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# Communication Behavior and Relationship Satisfaction Among American and Chinese Newlywed Couples

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## Abstract

Most research on couple communication patterns comes from North America and Europe and suggests cross-cultural universality in effects, but emerging studies suggest that couple communication takes different forms depending on the cultural context in which it occurs. The current study aims to address this discrepancy by comparing the observed social support behaviors of 50 newlywed American couples and 41 newlywed mainland Chinese couples, first on mean levels of positivity and negativity and second on behavior-satisfaction associations. Consistent with predictions derived from observational work by Tsai and Levenson (1997), Chinese couples were observed displaying significantly more negative behavior than American couples, even after controlling for relationship satisfaction; the two groups did not differ in observed positive behaviors. Tests of the moderating role of culture on behavior-satisfaction associations showed that positivity was significantly related to relationship satisfaction only for American husbands, whereas negativity was significantly associated with relationship satisfaction only for Chinese husbands. We speculate that cultural contexts may influence the display and evaluation of behavior in intimate relationships, suggesting the need for caution when generalizing models and associated interventions to non-Western couples.

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**Keywords**

couples; communication; cross-cultural; observational; Chinese

Adults the world over pair up to form intimate relationships that they intend to maintain for a long time. Are the patterns of behaviors exchanged in these relationships similar and comparable across cultural boundaries, or do they vary in systematic ways with the cultural contexts in which they occur? Although observational research on interpersonal communication in intimate relationships has been conducted primarily with samples of Western couples (for a review, see Bradbury & Karney, 2010), a small body of cross-cultural evidence has now accumulated to permit deeper analysis of this question. Results to date are equivocal, however, with some studies suggesting the universality of couple communication processes (e.g., Hooley & Hahlweg, 1989) and other studies suggesting that couple interactions reflect cultural influences (e.g., Rehman & Holtzworth-Munroe, 2007). Addressing whether communication in intimate relationships is relatively universal across cultures versus unique to specific cultural settings is important for clarifying the boundary conditions that govern the breadth of our models of intimate functioning and, in turn, the exportability of interventions designed to improve relationships in couples from different cultural backgrounds.

The purpose of the present study is to shed light on these issues using samples of couples from the United States and China, observed at a common stage of their relationships (as newlyweds) while engaging in identical interactional tasks and coded with the identical coding system. We chose these two countries for comparison because differences between Eastern and Western cultures have been well-documented, and because these differences appear to be especially pertinent to the organization of social life. While a range of endorsement of cultural values is likely to exist in any given culture, Chinese culture is thought to be highly collectivistic whereas American culture is highly individualistic. The collectivistic culture in China means that individuals tend to view themselves in terms of their relatedness to social groups and value group harmony. Americans are relatively individualistic in comparison, assign greater value their uniqueness and autonomy, and view themselves as individuals, separate from the larger group (e.g., Hui & Triandis, 1986).

Broader cultural differences in the relative degree to which individuals construe themselves as individualistic versus collectivistic are likely to manifest themselves in the ways people think about and manage their intimate relationships (e.g., Epstein, Chen, & Beyder-Kamjou, 2005). Couples in the United States can be expected to place greater emphasis on intimacy and closeness as individual and dyadic pursuits; reactions of friends and family are not unimportant, but the experience of mutual attraction and romantic love drives the decision to marry (e.g., Buss, Shackelford, Kirkpatrick, & Larsen, 2001). In contrast, married couples in China can be expected to downplay the importance of meeting individual and couple-level needs, instead placing stronger emphasis on factors outside of the intimate relationship, such as their relationship with in-laws and friends and the approval of their family (Chang & Chan, 2007).

We can take this view one step further and propose that these differing cultural conceptions of relationships may affect the manner in which spouses from individualistic and collectivistic countries communicate with each other. Given their relative emphasis on connection, love, and intimacy, western couples should be inclined toward overt expressions of warmth and support and fewer expressions of derision and criticism towards one's partner than would be expected in Chinese couples, for whom displays of romantic love and intimacy are less important. Two lines of research support this view. A daily diary study of couples from Germany, Switzerland, Austria, Netherlands, Belgium, Portugal, Russia, and China found that Chinese husbands and wives displayed more anger towards each other than spouses in nearly every other country (Schoebi, Wang, Ababkov, & Perrez, 2010). Direct laboratory observation of European-American and Chinese-American couples yields similar results: the latter are less positive (Tsai & Levenson, 1997; Tsai, Levenson, & McCoy, 2006) and more negative than their European-American counterparts (Tsai et al., 2006). As the only direct observational studies to date that compare individuals with relatively individualistic and relatively collectivistic backgrounds, these studies are valuable because they help clarify possible effects of cultural factors on intimate communication. Accordingly, the first goal of the present study is to test the hypothesis that Chinese couples will be less positive and more negative than American couples, while also building upon the observational work by Tsai and colleagues in two respects: by studying married couples rather than dating couples, and by studying Chinese couples who reside in China rather than Chinese-American couples.

