

Love at the Cultural Crossroads:  
Intimacy and Commitment in Chinese Canadian Relationships

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### Abstract

The role of culture in romantic relationships has largely been investigated by examining variation between groups, rather than within groups. The present study took a within-group approach to examine the influence of Canadian and Chinese cultural identification on gender role egalitarianism, intimacy, and commitment in 60 Chinese Canadian dating couples. Results revealed that men's identification with mainstream Canadian culture was associated with their own and with their partner's greater intimacy, at least in part because of their greater egalitarianism. Conversely, women's identification with mainstream Canadian culture was associated with their partners' *lower* intimacy. Finally, women's identification with Chinese heritage culture was associated with their greater commitment, and some evidence suggested that this was because of their greater gender role traditionalism.

*Keywords:* Culture/ethnicity, gender differences, intimacy, commitment

### Author Note

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As multicultural societies flourish around the globe, it is increasingly common for individuals to identify with more than one culture. In particular, bicultural individuals may identify in varying degrees with the culture of their birth or upbringing, referred to as the *heritage* culture, and/or with the dominant host culture in which they currently reside, referred to as the *mainstream* culture (Ryder, Paulhus, & Alden, 2000). In recent years, psychologists have begun to explore the ways that cultural identification influences the attitudes, beliefs, and behaviors that guide dating and marital relationships (Ataca & Berry, 2002). Few studies, however, have investigated these issues by adopting a strength-of-cultural-identity design – one that holds that members within a group who more strongly identify with the norms, values, and attitudes that constitute that group’s culture will be more likely to exhibit behavior in line with these cultural norms (Jetten, Spears, & Manstead, 1997), including relationship behavior (Lalonde, Hynie, Pannu, & Tatla, 2004). By attending to and harnessing individual differences in cultural identification, within-group approaches offer an advantage over between-group designs, which tend to obscure this individual variation and risk stereotyping people who may share no similarities beyond group membership (Matsumoto, 2000).

The goal of the current study was to extend the literature on culture and relationships by examining whether the strength of Chinese Canadians’ identification with mainstream Canadian culture and with Chinese heritage culture was associated with intimacy and commitment in their romantic relationships. Importantly, gender role ideology – a dimension along which mainstream Canadian culture tends to endorse

greater egalitarianism than does traditional Chinese culture (Dion & Dion, 1996) – was examined as a mediator of these associations. To examine these linkages in greater detail, this article will (a) review perspectives on cultural identification and acculturation, (b) examine differences in gender role ideology in mainstream Canadian and Chinese culture, and (c) discuss the ways that these differences may influence two important components of relationship quality – intimacy and commitment.

### **Mainstream and Heritage Culture Identification**

For many people, cultural identity is a salient aspect of the self-concept (Ryder et al., 2000). Bicultural individuals – those who have internalized the values, norms, customs, beliefs, and behaviors of two cultures (Hong, Morris, Chiu, & Benet-Martinez, 2000) – must negotiate between independent cultural identities that vary in strength. Frameworks developed within the acculturation literature are useful for examining the influence of these cultural identities. According to the classic definition by Redfield, Linton, and Herskovits (1936), acculturation refers to “those phenomena which result when groups of individuals having different cultures come into continuous first-hand contact, with subsequent changes in the original culture patterns of either or both groups” (p. 149). At the psychological level, acculturation has been operationalized by Berry (1980) in terms of one’s attitudes toward two issues: to what extent should one maintain one’s heritage culture, and to what extent should one pursue contact and participation with the mainstream culture? This model of acculturation is bidimensional, such that identification with one’s mainstream culture is independent of identification with one’s heritage culture (Ryder et al., 2000). Some findings suggest that identification with both mainstream and heritage culture may lead to maximal psychological and sociocultural

adjustment (Berry, Phinney, Sam, & Vedder, 2006; Boski, 1994; Rogler, Cortes, & Malgady, 1991).

Insofar as bidimensional models of acculturation accommodate not only the perspectives of migrants (immigrants and sojourners) but also of sedentary groups (ethnocultural groups and indigenous peoples), they can be utilized to examine the psychological experience of bicultural individuals from wide-ranging backgrounds. The present study focused on Chinese Canadians, whose large and heterogeneous community consists of individuals who vary widely in their mainstream Canadian and Chinese heritage cultural identification. Because cultural identification transcends generational status – it is possible, for example, that a second-generation Chinese Canadian may identify more strongly with his or her heritage Chinese culture than with mainstream Canadian culture despite having been born in Canada – both first- and second-generation Chinese Canadians were examined in this study. In support of this strength-of-cultural-identity approach for operationalizing acculturation, Ryder et al. (2000) examined the association of Chinese Canadians' mainstream and heritage identification with a number of psychological variables, including personality, self-construal, and psychosocial adjustment, and found that mainstream and heritage identification accounted for variance in the dependent measures over and above between-group markers such as generational status. This approach therefore functions as a more nuanced way of operationalizing cultural influence, free of the implicit assumption that all group members necessarily think, feel, and behave in the same way.

