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Cultural Differences in Intimacy: The Influence of Gender-Role Ideology and Individualism-  
Collectivism

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## Abstract

Two studies examined emotional intimacy in European Canadian and Chinese Canadian dating relationships. Cultural differences in gender-role ideology and individualism-collectivism were hypothesized to differentially contribute to self-disclosure and responsiveness, and in turn, intimacy. Study 1 revealed that Chinese Canadians' lower intimacy relative to European Canadians was mediated by their greater gender-role traditionalism, but not by their individualism or collectivism. Study 2 further linked greater gender-role traditionalism to lower self-disclosure, and in turn, lower intimacy. Results also revealed that Chinese Canadians' lower intimacy mediated their lower relationship satisfaction and higher rate of relationship termination in Study 1, but that Chinese Canadians were not any more likely to terminate their relationships in Study 2.

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## Cultural Differences in Intimacy: The Influence of Gender-Role Ideology and Individualism-Collectivism

What is the nature of cultural differences in intimacy, and what cultural dimensions give rise to these differences? In Western cultures (i.e., Western European and related cultures in Canada, the US, Australia, and New Zealand), experiencing high levels of intimacy in a romantic relationship is associated with enhanced psychological, physical, and relational well-being (Dion & Dion, 1993; Hassebrauck & Fehr, 2002; Kiecolt-Glaser et al., 1988), and with reduced risk of divorce (Firestone & Firestone, 2004; Schneller & Arditto, 2004). It is unclear, however, whether intimacy has similar significance for personal and relational well-being in East Asian cultures – a question of particular importance in light of the lower intimacy typically reported by East Asians (Ting-Toomey, 1991) and the rising rate of divorce in China and Japan (Fuess, 2004; *The New York Times*, October 2005). Nevertheless, little research attention has been directed at this topic (Seki, Matsumoto, & Imahori, 2002). To close this research gap, the present studies compared the conceptualization, correlates, and outcomes of intimacy in Chinese and Western cultures.

Within the Western psychological literature, intimacy is often conceptualized as resulting from self-disclosure – revealing personal feelings, thoughts, and experiences to another person (Altman & Taylor, 1973; Jourard, 1971; Sprecher & Hendrick, 2004). Others argue, however, that responsiveness – the verbal and/or nonverbal behavior that conveys empathy, support, and affection to one's partner (Davis & Perkowski, 1979; Miller, Berg, & Archer, 1983) – is an equally if not more important component of intimacy than is self-disclosure (Lin, 1992; Prager, 1995). Still others highlight the temporal (Baxter, 1988; Duck & Sants, 1983), motivational (McAdams, 1988), and transactional nature of intimacy (Dindia, 1997). In an integration of these heterogeneous conceptualizations, the interpersonal process model of intimacy (Reis & Shaver,

1988) defines intimacy as the feelings of closeness that result from a transactional, dynamic process between partners' self-disclosures and responsiveness. More specifically, when an individual perceives that his or her personally-relevant disclosures have been responded to with concern and support from a partner, he or she may feel understood, validated, and cared for, and therefore more intimate with the partner. Furthermore, each partner's behaviors and interpretations of the other's behaviors are influenced by traits, goals, needs, and motives.

While this model has received empirical support in Western cultures (Laurenceau, Feldman Barrett, & Pietromonaco, 1998; Laurenceau, Feldman Barrett, & Rovine, 2005), it is unclear whether self-disclosure and responsiveness are similarly important components of intimacy in East Asian cultures. For example, some researchers have suggested that responsiveness has heightened significance for relationships in East Asian cultures (Heine, 2001; Lebra, 1976; Markus & Kitayama, 1991), while self-disclosure is less important (Chen, 1995; Goodwin & Lee, 1994). Other research has found that East Asians and Westerners tend to differ altogether in their conceptualizations and expressions of intimacy (Seki, Matsumoto, & Imahori, 2002). In light of these discrepancies, it is worth reconsidering whether East Asians do indeed experience less intimacy than do Westerners, as suggested by past research (De Vos, 1985; Dion & Dion, 1993; Ting-Toomey, 1991). The purpose of the current studies, then, was to examine the conceptualizations and expressions of intimacy that are most salient in Western and Chinese cultures. Specifically, these studies investigated whether cultural differences in gender-role ideology and individualism-collectivism encourage European Canadians to more likely conceptualize and express intimacy as self-disclosure, and Chinese Canadians as responsiveness. In the following sections, I will discuss cultural influences on (a) self-disclosure, (b) responsiveness, and (c) the practical significance of intimacy for relationship outcomes.

*Self-Disclosure: Associations with Gender-Role Ideology and Individualism-Collectivism*

Gender-role ideology refers to beliefs about the roles and behaviors that are appropriate for men and women (Kalin & Tilby, 1978). An egalitarian gender-role ideology asserts that these roles and behaviors ought to be equivalent for both sexes, while a traditional ideology holds that men and women are fundamentally different, and should therefore assume different roles and behaviors (Cota & Xinaris, 1993). More often than not, men's roles and behaviors tend to be greater in status and agency than women's (Eagly & Wood, 1999). Pivotal to the present studies, some research suggests that a more traditional gender-role ideology is endorsed within Chinese cultures than within Western cultures (Chia, Moore, Lam, Chuang, & Cheng, 1994; Loscocco & Bose, 1998). This more traditional ideology may trace its roots to Confucian social ethics; one of the Five Cardinal Relationships, for example, asserts that wives are subordinate to husbands (Bond & Hwang, 1986). Consistently, Chinese women in the People's Republic of China (Zuo, 2003) and in Hong Kong (Tang & Tang, 2001) are more likely to assume domestic roles while their husbands are more likely to join the paid workforce. These traditional roles are maintained by beliefs that it is unfeminine for women to be career-oriented (Liu, 2003) and that a "real man" ought to be the breadwinner of the family (Zuo, 2003).

Of specific interest, research has found that gender-role traditionalism is associated with inhibited self-disclosure in relationships, at least for European Americans (Neff & Suizzo, 2006; Rubin, Hill, Peplau, & Dunkel-Schetter, 1980). One explanation is that men's traditional roles do not encourage self-disclosure; revealing feelings, in particular, is often viewed as effeminate or "sissy" (Thompson & Pleck, 1986). Women's traditional roles, too, may discourage self-disclosure: to the extent that certain key relationships comprise an important part of women's self-identity, women may "self-silence" certain wishes, emotions, or grievances in order to

maintain harmony within these relationships (Jack, 1991). Moreover, the reciprocal nature of self-disclosure (Cozby, 1973) may mean that men or women coupled with a more traditional partner may themselves become less self-disclosing.