A second approach to exploring possible effects of culture on relationship functioning entails going beyond mean differences in behavior to examine cultural moderation of the association between behavior and relationship satisfaction. In the same manner that individualism and collectivism might affect partners' tendencies to display particular behaviors, so too might these influences affect the salience of positive and negative behaviors in spouses' self-reported evaluations of relationship satisfaction, with positivity and negativity correlating differently with relationship satisfaction in individualistic and collectivistic cultures. Prior research has not addressed this question to our knowledge, but three possible outcomes can be outlined. First, independent of any differences in observed behaviors, behavior-satisfaction associations could be similar in Chinese and American couples, with a likely outcome being that higher levels of satisfaction covary with higher levels of positive behaviors and lower levels of negative behaviors, across groups. A second possibility is that the communication behaviors, regardless of their valence, will covary more strongly with relationship satisfaction among American couples, given the relative salience of intimacy and love in western culture. Chinese couples, by contrast, may be less attuned to these influences, if their judgments of relationship satisfaction are rooted more deeply in experiences outside the immediate couple environment (e.g., fulfilling family responsibilities and promoting family harmony, at the expense of individual or couple needs). A third possibility is that positive behavior will be linked more closely with higher satisfaction in American couples by virtue of the relatively high value placed on closeness and connection in western culture, whereas negative behavior will be linked more closely with lower satisfaction in Chinese couples by virtue of the high threat value it has for couple and group harmony. In the absence of previous studies on this point, we will adopt the conservative

view and assume that culture will not moderate the association between satisfaction and behavior, while remaining open to the remaining two possibilities.

## Method

### Sampling

Sampling was undertaken to identify newlywed American and Chinese couples who were within nine months of their wedding, in their first marriage, and of the same ethnicity (Caucasian in the American subsample; Chinese in the Chinese subsample). American couples, identified via marriage license applications in Los Angeles County, were telephoned and screened to ensure that they met the above eligibility criteria. Chinese couples were recruited by lab members at Zhejiang Normal University in China, who contacted acquaintances to locate couples who met the above eligibility criteria. The identified couples were from large urban areas in seven widely dispersed Chinese provinces: Zhejiang, Anhui, and Jiangsu in Southern China ($n$ = 24), Henan and Shanxi in Central China ($n$ = 13), and Beijing and Heilongjiang in Northern China ($n$ = 4). The first 50 American couples and the first 41 Chinese couples identified with the above procedures comprised the final sample.

### Procedure

Couples were visited in their homes by trained interviewers who described the IRB-approved study and obtained written informed consent. After completing self-report measures, partners were reunited for two 8-minute videotaped discussions. These discussions took place in a location of the couples' choosing that would enable them to talk without interruption. Partners were seated at a ninety-degree angle to allow them to interact normally while remaining visible to the single camera in front of them. For the first interaction, one randomly chosen spouse was asked to "talk about something you would like to change about yourself" while the partner was told to "be involved in the discussion and respond in whatever way you wish" following procedures developed by Pasch and Bradbury (1998; also see Cutrona, 1996). Spouses were instructed to avoid selecting any topics that were sources of tension within the relationship. After a short break, a second discussion was held that was identical to the first discussion, with the roles reversed. At the end of the session, couples were debriefed and American couples were paid $75 for participating while Chinese couples were given a gift worth approximately $10. Instructions for the behavioral interactions and items from the self-report questionnaires were translated from English into Mandarin, then verified by back-translation into English.

Chinese and American couples, and men and women, were very similar in the topics they chose for discussion; "work/career" was the most popular topic, with 20% or more of each group discussing this issue. The next most popular topic for Chinese men was "communicating better with others," which was chosen by 10%. The second most popular topic for Chinese women was "losing weight," which was discussed by 12%. For American men, the second most popular topics were "losing weight" and "stress management" which were both discussed by 8%. The second most popular topic for American women was "stress management," which was chosen by 20%.

## Measures

**Interaction Behavior.—**Videotapes of the American sample were coded by nine English-speaking coders and videotapes of the Chinese sample were coded by two bilingual coders (fluent in English and Mandarin) using the Iowa Family Interaction Rating Scales (IFIRS; Melby et al., 1998), with one coder in common in the two groups. To ensure that the coders implemented the coding system similarly for all couples the coders from both groups attended all training activities together. Coders participated in 10 hours of training per week for 3 months and were required to pass written and viewing tests at an 80% percent accuracy level before coding tapes. The criterion scores used to judge coder accuracy were determined by expert coders at the Institute for Social and Behavioral Research at Iowa State University, where the IFIRS was developed. Coders participated in weekly two-hour training meetings, which consisted of a variety of structured activities (e.g., watching examples of specific codes) designed to minimize drift and ensure fidelity to the IFIRS codes. Coders viewed each of the interaction tasks three to four times using the Noldus Observer XT coding software, using the built-in capabilities to note behaviors of both spouses. Coders then used their notes to tabulate the frequency and intensity of each type of behavior and to assign a single score for each spouse for each IFIRS code which reflects the extent to which they exhibited that code throughout the entire interaction. To assess reliability, 20% of the American videos and 40% of the Chinese videos were randomly assigned to be double-coded. The scores of the two coders were compared and any discrepancies were resolved by both coders working together, to produce the final set of scores used in analyses for the reliability tapes. An average of 17.5% of codes for American tapes and 20% of codes for Chinese tapes were discrepant between the two coders. This is a low level of disagreement which meets the 80% agreement level suggested by the developers of the IFIRS to indicate adequate interrater agreement (Melby & Conger, 2001).

