to the reverse gender difference found by Kephart in the 1960s. Hence, until this difference is replicated in future studies, we cannot assume that it is a strong and robust new gender difference. It was not found in the Chinese sample (the means were in the opposite directions, although not significantly different), which may reflect the greater traditionalism of the Chinese.

We also had included a variation of the Kephart question that asked about the willingness to marry someone who had “all other qualities you desired” and to whom a “friendship/companionate love was experienced” but “not passionate love or sexual attraction.” Similar to how they responded to the Kephart question, our participants were more likely to say *no* than *yes* to this question. However, they were significantly more moderate in their *no* than they were to Kephart’s original question, suggesting that the respondents’ interpretation of the “in love” in the Kephart measure included something in addition to or other than passionate love and sexual attraction (see discussion by Berscheid & Meyers, 1996).

Although the responses to the questions asking about the importance of love for the maintenance of marriage were not compared directly with responses to the Kephart’s question and our variation of Kephart’s question (because of differences in response formats), nonetheless the lower means on the former items justify the conclusion that our participants believed less strongly that love is



important for the maintenance of marriage than that love is important for the entrance into marriage. The participants were particularly likely to believe that passionate love is not necessary for the maintenance of marriage. No gender differences were found in the perceived importance of love or passionate love for the maintenance of marriage. Women, however, believed to a greater degree than men that emotional satisfaction was important for maintaining marriage.

### Making Sense of Findings with the Chinese Sample in Light of Recent Changes in China

Our research findings with respect to the Chinese sample deserve some discussion and elaboration, given the lack of empirical research about Chinese love and romantic attitudes available to English-speaking audiences. In addition, our data offer a unique opportunity to compare and contrast two cultural traditions that have evolved along different conventions with respect to love and romantic relationships. In Western cultures, research supports the view that love is intensely individual. In Asian cultures, love is expected to develop more gradually and not to disrupt established family relations, an important feature of life in predominantly collective societies. More specifically, in China, researchers have found that the concept of *yuan*, the belief that a relationship is preordained by destiny, shapes beliefs about love and relationships (Goodwin & Findlay, 1997).

Although there is a rich tradition of love and romantic attitudes in China that goes back many centuries, under the influence of the Chinese Communist Party that came to power in the late 1940s, much of that history was lost and new cultural practices were introduced in keeping with communist values. For example, under Mao's totalitarian rule the individual was completely subordinated to the community. Relationships between men and women were strictly monitored and "falling in love" was considered a "bourgeois" sin punishable with years in prison. In the same vein, open expressions of love and affection were seen as signs of weaknesses. According to Xiaohe

and Whyte (1990), the communist regime erected considerable barriers that inhibited young people from developing a dating culture. Under the austere communist regime, much like the feudal system it sought to replace, marriage was a practical choice between two parties. Yet, recent economic reforms and China's integration to a global economy have brought important changes in the lives of Chinese men and women. For example, there is more freedom for young men and women to select their own partners (Xiaohe & Whyte, 1990). In addition, as Li (1998) observed, recent economic reforms have led to the adoption of Western ideals of fashion, beauty, and feminine values. Without prior research as a basis to compare we speculate that the gender differences we found in love styles speak to the changes taking place in the country with respect to relationships. In a country where marriages were arranged, and love was probably an outcome of marriage, not a precursor, it is significant to find that men were more romantic than women and more likely to view physical pleasure as important for maintaining marriage.

Yet, for all of the social and cultural changes taking place in China as the country moves from a state-controlled to a market economy, our data indicate that some cultural values tend to be more resistant to change than others. For example, their practical approach to love and romantic relationships can be grounded in the notion that a potential partner is the source of important resources such as housing, ability to move to more lucrative places, and access to schools and other resources still needed to maintain a family. Clearly, more research needs to be done to further explore gender differences across class and nationality groups within China. We are hopeful that China's opening to the world community will result in more research opportunities for Chinese scholars and for more collaborations between Western and Chinese researchers.

### Limitations of the Study

Research in more than one country is important to conduct but is not without problems. One limitation of our study is that the samples for both cultures were convenience samples, each with an

unknown degree of representation of its larger culture. Another limitation, also a sampling issue, is that the data were collected exclusively from university and college settings. Hence, we cannot generalize our findings to young adults who do not go to college and who are often from the lower classes. The predominantly middle-class college sample also limited our ability to compare relationship beliefs across social classes because we had few respondents representing the lowest classes. A third limitation is that we can never be sure that a cross-cultural difference (or similarity) found is not simply an artifact of a poor or an impossible translation. That is, we cannot be sure that individuals in both cultures are responding to items with equivalent meanings. A fourth limitation is that we are using measures that were developed by researchers belonging to only one of the cultures represented; hence, there may be important beliefs about love that were unique to China that were not assessed.

We anticipated all of these limitations before undertaking this study, but chose to pursue the research anyway because of our belief that imperfect research in understudied countries (e.g., China) is more desirable than no research.

### Conclusions

As we conclude, we return to the question raised by the title of our paper: Are men from Mars and women from Venus? Our research suggests that this popular paradigm loses ground when held against scientifically collected data and analysis. For example, when comparing Chinese and American samples, cultural differences seemed to override differences based on gender. Equally significant is our finding that gender may be an overrated variable that does not explain much variance in relationship beliefs and other phenomena. Yet, this is no reason to completely abandon the idea that there are important differences between men and women. Instead, future researchers need to pay more attention to the effects of other social variables such as ethnicity, race, and social class and how they intersect with gender.

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### Notes

1. An earlier version of this paper was presented at the International Conference on Personal Relationships, sponsored by INPR and ISSPR, Prescott, AZ, June 29 to July 3, 2001.
2. Because the format of the questions and response options for the Kephart question differed from that of the questions that asked about the importance of love for the maintenance of marriage, a paired *t* test was not conducted to directly compare the responses.

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