Inasmuch as individuals from Chinese cultures tend to be more traditional relative to Westerners, it follows that they may also be less self-disclosing, and thereby less intimate, in heterosexual relationships. Indeed, Chinese research participants have reported that they disclose less to close relationship partners than do Western participants (Chen, 1995; Goodwin & Lee, 1994). In spite of this suggestive evidence, most research has focused not on gender-role traditionalism as the mediator of Chinese partners' purportedly lower intimacy, but on the dimension of individualism-collectivism (Gao, 2001). Individualism emphasizes self-reliance, competition, and the subordination of in-group goals to personal goals, while collectivism emphasizes interdependence, interpersonal harmony, cooperation, and the subordination of personal goals to in-group goals (Triandis, Bontempo, Villareal, Asai, & Lucca, 1988). It has been suggested that romantic partners experience less intimacy in collectivistic cultures because intimacy needs are primarily satisfied through interdependent family relationships rather than through romantic relationships (Dion & Dion, 1993; Hsu, 1985; Ting-Toomey, 1991).

Another possibility is that individualism and collectivism exert indirect effects on intimacy through the mediators of self-disclosure and responsiveness. Indeed, several lines of evidence suggest that individualistic cultures place greater emphasis on self-disclosure for enhancing intimacy than do collectivistic cultures (Adams, Anderson, & Adonu, 2004). For one, the emphasis on verbal, explicit, direct, and expressive communication styles in individualistic settings (Gudykunst & Matsumoto, 1996) affords more open self-disclosure than the indirect, nonverbal, ambiguous, contextual, and less expressive communication styles that dominate in

collectivistic settings (Argyle, Henderson, Bond, Iizuka, & Contarello, 1986). Furthermore, to the extent that individualists tend to belong to a greater number of in-groups than do collectivists (Triandis et al., 1988), potentially risky self-disclosures may have fewer social consequences than in collectivistic settings, where tightly-knit networks increase the likelihood that inappropriate disclosures become grist for the rumor mill (Adams et al., 2004; Hastings, 2000). Consistent with these explanations, some research has found that Westerners, who are typically individualist, tend to be more self-disclosing within close relationships than are people from Chinese cultures, who are typically more collectivist (Chen, 1995; Goodwin & Lee, 1994).

Not all research supports these claims, however. For example, Wheeler, Reis, and Bond (1988) found that Hong Kong Chinese participants, who typically belong to fewer, but closer social groups than do Westerners, reported greater self-disclosure to in-group members than did American participants. Moreover, Gao (1991) found that self-disclosure was similarly important for the relationship stability of Chinese and American dating couples. In light of this mixed evidence, the present studies sought to further clarify the association of individualism and collectivism with self-disclosure and with intimacy. In tandem, these studies also explored the relation of responsiveness to gender-role ideology and to individualism-collectivism.

#### *Responsiveness: Associations with Gender-Role Ideology and Individualism-Collectivism*

Little research has been devoted to the ways that responsiveness may be influenced by cultural factors. Nevertheless, one possibility is that traditional gender ideologies encourage women to cultivate responsiveness-enhancing “feminine” traits such as sympathy, understanding, and sensitivity, while encouraging men to develop responsiveness-inhibiting “masculine” traits such as dominance and aggression (Bem, 1974). To the extent that a culture endorses traditional masculinity and femininity, it follows that women within this culture should

be more responsive than men. Countering this possibility, however, evidence shows that concepts of “masculinity” and “femininity” vary across cultural contexts (Ward & Sethi, 1986). For example, some researchers have suggested that the male role in East Asian cultures prescribes greater Western-style femininity than does the male role in the West (Keyes, 1984; Wetzel, 1991; Zhang, Norvilitis, & Jin, 2001). This greater “femininity” may derive at least in part from the Confucian belief that both sexes should cultivate *jen*, or benevolence, selflessness, kindness, and reciprocity (Hsu, 1985). These traits, which are considered to be more feminine in the West, may particularly enhance responsiveness in Chinese relationships. Therefore, because responsiveness may be socially desirable for both sexes – suggesting that it is a gender-neutral or androgynous characteristic– it may not be associated with the gender-role traditionalism of Chinese dating partners.

Alternatively, responsiveness may be associated with individualism-collectivism. Specifically, collectivism may encourage greater responsiveness to in-group members – such as family or romantic partners – as a means of fostering harmony and mutual obligation (Heine, 2001; Lebra, 1976; Markus & Kitayama, 1991). Yet research also suggests the opposite: that to maintain surface-level harmony, collectivism may encourage dismissive rather than responsive reactions to an in-group member’s distress (Burlison & Mortenson, 2003). In light of this mixed evidence, it is debatable whether Chinese Canadians emphasize responsiveness when conceptualizing and expressing intimacy, while European Canadians emphasize self-disclosure. Along with clarifying these theoretical links, the following studies also examined the practical implications of cultural differences in intimacy for important relationship outcomes.

*The Association of Intimacy with Relationship Outcomes*



Cultural differences in intimacy are only important insofar as they are linked to significant personal and relational outcomes. One possibility is that intimacy is more important for these outcomes in individualistic than in collectivistic cultures. In individualistic settings, where romantic relationships may be a primary vehicle for satisfying intimacy needs and for exploring the self, low intimacy in these relationships may have particularly negative personal and relational consequences (Dion & Dion, 1993). In collectivistic settings, however, romantic relationships may serve other, more culturally-valued functions – such as strengthening family or economic ties rather than satisfying one’s own personal interests (Hsu, 1985) – so that low intimacy may simply not have the same negative consequences. Accordingly, the current studies examined whether low intimacy in European Canadian and Chinese Canadian dating relationships has differential consequences for two important outcomes, relationship satisfaction and the likelihood of relationship termination.

In sum, the purpose of these studies was to chart the cultural parameters of intimacy. Toward this end, Study 1 sought to clarify the conceptualization, correlates, and relational outcomes of intimacy in European Canadian and Chinese Canadian dating relationships. Study 2 further examined the association of gender-role ideology with intimacy in these relationships by assessing the mediating roles of self-disclosure and responsiveness.

### Study 1

European Canadian and Chinese Canadian dating partners described their conceptualizations of intimacy, and then rated how much intimacy they were currently experiencing in their relationship. Mediation analyses tested whether any cultural differences in intimacy might be explained by gender-role ideology, individualism, or collectivism. Finally, the relative importance of intimacy for relationship satisfaction and likelihood of relationship

termination was examined for each group. As such, the hypotheses for this first study were as follows:

*Hypothesis 1:* European Canadians would more likely conceptualize intimacy as self-disclosure, and Chinese Canadians as responsiveness.

*Hypothesis 2:* Chinese Canadians would report experiencing less intimacy than European Canadians.

*Hypothesis 3:* Chinese Canadians would report greater gender-role traditionalism and collectivism than European Canadians.

*Hypothesis 4:* Chinese Canadians' greater gender-role traditionalism and collectivism would mediate their lower intimacy relative to European Canadians.

*Hypothesis 5:* The association of intimacy with relationship satisfaction and likelihood of relationship termination would be stronger for European Canadians than for Chinese Canadians.