A positivity composite was created by averaging an individual's scores on group enjoyment, positive mood, warmth/support, physical affection, humor/laugh, endearment, and listener responsiveness (see Williamson, Bradbury, Trail, & Karney, 2011 for a complete description if this process). Examples of behaviors that would be coded as positivity include: compliments, shared laughter, nodding in agreement, and encouraging statements. Because positivity scores calculated for the two discussion tasks were strongly correlated (American husbands $r = .55$, $p < .001$; American wives $r = .52$, $p < .001$; Chinese husbands $r = .56$, $p < .001$; Chinese wives $r = .50$ $p < .001$), these scores were averaged for each participant to form a single positivity score. Intraclass correlation coefficient (ICC) values reflecting interrater reliability were adequate: American men = .89, American women = .78, Chinese men = .79, Chinese women = .86.

A negativity composite was created by averaging an individual's scores on the angry coercion, contempt, denial, disruptive process, dominance, hostility, interrogation, and verbal attack codes (see Williamson et al., 2011). Examples of behaviors that would fall under negativity include: insults, interrupting, denying responsibility, and refusing to engage in conversation. Again, because scores were correlated across interaction tasks (American husbands $r = .43$, $p = .002$; American wives $r = .45$, $p = .001$; Chinese husbands $r = .69$, $p < .001$; Chinese wives $r = .67$, $p < .001$), an average value was computed for each

participant. ICC values reflecting interrater reliability for the negative composite were adequate: American men = .65, American women = .91, Chinese men = .74, Chinese women = .58.

**Relationship Satisfaction.—**The 8 items used to assess relationship satisfaction included 5 items asking how satisfied the respondent was with certain areas of their relationship, (e.g., "amount of time spent together") and were scored on a 5-point scale (1 = *Very satisfied*, 5 = *Very dissatisfied*). Three items asked to what degree the participant agreed with a statement about their relationship, (e.g., "how much do you trust your spouse") and were scored on a 4-point scale (1 = *Completely*, 2 = *Somewhat*, 3 = *Not that much*, and 4 = *Not at all*). All eight items were standardized, then summed to form the relationship satisfaction score for each individual. Coefficient α was .59 for Chinese men, .73 for Chinese women, .69 for American men, and .45 for American women. These values are lower than is typical in the couple satisfaction literature, owing to restricted ranges of variability in these newlywed subsamples.

## Results

### Preliminary Analyses

Table 1 presents descriptive statistics and results of independent samples *t* tests comparing the demographics of the American and Chinese subsamples of participants. All couples were married for nine months or less and the length of marriage did not differ between groups. The subsamples did differ on some demographic characteristics: American couples were significantly older, more educated with higher incomes, and had known each other longer prior to marriage than the Chinese couples. Participants tended to be highly satisfied with their relationships, though there was some variation (non-standardized scores ranged from 23 to 37 for Chinese spouses and 26 to 37 for American spouses.) American spouses reported significantly higher levels of relationship satisfaction than Chinese spouses. A correlation matrix for all study variables is presented in Figure 2.

### Comparison of mean levels of positivity and negativity

To examine whether there were differences in the levels of positivity and negativity displayed by the two subsamples of couples, we conducted an omnibus 2 (Nationality [US, China]) X 2 (Behavior [positivity, negativity]), X 2 (Spouse [husband, wife]) repeated measures ANOVA, with Nationality treated as a between-subjects factor and Behavior and Spouse treated as within-subject factors. Because the two samples differed significantly on their reported levels of relationship satisfaction, it is controlled for in all analyses. The Behavior X Spouse X Nationality interaction was significant, $F(1, 84) = 4.86$, $p = .03$, $\eta^2 = .06$. To decompose the significant three-way interaction, we conducted separate 2 (Spouse [husband, wife]) X 2 (Nationality [US, China]) repeated measures ANOVAs on positivity and negativity. For positivity, the Spouse X Nationality interaction was not significant, $F(1, 84) = .07$, $p = .794$, $\eta^2 = .01$, and the main effect of Nationality was not significant, $F(1, 84) = .08$, $p = .78$, $\eta^2 = .01$, indicating that there was no significant difference in the level of positivity observed in American and Chinese couples, after controlling for relationship satisfaction. This was not consistent with our hypothesis that American couples would be

more positive than Chinese couples. For negativity, the main effect of Nationality was significant, $F(1, 84) = 7.95$, $p = .006$, $\eta^2 = .09$, indicating that the Chinese couples were significantly more negative than the American couples, after controlling for relationship satisfaction. The Spouse X Nationality interaction was also significant, $F(1, 84) = 23.03$, $p < .001$, $\eta^2 = .22$. To decompose the interaction, we tested the effect of Nationality for each spouse. As seen in Figure 1, the results indicated that there was no significant difference in the level of Negativity expressed by Chinese and American husbands, $F(1, 84) = .95$, $p = .33$. There was a significant difference in the level of Negativity observed in American and Chinese wives, such that Chinese wives are more negative than American wives, $F(1, 84) = 17.26$, $p < .001$. This lends support to our hypothesis that greater levels of negativity would be observed in the Chinese couples, though this difference was seen only in wives.