Few studies, however, have examined the ways that identification with mainstream and heritage culture may be associated with attitudes and behaviors in

romantic relationships. One may reasonably expect that those who more strongly identify with mainstream culture may be expected to display relationship attitudes and behaviors that are encouraged within that cultural milieu, whereas those who more strongly identify with a heritage culture may be expected to display relationship attitudes and behaviors that are consistent with heritage culture norms. Accordingly, Lalonde et al. (2004) found that second-generation South Asian Canadians' heritage (but not mainstream) culture identification was significantly related to preferring traditional qualities in a mate – a preference that is consistent with South Asian heritage culture norms.

In an extension of this literature, the present study examined whether strength of cultural identity is related to two important components of relationship quality: intimacy and commitment. Intimacy is commonly defined as a process of reciprocal self-disclosure and responsiveness between interactional partners (Reis & Shaver, 1988). Commitment, on the other hand, is conceptualized in this study according to Johnson's (1999) tripartite model, which makes a distinction between *moral* commitment, feeling a sense of moral obligation to one's partner or to the relationship; *personal* commitment, desiring to continue a relationship because it is satisfying; and *structural* commitment, feeling compelled to continue a relationship because external constraints, such as having children, mean that ending the relationship would be difficult. The present study sought to further understand the association of cultural identification with intimacy and commitment by exploring gender role ideology as a mediator.

### **Gender Role Ideology**

Cultural identity is linked to a wide variety of attitudes, values, and behaviors that may mediate associations with relationship qualities. The present study examined a

potential mediator that has particular resonance within heterosexual relationships – gender role ideology. This construct is conceptualized as a dimension of prescriptive beliefs about the roles and behaviors that are most appropriate for each sex (Kalin & Tilby, 1978). At one end of the dimension, egalitarian beliefs hold that these roles and behaviors ought to be equivalent for both sexes, while at the opposite end, traditional beliefs maintain that men and women are fundamentally different, and should therefore assume different roles and behaviors (Cota & Xinaris, 1993). Typically, men’s roles and behaviors are greater in status and agency than women’s (Eagly & Wood, 1999).

Little research attention has examined the full chain of associations between cultural identification, gender role ideology, and relational quality. The current study attempted to fill this research gap by exploring two potential mediating sequences: the association of mainstream culture identification with greater gender role egalitarianism, and, in turn, greater intimacy; and the association of heritage culture identification with less gender role egalitarianism (i.e., greater traditionalism), and, in turn, greater commitment. The focus on intimacy and commitment is warranted by the importance of each for enhancing relationship satisfaction and stability both in Western (Fletcher, Simpson, & Thomas, 2000; Hasebrauck & Fehr, 2002; Kim & Hatfield, 2004) and in Chinese (Marshall, 2008) cultural settings. Moreover, testing gender role egalitarianism as a mediator is justified by previous research showing that it is positively associated with intimacy at least in part through enhanced self-disclosure (Marshall, 2008; Rubin, Hill, Peplau, & Dunkel-Schetter, 1980), and that egalitarianism is negatively associated with moral commitment (Johnson, Caughlin, & Huston, 1999).

### **Mainstream Culture Identification, Gender Role Egalitarianism, and Intimacy**

Studies have demonstrated a link between mainstream Western culture identification and egalitarian gender role attitudes (Phinney & Flores, 2002), and between egalitarianism and intimacy (Rubin et al., 1980), but no published study that the author is aware of has tested the full mediational model, especially one that takes the romantic partner's influence into account. In terms of the first link, between mainstream culture involvement and gender role attitudes and ideology, research has found that when migrants from economically developing countries become more involved in the mainstream culture of economically developed countries, they tend to adopt more egalitarian gender role beliefs (Harris & Firestone, 1998). Indeed, economic development (Kagitcibasi, 1985; Williams & Best, 1990) and, in association, individualistic value orientations (Apparala, Reifman, & Munsch, 2003), are related to more egalitarian ideologies and higher status for women. Accordingly, Mexican Americans (Leaper & Valin, 1996; Phinney & Flores, 2002; Valentine & Mosley, 2000), Iranian American women (Hanassab, 1991), British South Asians (Goodwin & Cramer, 2000), and South Asian Canadians (Lalonde et al., 2004) have all reported greater egalitarianism with increasing involvement in mainstream Western society. It follows that Chinese Canadians who more strongly identify with mainstream Canadian culture should endorse a more egalitarian gender role ideology than those who identify less strongly.

On the other hand, Chinese Canadians who identify less with mainstream Canadian culture and more with Chinese heritage culture should be less likely to endorse an egalitarian gender role ideology. That Chinese culture tends to promote more traditional gender roles than does Western culture has been well-documented (Best & Williams, 1997; Chia, Moore, Lam, Chuang, & Cheng, 1994; Loscocco & Bose, 1998).

This traditionalism may derive at least in part from Confucian principles suggesting that women are subordinate to men (Bond & Hwang, 1986) – principles that remain influential in mainland China in spite of the efforts of the Communist Party to increase equality between the sexes (Zuo, 2003). Likewise, while many women in Hong Kong work outside the home, women's career ambitions are not accorded the same status as men's, and working women are often viewed as "unfeminine" (Liu, 2003; Tang & Tang, 2001). Chinese individuals who acculturate within Western settings must reconcile the more traditional ideology that is prevalent in East Asia with the more egalitarian one that prevails in the West (Dion & Dion, 1996). Negotiating cultural differences in gender role ideology may have implications for intimacy in romantic relationships.