## Method

### *Participants*

Sixty-two dating couples (31 European Canadian and 31 Chinese Canadian) were recruited from an introductory psychology class at a Canadian university in a large urban area. Participants enrolled in this class received course credit for their participation; partners who were not enrolled received \$10. Partners were heterosexual and shared the same ethnic background. Of the European Canadians, 77% were born in Canada and 23% were born in other Western countries. Of the Chinese Canadians, 33% were born in Canada, 44% were born in Hong Kong, 12% were born in mainland China, 8% were born in Taiwan, and 3% were born elsewhere (but indicated ethnic Chinese heritage). There were no cultural differences in age ( $p = .65$ ), but

women were significantly younger than men ( $M_s = 19.10$  and  $20.23$ , respectively),  $F(1, 119) = 9.67, p = .002$ . Of those participants not born in Canada, the average length of time lived in Canada was 8.27 years, with no significant cultural or gender differences (both  $p_s > .23$ ). The average length of participants' current relationship was one year, and did not differ by cultural group ( $p = .47$ ).

### *Procedure and Measures*

Questionnaires were completed by partners in separate rooms of a laboratory. All items were written in English, and continuous scales were paired with a 5-point Likert response format anchored with "strongly disagree" (1) and "strongly agree" (5). Participants were contacted several months after the initial testing session and asked several follow-up questions.

*Conceptualizations of Intimacy.* An open-ended question adapted from Seki et al. (2002) asks participants to write, in a few sentences, what intimacy in a romantic relationship means to them.

*Intimacy.* Twelve items from the Triangular Love Scale (TLS; Sternberg, 1997) assess intimacy (e.g., "I feel emotionally close to my partner"). As evidence of validity, Sternberg (1997) found that these items were a better predictor of relationship satisfaction than were Rubin's (1970) Liking and Loving scales. To further reflect conceptualizations of intimacy as self-disclosure and responsiveness, Sternberg's intimacy items were supplemented with an additional 12 items that were developed by the author. Examples of these additional items are "I am comfortable sharing my innermost thoughts and experiences with my partner" and "My partner is not emotionally supportive" (reverse-scored).

When this composite intimacy scale was factor-analyzed, one clear factor emerged that accounted for 63.76% of the total variance. Additionally, this scale was highly correlated ( $r =$

.68,  $p < .0001$ ) with the 6-item emotional intimacy subscale of the Personal Assessment of Intimacy in Relationships scale (PAIR; Schaefer & Olson, 1981), providing evidence of convergent validity. Of particular note, internal consistency of the composite scale ( $\alpha = .90$  for European Canadians and Chinese Canadians alike) was superior to that of the PAIR subscale ( $\alpha = .76$  and  $.69$  for European and Chinese Canadians, respectively). Overall, the robust psychometric properties of the composite intimacy scale justified its use as the main dependent measure in Studies 1 and 2.

*Gender-Role Traditionalism.* Traditional and egalitarian beliefs about gender roles and behavior were measured with Cota and Xinaris's (1993) 18-item short form of the original 30-item Sex-Role Ideology Scale (SRIS; Kalin & Tilby, 1978). Cota and Xinaris updated the original 30-item SRIS by factor-analyzing the scale using data from large undergraduate samples at a Canadian university. Results of their factor analysis suggested a one-factor solution, and items that did not load highly on this factor – items that may no longer be relevant to Canadian undergraduates – were dropped. Higher summed scores on this scale indicate greater traditionalism. Examples of the remaining items include “The first duty of a woman with young children is to home and family,” and “When a man and woman live together, she should do the housework and he should do the heavier chores.” Internal consistency was adequate for European Canadians and Chinese Canadians ( $\alpha = .76$  and  $.80$ , respectively).

*Individualism and Collectivism.* The 32-item Individualism and Collectivism Scale (ICS; Singelis, Triandis, Bhawuk, & Gelfand, 1995) crosses individualism and collectivism with the horizontal-vertical dimension (i.e., equality versus hierarchy) to create four subscales. However, Cronbach's alpha coefficients for horizontal individualism and vertical collectivism were particularly low for Chinese Canadians ( $\alpha$ s =  $.50$  and  $.48$ , respectively); as such, the horizontal-

vertical dimension was collapsed. This decision was justified by the positive correlation between horizontal and vertical collectivism ( $r = .30, p < .001$ ), and between horizontal and vertical individualism ( $r = .18, p = .04$ ). Moreover, the collapsed individualism and collectivism scales were not correlated with each other ( $r = -.02, p = .79$ ), consistent with research suggesting that they are independent dimensions rather than opposite ends of a single continuum (e.g., Kashima et al., 1995; Rhee, Uleman, & Lee, 1996; Triandis, 1993). Overall, collapsing across the horizontal-vertical dimension improved the reliability of the scales assessing individualism ( $\alpha = .74$  and  $.71$  for European Canadians and Chinese Canadians, respectively) and collectivism ( $\alpha = .73$  and  $.67$  for European Canadians and Chinese Canadians). Each scale is composed of 16 items. Examples are “One should live one’s life independently of others” (individualism) and “It is important for me to maintain harmony with my group” (collectivism).

*Background Questions.* Participants were asked to indicate their own and their parents’ country of birth, length of residency in Canada, residential status (international student, permanent resident, refugee, or Canadian citizen), age, the number of relationships lasting six months or longer they had been involved in prior to their current relationship, the status of their current relationship (non-exclusive dating, exclusive dating, cohabitating, engaged, married, or other), their parents’ employment status, level of education, and marital status, and whether they were currently living with their parents. However, because there were no ethnic, gender, or interaction effects for any of these questions (all  $ps > .11$ ), they will not be discussed further.

#### *Relationship Outcomes*

*Satisfaction.* Four items from Murray, Holmes, Dolderman, and Griffin (2000) assess relationship satisfaction (e.g., “I am extremely happy with my current romantic relationship”).

An additional item, “I am perfectly satisfied in my relationship,” was also included. Internal consistency was high for European and Chinese Canadians ( $\alpha = .93$  and  $.87$ , respectively).

*Continuance/Termination.* Several months after the initial session, participants were telephoned and asked if they were still dating the same partner.

## Results

*Conceptualizations of Intimacy.* To test Hypothesis 1, that European Canadians would more likely conceptualize intimacy as self-disclosure, and Chinese Canadians as responsiveness, two judges independently coded qualitative responses for themes of self-disclosure, responsiveness, or “other.” Responses were classified holistically into one of the three categories; any responses that referred to more than one category were classified according to the theme that was most dominant (for instance, if the response contained two statements that referred to self-disclosure and one that referred to responsiveness, it was coded as self-disclosure). Responses that reflected themes of open communication, sharing, telling each other everything, and being oneself in the relationship were coded as self-disclosure, while responses reflecting themes of mutual support, selflessness, sensitivity, reciprocity, and other-directedness were coded as responsiveness. The “other” category was used to code responses that did not reflect either self-disclosure or responsiveness (e.g., romantic love or sexuality).

Agreement between the coding of the judges was substantial,  $\kappa = .73$ . Disagreement was resolved through discussion to arrive at the final theme frequencies. For European Canadians, 38 (62.30%) responses were coded as self-disclosure, 11 (18.03%) as responsiveness, and 12 (19.67%) as other. For Chinese Canadians, the respective frequencies were 32 (51.61%), 16 (25.81%), and 14 (22.58%). Contrary to Hypothesis 1, results did not reveal any significant

cultural differences in these frequencies,  $\chi^2(2) = 1.69, p = .45$ . European Canadian and Chinese Canadian participants, then, were similar in their conceptualizations of intimacy.