## Relationship between behavior and relationship satisfaction

A series of regressions was performed to explore the extent to which positivity and negativity covaried with relationship satisfaction across the two cultures. The first step was to simultaneously regress positivity, negativity, nationality (dummy coded, with 0 = Chinese and 1 = U.S.), positivity X nationality, and negativity X nationality on relationship satisfaction for the full sample of 91 couples. To test the within-spouse effects, husband behavior was regressed on husband relationship satisfaction, and wife behavior was regressed on wife relationship satisfaction. To test cross-spouses effects, husband behavior was regressed on wife relationship satisfaction and wife behavior was regressed on husband relationship satisfaction. Each of these four regressions was followed up with tests of simple slopes. All analyses included positivity and negativity simultaneously, so all results reported are controlling for the other behavior.

**Within-spouse effects.—**There was a significant interaction between husband positivity and nationality for husband relationship satisfaction, $\beta = .27$, $t(89) = 2.08$, $p = .04$, $R^2 = .02$, indicating that for husbands, positivity was associated with relationship satisfaction differently in the two subsamples (see Figure 2). Simple slopes tests demonstrated that in the Chinese subsample, positivity was not significantly related to relationship satisfaction for husbands, $\beta = -.15$, $t(39) = -.96$, $p = .34$, $R^2 = .02$, but in the American subsample, husband's positivity behavior was significantly related to their own relationship satisfaction, $\beta = .28$, $t(49) = 1.97$, $p = .05$, $R^2 = .08$, such that the more positivity the husbands displayed, the more satisfied they were with their relationship.

The interaction between husband negativity and nationality for husband relationship satisfaction was not significant, $\beta = .08$, $t(89) = .64$, $p = .77$, $R^2 = .01$. Because an aim of this study was to examine how communication behavior and relationship satisfaction are associated within each culture, we proceeded to test the simple slopes. As shown in Figure 2, the simple slopes tests demonstrated that in the Chinese subsample husband's negativity was significantly related to their own relationship satisfaction, $\beta = -.46$, $t(39) = -3.08$, $p = .004$, $R^2 = .20$, such that the more negativity the husbands displayed, the less satisfied they were with their relationships. In the American subsample, negativity was not significantly related to relationship satisfaction for husbands, $\beta = -.12$, $t(49) = -.84$, $p = .39$, $R^2 = .01$.

Neither the wife negativity X nationality interaction nor the wife positivity X nationality interaction significantly predicted wives' relationship satisfaction, β = .03, $t(87) = .20$, $p = .84$, $R^2 = .01$, and β = −.09, $t(87) = -.61$, $p = .56$, $R^2 = .01$, respectively. Despite the lack of a significant interaction, our goal to examine how communication behavior and relationship satisfaction are associated within each culture lead us to test the simple slopes of positivity and negativity within each subsample. For both subsamples there was no significant relationship between negativity and relationship satisfaction and positivity and relationship satisfaction (U.S. negativity, β = .03, $t(49) = .21$, $p = .84$, $R^2 = .01$; U.S. positivity β = .13, $t(49) = .91$, $p = .337$, $R^2 = .02$; Chinese negativity β = −.02, $t(37) = -.11$, $p = .91$, $R^2 = .01$; Chinese positivity β = .20, $t(37) = 1.19$, $p = .24$, $R^2 = .04$).

**Cross-spouse effects.—**There was a borderline significant interaction between wife positivity and nationality for husband relationship satisfaction, β = .24, $t(84) = 1.87$, $p = .06$, $R^2 = .02$, indicating that wife positivity is associated with husband relationship satisfaction differently in the two subsamples, as can be seen in Figure 2. The simple slopes demonstrate that in the Chinese subsample wife positivity is not significantly related to husband relationship satisfaction, β = −.09, $t(39) = -.59$, $p = .56$, $R^2 = .01$, but in the American subsample, wife positivity is significantly related to husband relationship satisfaction, β = .29, $t(49) = 2.08$, $p = .04$, $R^2 = .08$, such that when wives display more positivity, their husbands report higher levels of relationship satisfaction.

The interaction between wife negativity and nationality for husband relationship satisfaction was not significant, β = .17, $t(84) = 1.41$, $p = .16$, $R^2 = .03$. Again, because an aim of this study was to examine how communication behavior and relationship satisfaction are associated within each culture, we proceeded to test the simple slopes. As shown in Figure 2, the simple slopes demonstrate that in the Chinese subsample wife negativity is significantly related to husband relationship satisfaction, β = −.49, $t(39) = -3.25$, $p = .002$, $R^2 = .22$, such that when wives display more negativity, their husbands report lower levels of relationship satisfaction. In the American subsample, wife negativity is not significantly related to husband relationship satisfaction, β = −.04, $t(49) = -.26$, $p = .79$, $R^2 = .01$.