One consequence of a traditional gender role ideology is that it may constrain self-disclosure in heterosexual relationships (Neff & Suizzo, 2006; Rubin et al, 1980),<sup>1</sup> and therefore inhibit intimacy (Reis & Shaver, 1988). Traditional men tend to perceive the disclosure of feelings as effeminate and therefore undesirable (Thompson & Pleck, 1986), while traditional women, whose sense of self tends to be contingent upon interpersonal relationships (Cross & Madson, 1997), may be motivated to preserve relational harmony through self-silencing rather than self-disclosing their thoughts and feelings (Jack, 1991). Indeed, Ickes and Barnes (1978) found that when traditional men and women were covertly videotaped, they talked, laughed, and smiled less than did non-traditional couples. Constrained self-disclosure, in turn, is related to inhibited intimacy (Laurenceau, Feldman Barrett, & Rovine, 2005).

Insofar as social, economic, and cultural factors influence gender role ideology, it follows that cultural groups may show corresponding differences in intimacy.

Accordingly, Marshall (2008) found that Chinese Canadians' greater traditionalism relative to European Canadians was associated with lower self-disclosure, and in turn, lower intimacy in heterosexual relationships. Extending this work further, it is reasonable to surmise that if Chinese Canadian partners' greater identification with mainstream Canadian culture is associated with the adoption of more egalitarian gender role beliefs, they may therefore experience greater intimacy in heterosexual relationships. Past research has inferred but not directly tested this possibility. For example, Koutrelakos (2004) found that Greek Americans endorsed greater self-disclosure in relationships than did native Greeks, presumably because Greek Americans have received more exposure to American norms of egalitarianism that encourage open expression. However, Koutrelakos (2004) did not directly test this mediational sequence, nor did he examine potential links with intimacy. Likewise, Flores, Tschann, Marin, and Pantoja (2004) suggested that Mexican American couples who were more involved in mainstream American culture were more likely than less involved couples to adopt egalitarian gender roles and beliefs that encourage greater self-disclosure. As such, they may be more likely to express rather than avoid problems in their relationships – a pattern that may foster intimacy, but also increase overt marital conflict. Again, however, Flores et al. (2004) did not directly test the mediating role of gender role egalitarianism in the acculturation of self-disclosure and conflict. Others have examined the association of mainstream Western cultural involvement with such relationship variables as more liberal ideas about intimate relationships among Iranian women (Hanassab, 1991), and with more intimate, companionate, and sexual marital relationships among Mexican American women (Tharp, Meadow, Lennhoff, & Satterfield, 1968), yet did not test whether gender role

ideology mediated these associations. Although it may be only one of many potential variables that mediate cultural differences in intimacy, past research has verified that gender role ideology is indeed a significant mediator, whereas other potential mediators, such as individualism, have not received the same support (Marshall, 2008). In sum, the extant literature is consistent with the idea that gender role attitudes, beliefs, or ideology mediate the association of mainstream Western cultural identification with intimacy, yet to the author's knowledge, no direct test of this mediational model has been conducted up until now.

### **Heritage Culture Identification, Traditionalism, and Commitment**

Does a parallel mediating sequence exist between heritage culture identification, gender role traditionalism, and commitment in relationships? To the extent that a culture endorses traditional gender roles, people who identify more strongly with that culture should also be more traditional in their gender ideology (Terry & Hogg, 1996). People who are more traditional in their gender role ideology, in turn, tend to have a stronger sense of moral commitment to their relationships than do those people who are less traditional (Johnson et al., 1999). Whereas more egalitarian individuals are less likely to subscribe to the institution of marriage and are more accepting of divorce, many traditional individuals – both in Canadian and Chinese culture – equate the roles of husband and wife with status and the achievement of a culturally-mandated task. Insofar as these roles are central to their identity, traditional individuals may feel strongly committed to maintaining these roles in order to validate their self-worth (Jack, 1991). Traditional individuals may also be morally committed to conventional family structures as means of conserving the status quo in society, especially in the face of rising divorce

rates in Canada and in China over the past few decades (The New York Times, October 2005). Accordingly, research has found that men who are more traditional are more likely to marry (Sassler & Goldscheider, 2004; Sassler & Schoen, 1999), consistent with the centrality of marriage and the family for people who hold more traditional values (Gallagher, 2003; Xu, Hudspeth, & Bartkowski, 2005). It is important to note, however, that although moral commitment may be high in traditional couples, they tend to report less relationship satisfaction than do egalitarian couples (Helms, Proulx, Klute, McHale, & Crouter, 2006), suggesting that *personal* commitment may be lacking. As such, personal commitment (indexed in the present study by relationship satisfaction) was controlled for in the following analyses to better examine the unique associations of heritage culture identification and gender role ideology with moral commitment.