### *Tests of Cultural Comparisons*

Raw means and standard deviations for all continuous variables are presented in Table 1. Hypotheses 2 and 3 were tested with a series of 2 (culture: European, Chinese)  $\times$  2 (gender) ANOVAs. Hypothesis 2 was supported: Chinese Canadians reported significantly less intimacy than did European Canadians ( $M = 98.00$  and  $104.15$ , respectively),  $F(1, 120) = 7.86, p = .006, \eta^2 = .06$ . No other effects were significant for this measure (both  $ps > .15$ ).

Hypothesis 3 was also supported: Chinese Canadians were significantly more traditional in their gender-role ideology than were European Canadians ( $Ms = 47.02$  and  $41.32$ , respectively),  $F(1,120) = 11.26, p = .001, \eta^2 = .08$ . Additionally, men ( $M = 46.89$ ) reported greater traditionalism than did women ( $M = 41.45$ ),  $F(1,120) = 10.27, p = .002, \eta^2 = .07$ . The interaction of culture with gender was not significant ( $p = .84$ ). Also consistent with Hypothesis 3, Chinese Canadians reported significantly greater collectivism than did European Canadians ( $M = 57.85$  and  $53.98$ ),  $F(1, 120) = 10.08, p = .002, \eta^2 = .08$ . No other effects were significant for collectivism (both  $ps > .28$ ), nor were there any significant effects for individualism (all  $ps > .23$ ). The absence of cultural differences in individualism excluded this variable from further analysis as a potential mediator of cultural differences in intimacy.

Finally, European Canadians reported significantly greater relationship satisfaction than did Chinese Canadians ( $Ms = 21.66$  and  $19.97$ , respectively),  $F(1, 120) = 5.85, p = .02, \eta^2 = .05$ . No other effects were significant for the relationship satisfaction scale (both  $ps > .34$ ).

### *Tests of Mediation Hypotheses*

Hypothesis 4 predicted that Chinese Canadians' greater gender-role traditionalism and collectivism would separately mediate their lower intimacy relative to European Canadians. Four steps were necessary to conduct the mediational analyses (Baron & Kenny, 1986). The previous analyses of variance established the first two steps: culture (the independent variable) was a significant predictor of gender-role ideology and of collectivism (the mediators), and culture significantly predicted intimacy (the dependent variable). Next, it was necessary to show that each mediator significantly predicted the dependent variable.

At this step, multilevel analyses were conducted to take into account any interdependency between partners' variables. Specifically, because partners involved in relationship tend to mutually influence each other, it is possible that each partner's independent or mediating variables may influence the other partner's dependent variables. To examine this possibility, the Actor-Partner Interdependence Model (APIM; Kashy & Kenny, 2000) separately estimates *actor effects*, which measure the association of each participant's independent variables with his or her own dependent variable, and *partner effects*, which measure the association of the partner's independent variables with the actor's dependent variable (Bradford, Feeney, & Campbell, 2002). Thus, actor's intimacy (dependent variable) may be influenced not only by his or her own gender-role ideology (actor effect), but also by his or her partner's gender-role ideology (partner effect). *Relationship effects* – the interaction of the actor and partner effects (Snijders & Kenny, 1999) – were included in all of the following multilevel models, but none were significant (all  $ps > .15$ ) and therefore removed to preserve degrees of freedom. Partners' scores were nested within groups of  $n = 2$  to represent each couple. European Canadians were coded as 1 and Chinese Canadians as -1, and men were coded as 1 and women as -1. All continuous variables were



standardized prior to inclusion in the models; correlation coefficients among these variables are presented separately for European and Chinese Canadians in Table 2.

Thus, to test the third step in the mediational analysis, actor and partner effects for gender-role ideology and collectivism (the mediators) were entered together as predictors to determine the unique contribution of each to actor's intimacy (the dependent variable). Culture, gender, and their interactions with the actor and partner effects were also entered as predictors, but none of the interactions were significant (all  $ps > .38$ ), and therefore removed. Results revealed that actor's and partner's gender-role ideology were significantly negatively associated with actor's intimacy ( $\beta = -.28, p = .002$ , and  $\beta = -.22, p = .01$ , respectively). This means that participants reported less intimacy when they themselves were more traditional (actor effect), and when their *partners* were more traditional (partner effect). There were no significant actor or partner effects for collectivism (both  $ps > .69$ ), indicating that collectivism did not fulfill the third step of the mediational analysis requiring that the mediator significantly predict the dependent variable. Only gender-role ideology, then, was uniquely associated with intimacy, suggesting that it had the strongest potential to mediate the culture-intimacy association.

In the fourth step of the mediational analysis, a Sobel test (1982) assessed whether the association of culture with intimacy was significantly reduced when the mediator was added to the equation. The association was decreased from  $.24 (p = .03)$  to  $.17 (p = .10)$  with the addition of actor's gender-role ideology to the equation, and to  $.22 (p = .05)$  with the addition of partner's gender-role ideology. The Sobel test was significant for actor's gender-role ideology ( $z = 2.21, p = .03$ ) but not for partner's ideology ( $p = .29$ ), indicating that only the former was a significant mediator. Therefore, Hypothesis 4 was partially supported: Chinese Canadians' gender-role traditionalism, but not their collectivism, mediated their lower intimacy relative to European

Canadians.

*Relationship Outcomes.* Hypothesis 5 predicted that the association of intimacy with relationship satisfaction and the likelihood of relationship termination would be moderated by culture, such that the association would be stronger for European Canadians than for Chinese Canadians. To test this hypothesis, actor, partner, culture, gender, and interaction effects for intimacy were first entered as predictors of actor's relationship satisfaction in a multilevel analysis. The interactions of culture with actor's and partner's intimacy were not significant (all  $ps > .24$ ), indicating no moderating effect of culture. These interaction terms were therefore removed from the model. In the resulting model, actor's intimacy was significantly associated with actor's relationship satisfaction ( $\beta = .74, p < .0001$ ). This association was qualified by a significant interaction with gender ( $\beta = .17, p = .02$ ): it was stronger for men ( $\beta = .91, p < .0001$ ) than it was for women ( $\beta = .57, p < .0001$ ). No other effects were significant (all  $ps > .15$ ). Therefore, Hypothesis 5 was not supported: actor's intimacy was equally predictive of relationship satisfaction for European Canadians and Chinese Canadians alike.