The husband negativity X nationality interaction and husband positivity X nationality interaction were not significant for wife relationship satisfaction, β = .08, $t(87) = .72$, $p = .48$, $R^2 = .02$, and β = −.16, $t(87) = -1.12$, $p = .27$, $R^2 = .01$, respectively. Our goal to examine how communication behavior and relationship satisfaction are associated within each culture lead us to test the simple slopes of positivity and negativity within each subsample. For the American subsample, neither husband positivity nor husband negativity was significantly associated with wife relationship satisfaction, β = −.02, $t(49) = -.11$, $p = .91$, $R^2 = .01$, and β = .04, $t(49) = .25$, $p = .80$, $R^2 = .01$, respectively. The same result was found for Chinese couples; husband positivity and husband negativity were not significantly associated with wife relationship satisfaction, β = .206, $t(37) = 1.18$, $p = .25$, $R^2 = .04$, and β = −.15, $t(37) = -.93$, $p = .36$, $R^2 = .02$, respectively.

## Discussion

The purpose of this study was to explore how relationship processes compare across two cultural contexts by observing the communication behaviors displayed by American and Chinese newlywed couples. We sought to understand (a) whether partners from the United States and mainland China exhibit similar levels of positivity and negativity when communicating with their spouse and (b) whether associations between these observed behaviors and self-reported relationship satisfaction varied across the two subsamples. Contrary to our hypothesis, American and Chinese couples did not differ in their levels of positivity, but consistent with our predictions, Chinese wives displayed significantly more negativity than their American counterparts. Behavior-satisfaction associations did vary across groups, with positivity covarying reliably with satisfaction only among American husbands and negativity covarying with satisfaction only among Chinese husbands. Additionally, the Chinese couples reported lower levels of relationship satisfaction than the American couples, a result which is likely tied to the higher levels of negativity and the stronger link between negativity and satisfaction in Chinese couples. These results lend preliminary support to the view that, at least for these two settings, cultural factors may influence the display and meaning of marital communication.

The results of the current study are also consistent with previous observational studies of Chinese-American couples, which found that Chinese-American couples displayed more negativity than American couples. Here it is noteworthy that the previous observational studies employed a relationship conflict paradigm (Tsai & Levenson, 1997; Tsai et al., 2006), whereas the current study used a social support paradigm in which couples were instructed to discuss an aspect of themselves they would like to change. Chinese couples' displays of more negativity in a social support context is consistent with the idea that actively seeking support may be regarded as inappropriately self-centered in collectivistic groups but as appropriate and functional behavior in individualistic groups (Markus & Kitayama, 2003). However, it is also important to acknowledge that this task may elicit different samples of behavior in the two cultures; Chinese spouses may not typically seek support from their partner in the manner prompted by the Pasch and Bradbury (1998) social support task, which asks each individual to openly identify their area of concern to their partner. Although some of this concern is offset by the fact that Schoebi et al. (2010) obtained similar results for negative behavior using a diary study, future observational studies may benefit from experimenting with different instructional sets to elicit social support behavior in Chinese couples.

The differential behavior-satisfaction associations found across the two countries are consistent with previous theorizing about preferences for different types of communication among individuals in collectivistic and individualistic cultures. The collectivist culture in China stresses the importance of social harmony, and as a result, cultural display rules encourage the use of indirect communication and discourage the expression of anger towards in-group members (e.g., Matsumoto et al., 2008; Park & Kim, 2008). In contrast, the relatively individualistic culture in the United States values uniqueness and personal expression, therefore direct communication is preferred and the expression of anger towards in-group members such as family and friends is considered acceptable. Consequently, an

expectancy violation perspective suggests that direct, negative emotions, such as anger, would be more disruptive if they occur in a collectivistic cultural context than an individualistic context because they violate cultural norms and upset group harmony (Markus & Kitayama, 1991). Additionally, because individualistic cultures value the expression of positivity more than collectivistic cultures we would expect that positivity would be a more important aspect of relationships for American than Chinese couples. Indeed the results of the current study found that negativity was significantly related to lower levels of relationship satisfaction in the Chinese couples, whereas positivity was related to higher levels of relationship satisfaction in American couples. It is noteworthy that this link was found only for husbands' relationship satisfaction. The reason for this gender difference is unclear; one possibility is that the transition to marriage may be more difficult for men than women (Lavner & Bradbury, 2010), and therefore men are more closely monitoring and evaluating their relationships at this time. However, as this is the first study to examine the link between behavior and relationship satisfaction in Chinese couples this is purely speculative and will require further research to replicate and clarify this result.

Other limitations of the current study can be noted. First, the present study is a cross-sectional examination of a relatively small sample of newlywed couples, and participants may not be wholly representative of even first-time newlywed couples in each country. Further research with larger, more representative samples of more established couples now appears warranted. Furthermore, because culture was assessed using country of residence as a proxy for cultural values, specific cultural factors cannot be directly linked to the pattern of results found in the current study. The two countries sampled in the current study are large and heterogeneous, with likely within-country variation in the degree to which cultural values are endorsed. Therefore, future studies of Chinese couples would benefit from directly measuring cultural factors, such as orientation to collectivistic and individualistic thinking or preference for direct and indirect communication in order to determine which aspect of the Chinese culture accounts for the results. Finally, the measures and coding system used were developed for American couples and translated into Mandarin for use with the Chinese couples. Because the measure of relationship satisfaction had not been validated in a Chinese sample, it is not clear whether this measure is accurately and fully assessing this construct in the Chinese sample. Similarly, it is unclear whether the couples from both countries interpreted the instructions for the discussion task in the same way. Future studies would benefit from using measurement tools and research paradigms that have been developed specifically for Chinese individuals.