In sum, the present study sought to expand the literature on culture and relationships in several ways. First, it adopted a within-group strength-of-cultural identity approach to examine cultural influences on relationships, thus extending past work that has used a more typical between-groups design (e.g., Marshall, 2008). Second, this study tested whether gender role ideology mediated the association of mainstream culture identification with intimacy, and heritage culture identification with commitment. In particular, the examination of cultural influences on commitment brings a novel element to a research literature that has previously focused on cultural influences on intimacy (e.g., Adams, Anderson, & Adonou, 2004; Dion & Dion, 1991, 1993; Marshall, 2008). Third, data was collected from *both* partners in a couple, thereby allowing for the utilization of powerful multilevel modeling techniques to separately examine the influence of the participant's own variables, the romantic partner's variables, and the

interaction between the partners' variables on the dependent variables of each member of the couple. This examination of individual, partner, and dyadic effects underscores the reality that cultural identification, gender role ideology, and relational quality do not exist in a social vacuum, but rather, tend to influence and be influenced by important close relationships. The following hypotheses were tested in a sample of Chinese Canadian dating partners.

### **Hypotheses for Intimacy**

**Hypothesis 1.** Chinese Canadians who indicate stronger identification with mainstream Canadian culture will be more egalitarian in their gender role ideology, as will their partners, than those indicating weaker identification.

**Hypothesis 2.** Participants who indicate stronger mainstream Canadian identification will report greater intimacy in their relationships, as will their partners.

**Hypothesis 3.** Participants who are more egalitarian will report greater intimacy in their relationships, as will their partners.

**Hypothesis 4.** Egalitarianism will mediate the association of mainstream Canadian culture identification with intimacy.

### **Hypotheses for Commitment**

**Hypothesis 5.** Participants who more strongly identify with heritage Chinese culture will be less egalitarian (i.e., more traditional) in their gender role ideology than those with weaker identification.

**Hypothesis 6.** Participants who more strongly identify with heritage Chinese culture will report greater commitment in their relationships, as will their partners.

**Hypothesis 7.** Participants who are less egalitarian will report greater commitment than those who are more egalitarian.

**Hypothesis 8.** Egalitarianism will mediate the association of heritage Chinese culture identification with commitment.

## Method

### Participants

Sixty-five Chinese Canadian heterosexual dating couples were recruited through an introductory psychology class, campus posters, and an advertisement in the student newspaper at a Canadian university.<sup>2</sup> Five couples were not included in the following analyses because one partner did not provide complete data for the key variables. These excluded participants were not significantly different from the remaining participants on any of the other variables (all  $ps > .13$ ). All dyadic analyses, then, were based on a sample size of 60 couples. Those enrolled in the introductory psychology class received course credit for their participation; those not enrolled received \$10. Both partners in every couple identified Chinese culture as their heritage culture. Thirty-nine percent of the participants were born in Hong Kong, 30% were born in Canada, 18% were born in the People's Republic of China, 8% were born in Taiwan, and 5% were born elsewhere (but indicated ethnic Chinese heritage). Participants had lived in Canada for an average of 12 years ( $SD = 6.28$ ), and this did not significantly differ by gender.<sup>4</sup> The average length of their current relationship was one year ( $SD = 1.38$ ); 75% of participants indicated that

it was an exclusive dating relationship, 16% indicated that they cohabitated with their partner, and 9% indicated that it was a non-exclusive dating relationship. Finally, men were significantly older than women ( $M_s = 20.07$  and  $19.32$ ,  $SD_s = 1.85$  and  $1.64$ , respectively),  $t(117) = 2.35$ ,  $p = .02$ ,  $\eta^2 = .04$ .

### **Procedure and Measures**

Questionnaires were completed by romantic partners at the same time in separate rooms of a laboratory. All items were written in English, and were paired with a 5-point Likert response format anchored with “strongly disagree” (1) and “strongly agree” (5).

**Cultural identification.** The 20-item Vancouver Index of Acculturation (VIA; Ryder et al., 2000) assesses core aspects of mainstream and heritage cultural identification. In this study, heritage culture refers to Chinese culture, and mainstream culture refers to Canadian culture, regardless of whether participants are first- or second-generation Canadian. 10 items measure mainstream identification (e.g., “I believe in mainstream Canadian values”) and 10 measure heritage identification (e.g., “It is important for me to maintain or develop the practices of my heritage culture”). Both scales were reliable ( $\alpha_s = .82$  and  $.84$  for mainstream and heritage identification, respectively). Consistent with Ryder et al. (2000), the two dimensions of the VIA were not significantly correlated ( $r(118) = .15$ ,  $p = .10$ ). Nonetheless, because this weak correlation approached significance, both dimensions were included in the following regression models to uncover the unique contribution of each to the dependent measures.

**Gender role ideology.** The 30-item Sex-Role Ideology Scale (SRIS; Kalin & Tilby, 1978) measures a range of traditional and egalitarian beliefs about gender roles and behavior. Items were scored so that higher scores indicated greater egalitarianism.

Example items include “Women should be allowed the same sexual freedom as men,” and “More day care centers should be available to free mothers from the constant caring for their children.” This scale was internally consistent ( $\alpha = .82$ ).