Next, to assess the likelihood of relationship termination, data on the status of the relationship a number of weeks ( $M = 14.5$ ) after completion of the initial study was obtained for 57 of the 62 couples (30 European Canadian and 29 Chinese Canadian). Of the couples contacted, 4 European Canadian couples had terminated their relationship (13.33%), compared to 9 Chinese Canadian couples (31.03%). This difference was significant,  $\chi^2(1) = 5.38, p = .02$ . To test Hypothesis 5, that intimacy would be more predictive of relationship termination for European Canadians than for Chinese Canadians, culture, intimacy, and their interaction were entered as simultaneous predictors of relationship termination in a logistic regression model. Continued relationships were coded as 0 and terminated relationships as 1. Several other

predictors were added to this model: relationship satisfaction, length of relationship, time lapse between completion of the study and the obtaining of relationship termination data, and the interactions of these variables with culture. Neither time lapse nor its interaction with culture were significant (both  $ps > .14$ ), and they were removed. In the resulting model, intimacy ( $\beta = -.92, p = .05$ ) and length of relationship ( $\beta = -.65, p = .005$ ) were significantly associated with a lower likelihood of relationship termination. Importantly, the association of intimacy with relationship termination was not qualified by an interaction with culture ( $p = .33$ ; all other  $ps > .30$ ), indicating that Hypothesis 5 was not supported: intimacy was equally predictive of relationship termination for European Canadians and for Chinese Canadians alike.

Because intimacy appeared to be similarly important for the relationship outcomes of both groups, analyses next tested whether Chinese Canadians' lower intimacy mediated their lower relationship satisfaction and higher rate of relationship break-up. The association of culture with actor's satisfaction was reduced from  $.21 (p = .04)$  to  $.03 (p = .65)$  with the addition of actor's intimacy to the equation, and the Sobel test was significant ( $z = 2.24, p = .02$ ). Likewise, the association of culture with relationship termination was reduced from  $-.54 (p = .02)$  to  $-.40 (p = .11)$  when intimacy was added to the model, and the Sobel test was significant ( $z = -2.21, p = .03$ ). Taken together, these results suggest that Chinese Canadians' lower intimacy was mediated by their lower relationship satisfaction and higher likelihood of relationship termination.

## Discussion

The results of Study 1 revealed, first, that European Canadians and Chinese Canadians similarly conceptualized intimacy in terms of self-disclosure and partner responsiveness. This similarity buttressed the cross-cultural validity of the newly-formed continuous measure of

intimacy that was based on these conceptualizations. As predicted, Chinese Canadians scored lower on this measure than did European Canadians. Importantly, Chinese Canadians' lower intimacy was mediated by their more traditional gender-role ideology, but not by their collectivism. This marks the first time that gender-role ideology and collectivism have been compared as mediators of cultural differences in intimacy. Additionally, the findings demonstrated that Chinese Canadians' lower intimacy mediated their lower relationship satisfaction and higher risk of relationship termination, suggesting that cultural differences in intimacy may not be benign, but may have important practical implications for relationship outcomes.

## Study 2

The purpose of Study 2 was to further clarify the association of gender-role ideology with intimacy by testing whether it was mediated by self-disclosure or responsiveness. Previous research has found that gender-role traditionalism is associated with lower self-disclosure (Rubin et al., 1980), and that lower self-disclosure is associated with lower intimacy (Laurenceau et al., 1998). Few studies, however, have established a similar precedent for the potential of responsiveness to mediate the traditionalism-intimacy relationship. As such, associations with responsiveness, particularly the link between traditionalism and responsiveness, were assessed on an exploratory basis. Because Study 1 did not find that individualism or collectivism played as important a role in experiences of intimacy as did gender-role ideology, these constructs were not further examined in Study 2. Finally, Study 2 examined whether Chinese Canadians' lower intimacy was linked to increased risk of relationship termination, as found in Study 1. The hypotheses for Study 2 were as follows:

*Hypothesis 1:* Chinese Canadians were expected to report lower intimacy and greater gender-role traditionalism than European Canadians.

*Hypothesis 2:* Chinese Canadians would report lower self-disclosure than European Canadians.

*Hypothesis 3:* Chinese Canadians' lower intimacy would be mediated by their greater gender-role traditionalism.

*Hypothesis 4:* The association of gender-role traditionalism with intimacy would be mediated by self-disclosure.

*Hypothesis 5:* Chinese Canadians would show an elevated likelihood of relationship termination, and this likelihood would be mediated by their lower intimacy.

## Method

### *Participants*

Sixty-nine couples (33 European Canadian and 36 Chinese Canadian) were recruited through an introductory psychology class, campus posters, and an advertisement in the student newspaper at a Canadian university in a large urban area. Those enrolled in the introductory psychology class received course credit for their participation; those not enrolled received \$10. Partners were heterosexual and shared the same ethnic background. Of the European Canadians, 74% were born in Canada and 26% were born in other Western countries. Of the Chinese Canadians, 26% were born in Canada, 32% were born in Hong Kong, 31% were born in mainland China, 6% were born in Taiwan, and 5% were born elsewhere (but indicated ethnic Chinese heritage). There were no cultural differences in age ( $p = .23$ ), but women were significantly younger than men ( $M_s = 19.17$  and  $20.12$ , respectively),  $F(1, 134) = 7.31, p = .01$ . Of those participants not born in Canada, the average length of time lived in Canada was 8.19

years, with no significant culture, gender, or interaction effects (all  $ps > .76$ ). The average length of participants' current relationship was one year, and did not differ by cultural group ( $p = .89$ ).

### *Procedure and Measures*

Dating partners separately completed questionnaires in a laboratory. All questionnaires were written in English and assessed self-disclosure, responsiveness, gender-role traditionalism, intimacy, and background information. While several significant differences emerged in background information, none were associated with cultural differences in intimacy (all  $ps > .32$ ), and will not be discussed further. Other than the self-disclosure and responsiveness scales, all measures were the same as those used in Study 1, and all continuous scales used the same 5-point response format. Scores were internally consistent for European and Chinese Canadians on the intimacy scale ( $\alpha = .89$  and  $.93$ , respectively) and on the SRIS ( $\alpha = .80$  and  $.83$ , respectively). Participants were phoned several months after completion of the initial study to assess whether relationships were continuing or terminated. Data was analyzed according to the strategies used in Study 1.

*Self-Disclosure.* Nine items from the Marital Self-Disclosure Questionnaire (MSDQ; Waring, Holden, & Wesley, 1998) measure the tendency to disclose thoughts and feelings to one's partner about the relationship (e.g., "I talk about my feelings concerning our relationship with my partner"), while 10 items measure the tendency to disclose thoughts and feelings about sexuality (e.g., "I tell my partner how I feel about our sexual relationship"). References to "your spouse" on the original scale were changed to "your partner." Internal consistency for total scores was high for European and Chinese Canadians (both  $\alpha s = .92$ ). As evidence of validity, Waring et al. (1998) found that scores on the MSDQ successfully differentiated distressed couples from non-distressed couples.