Notwithstanding these limitations, the present findings lend greater confidence to prior studies showing that American and Chinese couples differ on observed levels of negativity, and we extend those studies here by observing socially supportive behaviors and by showing that links between satisfaction and behavior differ across these two cultural contexts. The culture in which a relationship occurs therefore may be an important factor in determining how individuals behave towards their spouse and how they assign meaning to this behavior. On the basis of these findings, we can speculate that existing educational interventions may not be entirely appropriate for use with Chinese couples, for whom being encouraged to communicate with their partner in a manner in line with Western ideals may not improve the relationship. For example, although the right side of Figure 2 does suggest that reducing

negative behavior could benefit Chinese husbands more than their American counterparts, the left side of this figure suggests that only American husbands might benefit from higher levels of positivity in their socially supportive conversations. In sum, by adding to a small but growing literature on how cultural factors might influence dyadic processes in intimate relationships, the present findings highlight the value of future studies that specify which aspects of interpersonal behavior are unique to particular cultures and which aspects of these interactions transcend cultural boundaries.

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## References

Bradbury TN, & Karney BR (2010). Intimate relationships. New York: W.W. Norton.

Buss DM, Shackelford TK, Kirkpatrick LA, & Larsen RJ (2001). A half century of mate preferences: The cultural evolution of values. Journal of Marriage and Family, 63, 491–503. doi: 10.1111/j.1741-3737.2001.00491.x

Chang S, & Chan C (2007). Perceptions of commitment change during mate selection: The case of Taiwanese newlyweds. Journal of Social and Personal Relationships, 24, 55–68. doi: 10.1177/0265407507072583

Cutrona C (1996). Social support in marriage. Thousand Oaks, CA: Sage.

Epstein NB, Chen F, & Beyder-Kamjou I (2005). Relationship standards and marital satisfaction in Chinese and American couples. Journal of Marital and Family Therapy, 31, 59–74. doi: 10.1111/j.1752-0606.2005.tb01543.x [PubMed: 15739967]

Hooley JM, & Hahlweg K (1989). Marital satisfaction and marital communication in German and English couples. Behavioral Assessment, 11, 119–133.

Hui CH, & Triandis HC (1986). Individualism-collectivism: A study of cross-cultural researchers. Journal of Cross-Cultural Psychology, 17, 225–248. doi: 10.1177/0022002186017002006

Lavner JA, & Bradbury TN (2010). Patterns of change in marital satisfaction over the newlywed years. Journal of Marriage and Family, 72, 1171–1187. doi: 10.1111/j.1741-3737.2010.00757.x [PubMed: 21116452]

Markus HR, & Kitayama S (1991). Culture and the self: Implications for cognition, emotion, and motivation. Psychological Review, 98, 224–253. doi: 10.1037/0033-295X.98.2.224

Markus HR, & Kitayama S (2003). Culture, self, and the reality of the social. Psychological Inquiry, 14, 277–283. doi:10.1080/1047840X.2003.9682893

Matsumoto D, Yoo SH, Fontaine J, Anguas-Wong AM, Arriola M, Ataca B, … Grossi E (2008). Mapping expressive differences around the world: The relationship between emotional display rules and individualism versus collectivism. Journal of Cross-Cultural Psychology, 39, 55–74. doi: 10.1177/0022022107311854

Melby JN, & Conger RD (2001). The Iowa Family Interaction Rating Scales: Instrument summary In Kerig P & Lindahl K (Eds.) Family Observational Coding Systems (pp. 33–58). Mahwah, New Jersey: Lawrence Erlbaum Associates.

Melby J, Conger R, Book R, Rueter M, Lucy L, Repinski D, Rogers S, Rogers B, & Scaramella L (1998). The Iowa Family Interaction Rating Scales (5th ed). Unpublished document, Iowa State University, Institute for Social and Behavioral Research.

Park YS & Kim BSK (2008). Asian and European American cultural values and communication styles among Asian American and European American college students. Cultural Diversity and Ethnic Minority Psychology, 14, 47–56. doi: 10.1037/1099-9809.14.1.47 [PubMed: 18230000]

Pasch LA, & Bradbury TN (1998) Social support, conflict, and the development of marital dysfunction. Journal of Consulting and Clinical Psychology, 66, 219–230. doi: 10.1037/0022-006X.66.2.219 [PubMed: 9583325]

Rehman US, & Holtzworth-Munroe A (2007). A cross-cultural examination of the relation of marital communication behavior to marital satisfaction. Journal of Family Psychology, 21, 759. doi: 10.1037/0893-3200.21.4.759 [PubMed: 18179348]

Schoebi D, Wang Z, Ababkov V, & Perrez M (2010). Affective interdependence in married couples' daily lives: Are there cultural differences in partner effects of anger? Family Science, 1, 83–92. doi: 10.1080/19424620903471681