**Intimacy.** A measure of intimacy was created by combining 12 intimacy items (e.g., “I feel emotionally close to my partner”) from the Triangular Love Scale (TLS; Sternberg, 1997) with an additional 12 items developed by the author that further assess self-disclosure, responsiveness, and emotional connection in romantic relationships (e.g., “I am comfortable sharing my innermost thoughts and experiences with my partner”). Factor analysis of this scale revealed the dominance of a single common factor that accounted for 63.69% of the total variance. Internal consistency of this scale was high ( $\alpha = .92$ ). Marshall (2008) found that this combined scale not only showed convergent validity with established measures of intimacy, but also demonstrated superior psychometric properties.

**Commitment.** Twelve items from the Triangular Love Scale (TLS; Sternberg, 1997) assess commitment ( $\alpha = .92$ ). Examples items are “I am committed to maintaining my relationship with my partner” and “I will always feel a strong responsibility for my partner.”

**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 ( $\alpha = .90$ ). Including satisfaction as a covariate in the regression models controlled for variance associated with personal, or satisfaction-based, commitment and afforded a clearer approximation of moral commitment – the

facet of commitment that should be most related to gender role ideology and heritage culture identification.<sup>3</sup> Controlling for satisfaction also attenuated the correlation between intimacy and commitment, ensuring sufficient independence to allow them to have potentially opposite associations with gender role egalitarianism (i.e., a positive association with intimacy, and a negative association with commitment). Thus, when satisfaction was included with commitment as simultaneous predictors of intimacy, the correlation between commitment and intimacy decreased from  $\beta = .82$  ( $p < .0001$ ) to  $.60$  ( $p < .0001$ ). That they remained correlated is consistent with research showing that moral commitment encourages some pro-relationship attitudes and behaviors (e.g., seeing relationship partners more positively than partners see themselves; Gagné & Lydon, 2003) that may also enhance intimacy.

**Background variables.** Participants indicated their own and their parents' country of birth, length of residency in Canada, residential status, 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.

## Results

Raw means and standard deviations for all continuous variables are presented separately for men and women in Table 1. Only one gender difference emerged as significant: women ( $M = 102.58$ ,  $SD = 12.48$ ) were more egalitarian in their gender role ideology than were men ( $M = 94.23$ ,  $SD = 14.66$ ),  $t(118) = 3.36$ ,  $p = .001$ ,  $\eta^2 = .09$ .

As for the background variables, only one gender difference was significant: men reported being involved in a greater number of prior relationships than did women ( $M_s = 1.10$  and  $0.65$ ,  $SD_s = 1.34$  and  $0.78$ , respectively),  $t(117) = 2.26$ ,  $p = .03$ ,  $\eta^2 = .04$ . This variable was related to age ( $r(119) = .30$ ,  $p = .001$ ), but not to intimacy or commitment, therefore it was not controlled for in the following analyses. Age, on the other hand, was significantly related to intimacy ( $r(119) = -.21$ ,  $p = .02$ ) and marginally related to commitment ( $r(119) = -.16$ ,  $p = .09$ ), and men were significantly older than women, so it was included as a control variable in all further analyses. Mother's level of education was the only background variable that was associated with intimacy ( $r(119) = .22$ ,  $p = .01$ ), such that participants with more highly-educated mothers also reported greater intimacy. This effect was not moderated by gender, nor was mother's level of education related to commitment, so it was not included as a control. There were no main or interactive effects of gender for any of the remaining background variables, nor were any of these variables related to intimacy or commitment.

### **Tests of Mediational Hypotheses: Intimacy**

According to Baron and Kenny (1986), four steps are necessary to establish mediation: the independent variable (mainstream culture identification) must significantly predict the mediator (gender role egalitarianism); the independent variable must significantly predict the dependent variable (intimacy); the mediator must significantly predict the dependent variable; and the association of the independent variable with the dependent variable must be significantly reduced when the mediator is introduced into the model. Each of these steps was tested in turn.

**Mainstream culture identification and gender role egalitarianism.** The first step tested Hypothesis 1 – that participants who reported greater identification with mainstream Canadian culture would be more egalitarian in their gender role ideology, as would their partners, than those with weaker identification. It was possible to assess, using multilevel models, whether the *partners* of these participants were also more egalitarian. These models are based on the assumption that, because partners involved in a relationship mutually influence one another, their scores on psychological measures are likewise related, and are therefore non-independent. The Actor-Partner Interdependence Model (APIM; Kashy & Kenny, 2000) accounts for this interdependency by separately estimating *actor effects*, which measure the association of each participant's independent variables with his or her own dependent variables, and *partner effects*, which measure the association of the partner's independent variables with the actor's dependent variables (Bradford, Feeney, & Campbell, 2002). *Relationship effects* refer to the interaction of the actor and partner effects (Snijders & Kenny, 1999). Therefore, actor's gender role ideology (the dependent variable in this case) may be influenced not only by his or her own mainstream identification (actor effect), but also by his or her partner's mainstream identification (partner effect), and by the interaction of the partners' mainstream identification (relationship effect). Data is hierarchically nested in dyadic analyses, such that individuals (considered the lower level of analysis, known as Level 1) are nested within dyads (considered the upper level, known as Level 2). In multilevel models, estimates at the lower level are modeled at the upper level as a random effect. For example, the Level 1 and Level 2 models that test Hypothesis 1 – that actor's gender role egalitarianism (AEGAL) is a function of actor's and partner's mainstream Canadian