*Responsiveness.* Individual differences in responsiveness, operationalized here as the ability to elicit disclosures from others, were assessed with the 10-item Opener Scale (Miller, Berg, & Archer, 1983). Example items include “I’m sympathetic to people's problems,” “I’m very accepting of others,” and “I encourage people to tell me how they're feeling.” Internal consistency was high for European Canadians ( $\alpha = .87$ ) and for Chinese Canadians ( $\alpha = .88$ ). In support of the Opener Scale’s validity as a measure of responsiveness, Miller et al. (1983) found that participants who scored high on the Opener Scale were indeed more likely to elicit a partner’s self-disclosure during a laboratory interaction than did those participants who scored low. Furthermore, other research has found that high Openers are more likely to use short verbal utterances (e.g., “uh-huh”) that act as encouraging, responsive cues to a partner’s self-disclosure (Pegalis, Shaffer, Bazzini, & Greenier, 1994).

## Results

### *Tests of Cultural Comparisons*

Raw means and standard deviations for all continuous variables are presented in Table 3. Correlations among standardized variables are presented in Table 4. Consistent with Hypothesis 1, European Canadians reported experiencing greater intimacy in their romantic relationships than did Chinese Canadians ( $M = 107.33$  and  $97.42$ , respectively),  $F(1, 134) = 24.04$ ,  $p < .0001$ ,  $\eta^2 = .15$ . No other effects were significant for the intimacy scale (both  $ps > .56$ ). Also consistent with Hypothesis 1, Chinese Canadians were more traditional in their gender-role ideology than were European Canadians ( $Ms = 49.00$  and  $37.80$ ),  $F(1, 134) = 49.21$ ,  $p < .0001$ ,  $\eta^2 = .25$ . Men were also more traditional than were women ( $Ms = 46.52$  and  $40.77$ ),  $F(1, 134) = 12.50$ ,  $p = .001$ ,  $\eta^2 = .06$ . The interaction between ethnicity and gender was not significant ( $p = .12$ ).

In support of Hypothesis 2, Chinese Canadians were significantly lower in total self-

disclosure than were European Canadians ( $M_s = 66.10$  and  $75.32$ ),  $F(1, 134) = 14.92$ ,  $p = .0002$ ,  $\eta^2 = .10$ . More specifically, they were lower in both relationship self-disclosure ( $M_s = 35.30$  and  $32.93$ ),  $F(1, 134) = 4.28$ ,  $p = .04$ ,  $\eta^2 = .03$ , and in sexual self-disclosure ( $M_s = 40.02$  and  $33.17$ ),  $F(1, 134) = 20.89$ ,  $p < .0001$ ,  $\eta^2 = .13$ . No other main effects or interactions were significant for the self-disclosure scale (all  $p_s > .08$ ). There were no cultural differences on the Opener Scale ( $p = .81$ ), nor were there any other significant effects (both  $p_s > .07$ ).

### *Tests of Mediation Hypotheses*

*Hypothesis 3: Gender-Role Ideology Mediates the Culture-Intimacy Association.* The preceding analyses had already established the first two steps in testing this mediation: Chinese Canadians were significantly more traditional than were European Canadians, and significantly lower in intimacy. To test the third step, the association of gender-role ideology with intimacy was estimated through multilevel analysis. Actor and partner effects, culture, gender, and the interactions of culture and gender with the actor and partner effects were included as predictors of actor's intimacy. None of the higher-order interactions with culture were significant (all  $p_s > .36$ ), and were removed from the model. In the resulting model, actor's gender-role ideology was significantly associated with actor's intimacy ( $\beta = -.30$ ,  $p = .001$ ). The interaction of gender with partner's ideology was also significant ( $\beta = .21$ ,  $p = .02$ ): partner's ideology was negatively related to women's intimacy ( $\beta = -.34$ ,  $p = .01$ ) and nonsignificantly related to men's intimacy ( $p = .48$ ).

The fourth step in the mediational analysis tested the significance of actor's gender-role ideology, then partner's ideology, as mediators of the culture-intimacy association. Note that partner's ideology was tested as a mediator of women's intimacy only, consistent with the findings of the third step, and therefore used standard regression coefficients instead of



multilevel coefficients. When actor's gender-role ideology was added alongside culture as a predictor of actor's intimacy, the coefficient for culture decreased from .39 ( $p = .0002$ ) to .28 ( $p = .008$ ), and the Sobel test was significant,  $z = 2.74$ ,  $p = .006$ . When partner's (i.e., men's) gender-role ideology was included with culture as predictors of women's intimacy, the coefficient for culture decreased from .41 ( $p < .001$ ) to .20 ( $p = .14$ ), and the Sobel test was significant,  $z = 2.43$ ,  $p = .02$ . Taken together, these results not only replicated Study 1's finding that *actor's* gender-role traditionalism mediated Chinese Canadians' lower intimacy, but further demonstrated that *partner's* gender-role traditionalism mediated Chinese Canadian women's lower intimacy.

*Hypothesis 4: Self-Disclosure Mediates the Association of Gender-Role Ideology with Intimacy.* The following analyses tested actor's self-disclosure, then partner's self-disclosure, as mediators of the link between gender-role ideology and intimacy. To establish the first step in the mediational sequence for actor's self-disclosure, analyses revealed that actor's ideology predicted actor's self-disclosure ( $\beta = -.26$ ,  $p = .002$ ). The second step in the mediational sequence – that actor's traditionalism predicted actor's intimacy – was established in the preceding analyses. Third, multilevel analyses found that actor's self-disclosure significantly predicted actor's intimacy ( $\beta = .60$ ,  $p < .0001$ ). To complete the mediational analysis, actor's self-disclosure was included with actor's ideology as predictors of actor's intimacy. The coefficient for actor's ideology was thus reduced from  $-.29$  ( $p < .0001$ ) to  $-.23$  ( $p = .0004$ ), and the Sobel test was significant,  $z = -3.00$ ,  $p = .003$ . Thus, participants who were more traditional in their gender-role ideology may have been lower in intimacy at least in part because of their lower self-disclosure.

Next, partner's self-disclosure (i.e., men's) was tested as a mediator of the association of partner's gender-role ideology with women's intimacy. To establish mediation, it was demonstrated, first, that men's traditionalism was associated with men's self-disclosure ( $\beta = -.35$ ,  $p = .002$ ); second, that men's ideology was associated with women's intimacy ( $\beta = -.47$ ,  $p < .0001$ ); and third, that men's self-disclosure predicted women's intimacy ( $\beta = .43$ ,  $p = .0004$ ). In the fourth step, men's self-disclosure was included with men's ideology as predictors of women's intimacy. The coefficient for men's ideology was thus reduced from  $-.47$  ( $p < .0001$ ) to  $-.36$  ( $p = .002$ ), and the Sobel test was significant,  $z = -1.98$ ,  $p = .05$ . These findings suggest that men's gender-role ideology was related to women's lower intimacy at least in part through traditional men's constrained self-disclosure. That Chinese Canadian men reported the most traditional gender-role ideology suggests that they may play an especially instrumental role in shaping their own and their partner's experiences of intimacy.