Tsai JL, & Levenson RW (1997). Cultural influences on emotional responding: Chinese American and European American dating couples during interpersonal conflict. Journal of Cross-Cultural Psychology, 28, 600–625. doi: 10.1177/0022022197285006

Tsai JL, Levenson RW, & McCoy K (2006). Cultural and temperamental variation in emotional response. Emotion, 6, 484–497. doi: 10.1037/1528-3542.6.3.484 [PubMed: 16938089]

Williamson HC, Bradbury TN, Trail TE, & Karney BR (2011). Factor analysis of the Iowa Family Interaction Rating Scales. Journal of Family Psychology, 25, 993–999. DOI: 10.1037/a0025903 [PubMed: 21988081]

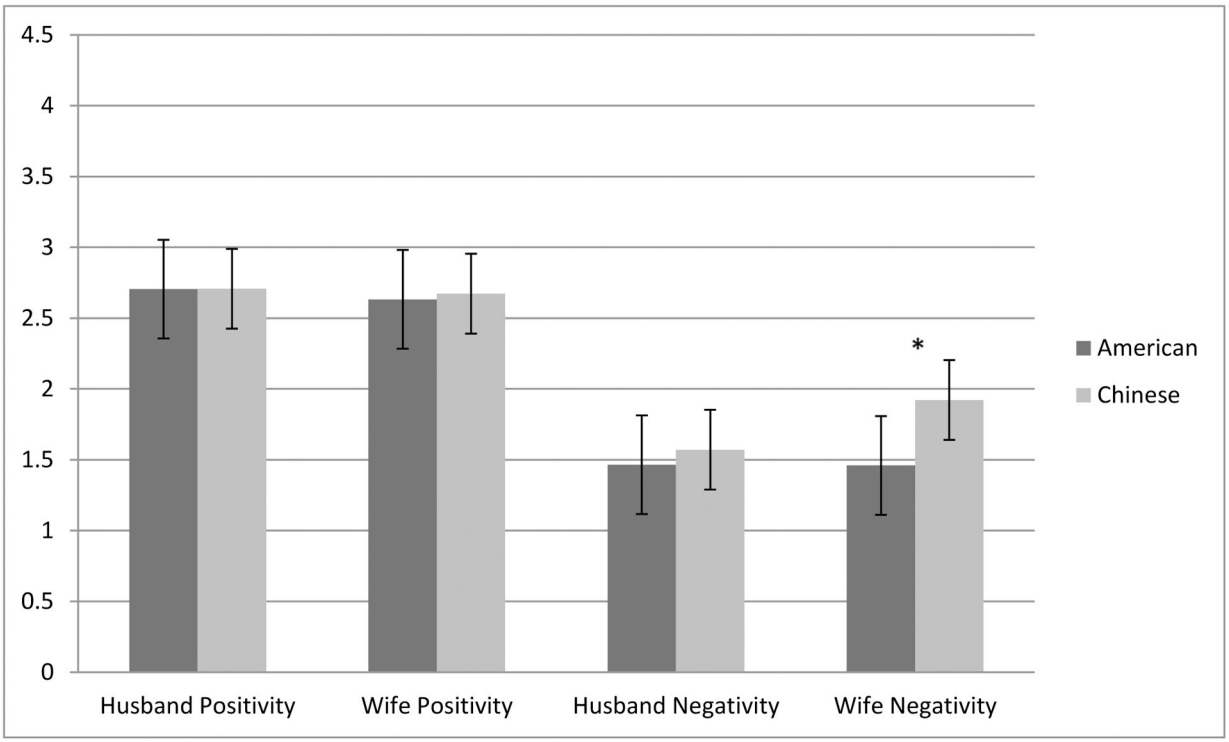


**Figure 1.**

Means of behavioral variables across countries, adjusting for relationship satisfaction.

* indicates groups are significantly different at $p < .001$.