identification (AMAIN and PMAIN, respectively) – are represented by the following equations:

$$\text{Level 1: } \text{AEGAL} = \beta_0 + \beta_1 \text{AMAIN} + \beta_2 \text{PMAIN} + \beta_3 \text{APMAIN} + r$$

$$\text{Level 2: } \beta_0 = \gamma_{00} + \mu_0$$

$$\beta_1 = \gamma_{10}$$

$$\beta_2 = \gamma_{20}$$

$$\beta_3 = \gamma_{30}$$

In the Level 1 equation,  $\beta_0$  represents the intercept (the average of AMAIN and PMAIN),  $\beta_1$  is the slope for the actor effect (the degree to which AEGAL changes as a function of AMAIN),  $\beta_2$  is the slope for the partner effect (the degree to which AEGAL changes as a function of PMAIN),  $\beta_3$  is the slope for the interaction of AMAIN and PMAIN (APMAIN), and  $r$  represents the error term. Actor's and partner's heritage culture identification, gender, the interactions of gender with the actor and partner variables, age, and length of relationship were also included in these models, but are not shown here for purposes of brevity.

In the Level 2 models, the intercept ( $\beta_0$ ) consists of a fixed component ( $\gamma_{00}$ ), which denotes the gender role ideology of partners when AMAIN and PMAIN are 0, and a random component ( $\mu_0$ ), which estimates the extent to which gender role ideology varies between couples after controlling for the effects of AMAIN and PMAIN. The remaining models suggest that the effects of AMAIN, PMAIN, and APMAIN are the same across couples; there is no random component for these effects in the Actor-Partner Interdependence Model (Kenny, Kashy, & Cook, 2006).

To estimate these effects, the following multilevel analyses were conducted with the PROC MIXED procedure in SAS (Campbell & Kashy, 2002). Here, partners' scores were nested within groups of  $n = 2$  to represent each couple. All continuous variables were centered on the grand mean prior to inclusion in the models; correlation coefficients among these variables are presented separately for men and women in Table 2. The correlations between men's and women's variables are presented along the diagonal. The following models included actor and partner main effects for mainstream and heritage identification (or gender role ideology where appropriate), the interaction of these terms with gender, and relationship effects (actor  $\times$  partner effects) as independent variables predicting either gender role ideology, intimacy, or commitment. Mainstream  $\times$  heritage interaction effects for actor and partner were also included in the models, but because none of these effects were significant, they were removed. Finally, age and length of relationship were also included as covariates in all of the following models. Effect coding was used to distinguish men from women (1 and -1, respectively). Degrees of freedom were determined by the Satterthwaite approximation.

First, tests examined Hypothesis 1 – that Chinese Canadians who identified more strongly with mainstream Canadian culture would be more egalitarian, as would their partners, than those who identified less strongly. Consistent with this hypothesis, actor's mainstream identification significantly predicted actor's egalitarianism ( $b = .56, t(93) = 2.48, p = .02$ ), but was qualified by a significant interaction with gender ( $b = .60, t(81) = 2.63, p = .01$ ). Simple slope analysis showed that mainstream identification was positively related to egalitarianism for men ( $b = 1.16, t(102) = 3.40, p = .001$ ), but not for women ( $p = .89$ ). Partner and relationship effects for mainstream culture identification

were not significant. Associations of heritage identification with egalitarianism will be discussed in a subsequent section. These results, then, partially supported Hypothesis 1: men's (but not women's) mainstream identification was associated with more egalitarian gender role beliefs, controlling for all other variables in the model.

**Mainstream identification and intimacy.** The second step in the meditational analysis tested whether mainstream culture identification was positively associated with intimacy (Hypothesis 2). Actor, partner, and relationship effects for mainstream and heritage identification, and their interactions with gender, were included in the models as predictors of intimacy; age and length of relationship were also included as covariates. The relationship effects were not significant, and they were removed from the model. The main effect of actor's mainstream identification approached significance ( $b = .36$ ,  $t(104) = 1.71$ ,  $p = .09$ ), and was qualified by a significant interaction with gender ( $b = .63$ ,  $t(66) = 2.47$ ,  $p = .02$ ). Simple slope analysis showed that actor's mainstream identification was significantly related to men's intimacy ( $b = 1.00$ ,  $t(90) = 2.82$ ,  $p = .006$ ), but actor's mainstream identification was not related to women's intimacy ( $p = .39$ ). Second, while there was no main effect of partner's mainstream identification, its interaction with gender was significant ( $b = -.72$ ,  $t(67) = 2.82$ ,  $p = .006$ ). Examination of this interaction revealed that partner's mainstream identification was negatively associated with men's intimacy ( $b = -.63$ ,  $t(88) = 2.04$ ,  $p = .04$ ), and positively associated with women's intimacy ( $b = .82$ ,  $t(91) = 2.29$ ,  $p = .02$ ). None of the associations of actor's or partner's heritage identification with actor's intimacy were significant. In sum, these results provided partial support for Hypothesis 2: controlling for all other variables in the model, men who reported greater identification with mainstream Canadian culture, and the

women dating these men, reported greater intimacy in their relationships. In contrast, men dating women who identified more strongly with mainstream Canadian culture reported *less* intimacy.