*Responsiveness.* Because the absence of cultural differences on the Opener Scale violated the first requirement of the mediational sequence, responsiveness was ruled out as a mediator of the culture-intimacy association. However, associations of responsiveness with intimacy and with gender-role ideology were still conducted on an exploratory basis. First, actor, partner, culture, gender, and interaction effects for the Opener Scale were entered together in a multilevel analysis to predict actor's intimacy. Results did not reveal any significant effects for responsiveness (all  $ps > .21$ ). Second, actor, partner, culture, gender, and interaction effects for gender-role ideology were entered in a multilevel model to predict actor's responsiveness. Again, none of the effects for gender-role ideology were significant (all  $ps > .07$ ). In short, responsiveness as measured did not shed light on the association of gender-role ideology with intimacy.

*Relationship Outcomes.* Hypothesis 5 predicted that Chinese Canadians would experience a greater likelihood of relationship termination, and that this increased likelihood would be mediated by their lower intimacy. To test this hypothesis, data on the status of the relationship several months after participation in the initial study was obtained for 57 of the 69 couples (27 European Canadian and 30 Chinese Canadian). Of the European Canadians contacted, 6 (11.11%) had terminated their relationship, compared to 6 (10%) of the Chinese Canadians. This difference was not significant ( $p = .85$ ), meaning that Hypothesis 5 was not supported. To further probe the predictors of relationship termination, a logistic regression analysis was conducted that included the same predictors that were used for the parallel analysis in Study 1. Because Study 1 found that intimacy accounted for variation in relationship termination over and above that accounted for by relationship satisfaction, suggesting that intimacy may be more crucial for relationship termination, satisfaction was not again included as a predictor in this analysis. Results revealed that intimacy ( $\beta = -1.34, p = .004$ ) and length of relationship ( $\beta = -.57, p = .05$ ) were again significantly associated with a lower likelihood of relationship termination. No other variables were significant (all  $ps > .06$ ). Consistent with the findings of Study 1, then, the less intimacy reported at the initial study, the more likely participants were to experience relationship termination several months later. That this effect was not moderated by culture again suggests that intimacy has equally important relationship outcomes for European Canadians and for Chinese Canadians.

### Discussion

In Study 2, Chinese Canadians' more traditional gender-role ideology appeared to play a key role in their lower self-disclosure, and in turn, their lower intimacy. Furthermore, men's traditionalism and associated lower self-disclosure contributed to their partners' lower intimacy.

By elucidating this chain of associations, these findings highlight only one of the potential consequences of socializing men and women to feel, think, and behave as if they are fundamentally different. In contrast to the results for self-disclosure, there were no mean cultural differences in responsiveness, nor was this variable related to intimacy or gender-role ideology. While the Opener Scale was highly reliable for both groups, this trait measure of responsiveness may be limited in capturing the situation-specific, transactional nature of partners' responses within particular relationships – transactions that might be better assessed with daily diary methods (e.g., Wheeler & Nezlek, 1977). Finally, Study 2 did not find that Chinese Canadians were any more likely to terminate their relationships than were European Canadians, as revealed in Study 1. In both studies, however, intimacy appeared to similarly protect against relationship termination for European and Chinese Canadian couples, suggesting that intimacy may serve an equally important function within their relationships.

### General Discussion

Taken together, these studies provide strong evidence that Chinese Canadians' greater gender-role traditionalism contributes to their lower intimacy. Results revealed that (a) gender-role ideology was more important for understanding cultural differences in intimacy than was individualism or collectivism, (b) Chinese Canadians' gender-role traditionalism and associated lower self-disclosure contributed to their lower intimacy, (c) men's gender-role traditionalism contributed to women's lower intimacy at least in part through inhibiting men's self-disclosure, (d) Reis and Shaver's (1988) interpersonal process model of intimacy was partially supported in both groups, and (e) lower intimacy may have similar consequences for relationship satisfaction and termination for European and Chinese Canadians alike. Each of these findings will be discussed in turn.

First, that gender-role ideology contributed more to cultural differences in intimacy than did individualism or collectivism reinforces recent calls in cross-cultural psychology to expand research attention beyond individualism-collectivism to other, less-researched cultural dimensions (e.g., Matsumoto, 2004). Such expansion is particularly justified by the null results for individualism in Study 1: European Canadians were not significantly more individualistic than were Chinese Canadians, and the association of individualism with intimacy for European Canadians was not *positive* – as often asserted in the literature (e.g., Gao, 2001; Hsu, 1985; Ting-Toomey, 1991) – but *negative* (see Table 2). This latter finding resonates, however, with research demonstrating that extreme individualists may perceive intimacy and commitment as a threat to independence, resulting in withdrawal from the relationship (Dion & Dion, 1991). Overall, individualism and collectivism clearly did not explain cultural differences in intimacy as well as did gender-role ideology.

Second, the results of Study 2 suggested that gender-role traditionalism inhibits self-disclosure, which in turn inhibits intimacy. This was true both for one's own traditionalism and for the influence of men's traditionalism on women's intimacy. These linkages suggest that Chinese Canadian men, who reported the greatest traditionalism in both studies, may particularly influence intimacy in their relationships. For example, that self-disclosure may be even more constrained for men than for women in Chinese culture (Zuo, 2003) may mean that women reciprocate men's low disclosure (Cozby, 1973), resulting in both partner's relatively low intimacy. However, experimental or longitudinal data is needed to more firmly establish the direction of causality among these associations.

Third, these studies mark a first step toward cross-cultural validation of Reis and Shaver's (1988) process model of intimacy. Study 1 found that both cultural groups

conceptualized intimacy as self-disclosure and responsiveness. While the role of responsiveness awaits further study, Study 2 provided support for the intimacy-enhancing role of self-disclosure across cultural groups. That Chinese Canadians were particularly low in self-disclosure but no different in responsiveness may alone account for their lower intimacy relative to European Canadians.

Fourth, these studies demonstrated that cultural differences in intimacy may not be benign, but may have important practical consequences for relationship well-being. Study 1 found that Chinese Canadians' lower intimacy mediated their lower relationship satisfaction and higher rate of relationship termination. Although Study 2 did not find that Chinese Canadians again showed a higher likelihood of ending their relationships, results from both studies revealed that lower intimacy was associated with greater risk of relationship termination for European and Chinese Canadians alike. While mindful that these results may not generalize beyond the current samples, it is nonetheless intriguing to speculate on the implications of such findings. For one, to the extent that dating relationships are analogous in many respects to marital relationships (Hill, Rubin, & Peplau, 1976), these results suggest the possibility that increasing dissatisfaction with low intimacy may be at least partially contributing to the rising divorce rates in the PRC (The New York Times, October 2005) and in Hong Kong (Hong Kong Annual Digest of Statistics, 1993). As such, further development of culturally-specific couples' therapies may do much to enhance intimacy, and the personal and relational well-being of diverse cultural groups thereby.

#### *Limitations and Future Directions*

Caution is warranted when interpreting these results for several reasons. First, it is important to note that although Chinese Canadians reported experiencing less intimacy than did European Canadians, their means on the intimacy scale (98.00 and 97.42 for Studies 1 and 2,

respectively) were still far above the theoretical midpoint (72). By the same token, their means on the Sex-Role Ideology Scale (47.02 and 49.00 for Studies 1 and 2, respectively) were below the theoretical midpoint (54). In an absolute sense, then, Chinese Canadians were highly intimate in their relationships as well as egalitarian in their gender-role ideology.