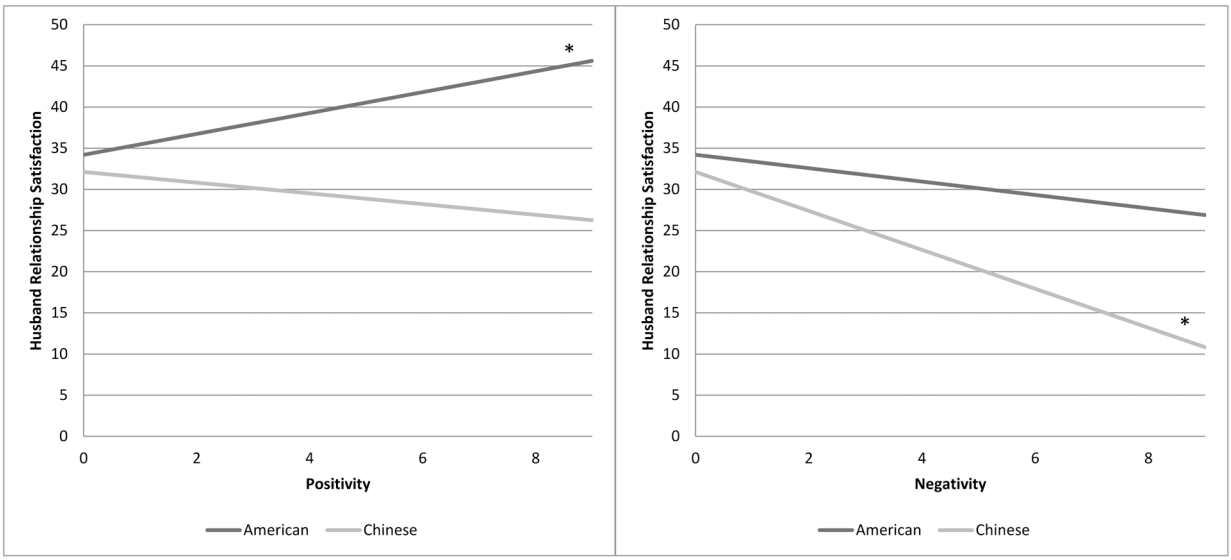


**Figure 2.**

Simple slopes of the relationship between husbands' relationship satisfaction and (a) positivity (left panel) and (b) negativity (right panel) for each subsample. In each case, the other behavioral code has been controlled. For example, when predicting husbands' relationship satisfaction from positivity, negativity has been controlled.

* indicates slope is significantly different from zero at $p < .05$

**Table 1.**

Descriptive Statistics and *t* tests of American and Chinese Subsamples

| | Mean (SD) | | Comparison of American vs. Chinese |
|---|---|---|---|
| | **American** | **Chinese** | ***t* value (*d*)** |
| Length of Marriage (months) | 5.3 (2.8) | 6.8 (4.8) | 1.94 (0.41) |
| Time known before marriage (months) | 67.8 (67.1) | 47.5 (46.8) | −2.17 (−0.50) * |
| Husband Age (years) | 31.3 (5.4) | 27.2 (2.5) | −4.45 (−0.94) *** |
| Wife Age (years) | 29.6 (4.1) | 26.0 (2.0) | −5.05 (−1.07) *** |
| Husband Education (years) | 17.6 (2.1) | 15.1 (2.1) | −6.78 (−1.44) *** |
| Wife Education (years) | 17.3 (1.9) | 14.8 (2.2) | −5.84 (−1.24) *** |
| Husband Income (U.S. dollars) | $62,020 ($45,676) | $6,310 ($3,465) | −7.79 (−1.65) *** |
| Wife Income (U.S. dollars) | $47,081 ($30,926) | $4,129 ($2,378) | −8.86 (−1.88) *** |
| Husband Relationship Satisfaction | 34.40 (2.54) | 31.60 (2.96) | −4.83 (−1.02) *** |
| Wife Relationship Satisfaction | 33.56 (2.45) | 31.58 (3.88) | −1.98 (−0.42) ** |
| Husband Positivity | 2.75 (0.70) | 2.64 (0.80) | −0.66 (0.15) |
| Wife Positivity | 2.69 (0.60) | 2.59 (0.69) | −0.73 (0.15) |
| Husband Negativity | 1.41 (0.26) | 1.64 (0.56) | 2.53 (−0.53) ** |
| Wife Negativity | 1.40 (0.30) | 1.98 (0.62) | 5.82 (−1.19) *** |

*Note.* $N = 50$ American couples and 41 Chinese couples

* $p < .05$,

** $p < .01$,

*** $p < .001$

**Table 2.**

Correlations between all variables

| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1. Husband Positivity | -- | | | | | | | | | | | | |
| 2. Husband Negativity | −.18** | -- | | | | | | | | | | | |
| 3. Wife Positivity | .80*** | −.26* | -- | | | | | | | | | | |
| 4. Wife Negativity | −.10 | .77*** | −.24* | -- | | | | | | | | | |
| 5. Husband Relationship Satisfaction | .11 | −.37*** | .17 | −.47*** | -- | | | | | | | | |
| 6. Wife Relationship Satisfaction | .13 | −.19 | .17 | −.18 | .42*** | -- | | | | | | | |
| 7. Husband Age | −.06 | .07 | −.08 | .07 | .00 | −.09 | -- | | | | | | |
| 8. Husband Education | .11 | −.01 | .14 | −.04 | .14 | .02 | −.01 | -- | | | | | |
| 9. Husband Income | −.03 | −.18 | −.01 | −.07 | .13 | .06 | .12 | .09 | -- | | | | |
| 10. Wife Age | −.07 | .03 | −.04 | .09 | −.03 | .07 | .68*** | .09 | .05 | -- | | | |
| 11. Wife Education | .20 | −.01 | .27* | −.08 | .09 | .08 | −.08 | .42*** | .07 | −.13 | -- | | |
| 12. Wife Income | −.06 | .10 | .01 | −.05 | .22* | .13 | .16 | .17 | .23* | .24* | .25* | -- | |
| 13. Time known before marriage | −.05 | −.12 | .03 | −.06 | −.11 | .08 | −.03 | −.05 | −.13 | .13 | .13 | .02 | -- |

*Note*. Variables 7 through 13 were standardized within each nationality subgroup. $N = 50$ American couples and 41 Chinese couples

* $p < .05$,

** $p < .01$,

*** $p < .001$