**Gender role egalitarianism and intimacy.** The third step in the mediational analysis tested whether actor's and partner's egalitarianism were positively associated with actor's intimacy (Hypothesis 3). Actor, partner, and relationship effects for egalitarianism, and their interactions with gender, were included in the models along with age and length of relationship as predictors of intimacy. The relationship effects were not significant, and they were removed from the model. There was a main effect of actor's egalitarianism ( $b = .25$ ,  $t(102) = 2.92$ ,  $p = .004$ ) that was marginally qualified by an interaction with gender ( $b = .16$ ,  $t(80) = 1.71$ ,  $p = .09$ ). Simple slopes showed that actor's egalitarianism was positively associated with men's intimacy ( $b = .41$ ,  $t(91) = 3.51$ ,  $p = .0007$ ), whereas actor's egalitarianism was not associated with women's intimacy ( $p = .49$ ). Additionally, while there was no main effect of partner's egalitarianism, its interaction with gender was significant ( $b = -.19$ ,  $t(80) = 2.04$ ,  $p = .04$ ). Simple slopes showed that partner's egalitarianism was positively associated with women's intimacy ( $b = .30$ ,  $t(90) = 2.61$ ,  $p = .01$ ), whereas partner's egalitarianism was not associated with men's intimacy ( $p = .59$ ). These results provide partial support for Hypothesis 3: controlling for all other variables in the model, men's (but not women's) egalitarianism was positively related to men's and women's intimacy.

**Mediational analysis: intimacy.** Hypothesis 4 stated that egalitarian gender role beliefs mediate the association of mainstream identification with intimacy. The previous analyses established that the first three steps in testing mediation were significant for the

actor effect for men (i.e., that the association of men's mainstream identification with men's intimacy was mediated by men's egalitarianism) and for the partner effect for women (i.e., that the association of men's mainstream identification with *women's* intimacy was mediated by men's egalitarianism). To verify the fourth step, the Sobel (1982) test assessed whether the association of the independent variable (men's mainstream identification) with the dependent variable (men's or women's intimacy) was significantly reduced when the mediator (men's egalitarianism) was included as a predictor in the equation. An online interactive calculation tool for mediation tests (Preacher & Leonardelli, 2001) was used to conduct the Sobel test. Two regression coefficients and their standard errors needed to be entered into this tool: the coefficient for the association of the independent variable with the mediator, and the coefficient for the association of the mediator with the dependent variable when the independent variable was also included as a predictor of the dependent variable. When actor effects were tested, partner effects were controlled for in the models, and vice versa when partner effects were tested. Interactions with gender were also included in the models; if they were significant, they were further examined for simple effects to arrive at the coefficients used in the Sobel tests. Age, length of relationship, and heritage culture identification – to clarify the unique contributions of men's mainstream identification – were all included as covariates in these regression models. Variables that were not significant in prior analyses (i.e., mainstream  $\times$  heritage interaction effects for actor and partner, and relationship effects) were not included in these models. Thus, the two regression models that were used to generate the coefficients for the Sobel test included the same variables that were included in the prior analyses.

For men, the association of mainstream identification with intimacy decreased from  $b = 1.00$  ( $t(90) = 2.82, p = .006$ ) to  $b = .60$  ( $t(90) = 1.66, p = .10$ ) when men's egalitarianism was added to the model (see Figure 1). The Sobel test was significant ( $z = 2.25, p = .02$ ). For women, the association of their partner's mainstream identification with their own intimacy decreased from  $b = .82$  ( $t(91) = 2.29, p = .02$ ) to  $b = .50$  ( $t(91) = 1.35, p = .18$ ) when partner's egalitarianism was added to the model (see Figure 2). The Sobel test of mediation approached significance ( $z = 1.69, p = .09$ ).<sup>5</sup> These results therefore provide some support for Hypothesis 4: controlling for all other variables in the model, men's egalitarianism completely mediated the association of men's mainstream identification with men's intimacy, and at least partially mediated the association of men's mainstream identification with women's intimacy.

### **Tests of Mediational Hypotheses: Commitment**

The same predictor variables from the preceding analyses were included in multilevel models to predict actor's commitment. In addition, actor's relationship satisfaction was included as a covariate.

**Heritage culture identification and gender role egalitarianism.** Hypothesis 5 stated that actor's heritage culture identification would be negatively related to actor's egalitarianism. Actor, partner, and relationship effects for heritage and mainstream identification, their interactions with gender, and age, length of relationship, and actor's relationship satisfaction were included in the models as predictors of actor's egalitarianism. Results revealed a main effect of actor's heritage culture identification ( $b = -.76, t(103) = 3.99, p < .0001$ ) that was not qualified by an interaction with gender. Partner effects for heritage culture identification were not significant.<sup>6</sup> Confirming

Hypothesis 5, then, actor's heritage culture identification was significantly related to less egalitarian gender role beliefs for men and women alike, controlling for all other variables in the model.