Second, the current findings may be confounded with the effects of acculturation. That Chinese Canadians had lived in Canada for an average of 8 years suggests that acculturation to mainstream Canadian values and norms may have blunted any initial cultural differences, such as in individualism and collectivism, and their corresponding influences on intimacy. Furthermore, it is possible that acculturative stress – or, the anxiety, depression, and identity confusion that may result from the process of acculturation (Berry, Poortinga, Segall, & Dasen, 1992) – reduced intimacy for some Chinese Canadian partners. However, that Chinese Canadians born in Canada did not significantly differ in intimacy from Chinese Canadians born elsewhere ( $ps = .97$  and  $.42$  for Studies 1 and 2, respectively) suggests that aspects of Confucian culture, such as gender-role traditionalism, may have had a certain degree of common influence within the Chinese Canadian group that at least partially overrode the effects of acculturation.

Additionally, the results of these studies may be limited by the selection of measures. In particular, different measures of responsiveness and individualism-collectivism may have yielded more illuminating results than did the Opener Scale and the Individualism and Collectivism Scale, respectively. The possibility also remains that response bias influenced answers to the measures used here. In particular, Chinese tend to be modest when discussing romantic relationships (Moore, 1998), suggesting that they may have downplayed some of their responses.

Finally, the current findings have not conclusively established that Chinese Canadians'

lower intimacy necessarily has negative consequences. For instance, Chinese Canadians' higher rate of relationship termination in Study 1, although linked to lower intimacy, may simply reflect a pragmatic casual dating strategy for finding a more suitable potential spouse (Moore, 1998), and may therefore have little bearing on the likelihood of divorcing in the future. This pattern of results may also reflect family influence over relationship outcomes: strong family disapproval may hasten the end of Chinese dating relationships (Moore, 1998). It is still possible, then, that lower premarital intimacy has fewer long-term personal and relational consequences for Chinese Canadians than for European Canadians. More research is needed to examine the consequences of lower marital intimacy in diverse cultural groups.

The present studies suggested several additional avenues for future research. For one, greater knowledge about cultural differences in intimacy might be gained by directly observing couple interactions (Gottman & Notarius, 2000). This would afford an opportunity to examine such nonverbal behaviors as eye gaze, touching, and physical distance – modalities through which Chinese tend to express intimacy to a greater extent than do Westerners (Moore, 1998). Furthermore, a daily diary methodology would more fully capture the situation-specific, dynamic transaction of partners' self-disclosures and responses than the static, dispositional measures used in the present studies. Finally, the expansion of sampling, both to cultural groups who live outside Western contexts to reduce the confounding influence of acculturation, and to cultural groups who endorse even greater gender-role traditionalism than do Chinese Canadians, might yield additional gains to this research literature.

In conclusion, these studies demonstrated that Chinese Canadians may experience lower intimacy in romantic relationships at least in part because of their greater gender-role traditionalism and associated lower self-disclosure. While individualism and collectivism may



also play a role, the present findings suggest that their relative influence is far less than that of gender-role ideology. At a broader level, these studies contribute to the growing movement toward greater cultural inclusiveness in the close relationships literature (Reis, Collins, and Berscheid, 2000). In light of the pervasive migration and globalization that characterize modern existence, it is imperative to examine the nature, antecedents, and outcomes of close relationship processes not just for Westerners, but for all cultural groups.

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Table 1

*Study 1: Raw means and standard deviations (in parentheses) for continuous variables*

Scale	European Canadians		Chinese Canadians	
	Men ( <i>n</i> = 31)	Women ( <i>n</i> = 31)	Men ( <i>n</i> = 31)	Women ( <i>n</i> = 31)
Intimacy Scale	103.23 (10.88)	105.06 (12.65)	95.77 (13.79)	100.23 (11.26)
SRIS	43.87 (10.69)	38.77 (8.11)	49.90 (10.38)	44.13 (8.31)
Individualism	56.39 (7.60)	55.45 (7.59)	55.23 (8.25)	53.39 (6.28)
Collectivism	53.81 (8.15)	54.16 (6.34)	59.13 (6.26)	56.58 (6.20)
Satisfaction	21.42 (4.06)	21.90 (3.46)	19.55 (4.58)	20.39 (3.38)

Table 2

*Study 1: Pearson's r coefficients among standardized variables for European Canadians (N = 62) and Chinese Canadians (N = 62)*

Variable	1	2	3	4	5
1. Intimacy		-0.34**	-0.13	-0.07	0.69***
2. SRIS	-0.36**		0.11	0.10	-0.13
3. Individualism	-0.25*	0.26*		0.20	-0.10
4. Collectivism	-0.003	-0.01	-0.16		0.01
5. Satisfaction	0.82***	-0.27*	-0.20	-0.12	

*Note.* European Canadian data is presented below the diagonal, and Chinese Canadian data is presented above the diagonal.

\* $p < .05$ . \*\* $p < .01$ . \*\*\* $p < .0001$ .

Table 3

*Study 2: Means and standard deviations (in parentheses) for continuous variables*

	European Canadians		Chinese Canadians	
	Men ( <i>n</i> = 33)	Women ( <i>n</i> = 33)	Men ( <i>n</i> = 36)	Women ( <i>n</i> = 36)
Intimacy	106.45 (9.31)	108.21 (9.15)	97.14 (13.85)	97.69 (13.85)
SRIS	39.36 (8.98)	36.24 (8.12)	53.08 (9.63)	44.92 (10.44)
MSDQ: Total	73.97 (13.08)	76.67 (12.60)	66.06 (14.22)	66.14 (15.74)
-Relationship	33.94 (6.70)	36.67 (6.56)	32.33 (6.86)	33.53 (6.78)
-Sex	40.03 (7.38)	40.00 (8.10)	33.72 (9.37)	32.61 (9.91)
Opener Scale	38.55 (6.47)	40.55 (5.85)	38.36 (6.45)	40.22 (5.75)

Table 4

*Study 2: Pearson's r coefficients among standardized variables for European Canadians (N = 66) and Chinese Canadians (N = 72)*

Variable	1	2	3	4	5	6
1. Intimacy		-0.26*	0.65***	0.65***	0.55***	0.09
2. SRIS	-0.31*		-0.10	-0.15	-0.05	-0.09
3. MSDQ Total	0.60***	-0.33**		0.87***	0.94***	0.11
4. MSDQ Rel	0.66***	-0.34**	0.87***		0.64***	0.15
5. MSDQ Sex	0.42**	-0.25*	0.90***	0.58***		0.06
6. Opener	0.17	0.04	0.22	0.24	0.16	

*Note.* European Canadian data is presented below the diagonal, and Chinese Canadian data is presented above the diagonal. MSDQ Rel = relationship subscale of the Marital Self-Disclosure Questionnaire.

\* $p < .05$ . \*\* $p < .01$ . \*\*\* $p < .0001$ .