**Heritage culture identification and commitment.** Next, tests were conducted for Hypothesis 6 – that heritage culture identification would be positively associated with commitment. Actor, partner, and relationship effects for heritage and mainstream identification, their interactions with gender, and age, length of relationship, and actor's relationship satisfaction were included in the models as predictors of actor's egalitarianism. The relationship effects were not significant, and they were removed. In line with predictions, actor's heritage identification was a significant predictor of actor's commitment ( $b = .21$ ,  $t(100) = 2.25$ ,  $p = .03$ ). Although it was not significantly qualified by an interaction with gender, simple slopes nonetheless revealed that the association of actor's heritage identification with commitment was significant for women ( $b = .34$ ,  $t(95) = 2.44$ ,  $p = .02$ ) but not for men ( $p = .61$ ). Partner effects for heritage identification were not significant, nor were the actor and partner effects for mainstream identification. Therefore, in partial support of Hypothesis 6, actor's heritage culture identification was positively related to commitment, but only for women, when all other variables in the model were controlled.

**Gender role egalitarianism and commitment.** Hypothesis 7 predicted that low egalitarianism (i.e., high traditionalism) would be related to greater commitment. Actor, partner, and relationship effects for egalitarianism, their interactions with gender, and age, length of relationship, and actor's relationship satisfaction were included in the models as predictors of actor's commitment. The relationship effects were not significant,

and they were removed. Results revealed that the main effect of actor's egalitarianism was not significant, but its interaction with gender was a significant predictor of actor's commitment ( $b = .11, t(96) = 2.45, p = .02$ ). Simple slopes showed that actor's egalitarianism significantly predicted women's commitment ( $b = -.16, t(105) = 2.45, p = .02$ ), but that actor's egalitarianism did not predict men's commitment ( $p = .36$ ). The interaction of partner's egalitarianism with gender also predicted actor's commitment ( $b = -.09, t(96) = 2.04, p = .04$ ). Further examination of this interaction revealed that partner's egalitarianism was negatively related to men's commitment ( $b = -.08, t(105) = 1.30, p = .20$ ) and positively related to women's commitment ( $b = .09, t(104) = 1.65, p = .10$ ), though neither of these simple slopes were significant. These results therefore provide partial support for Hypothesis 7: women who were less egalitarian in their gender role ideology (i.e., more traditional) reported greater commitment, controlling for all other variables in the model.

**Mediational analysis: commitment.** Hypothesis 8 predicted that gender role egalitarianism would mediate the association of heritage identification with commitment. The previous analyses established that the first three steps in testing mediation were significant for women only. To verify the fourth step, the Sobel (1982) test assessed whether the association of the independent variable (women's heritage identification) with the dependent variable (women's commitment) was significantly reduced when the mediator (women's egalitarianism) was included as a predictor in the equation. To arrive at the coefficients used in the Sobel test, two regression models were conducted in accordance with the Preacher and Leonardelli (2001) online calculator. Actor and partner effects for heritage and mainstream identification, their interactions with gender, and age,

length of relationship, and actor's satisfaction were included in these models. Significant interactions with gender were analyzed using simple slopes to generate coefficients for women only.

Results showed that the association of women's heritage identification with women's commitment decreased from  $b = .34$  ( $t(95) = 2.44, p = .02$ ) to  $b = .27$  ( $t(93) = 1.76, p = .08$ ) when women's egalitarianism was added to the model (see Figure 3). The Sobel test of mediation did not reach significance ( $z = 1.38, p = .17$ ). Thus, although the pattern of associations was consistent with Hypothesis 8 – women's heritage identification was positively related to commitment and negatively related to egalitarianism, and egalitarianism was negatively related to commitment – the trend revealed in the test of mediation was not quite significant.

### **Discussion**

The current study extends previous work on culture and relationships by taking a within-group approach to examine the influence of cultural identification on intimacy and commitment in romantic relationships. This approach circumvents some of the limitations of a between-group approach, such as the tendency to assume uniformity across cultural group members, as well as the possibility that questionnaire measures may not demonstrate factor loading invariance across groups (Chen, 2008). Results from the present study showed that Chinese Canadian men who identified more strongly with mainstream Canadian culture reported greater intimacy in their current romantic relationship, as did their partners. On the other hand, Chinese Canadian women who identified more strongly with Chinese heritage culture reported greater commitment. Importantly, the mediational analyses suggested that gender role ideology contributed to

these associations. Thus, men's mainstream identification was positively associated with their own and with their partners' intimacy at least in part through the relationship-enhancing effects of egalitarianism (note that this mediation was significant for men's intimacy, but only approached significance for women's intimacy). One such potential effect of egalitarianism is increased self-disclosure (Marshall, 2008; Rubin et al., 1980), and in turn, increased intimacy for both partners (Laurenceau et al., 2005). Conversely, the findings from this study suggested that egalitarianism might have played an opposite role in women's commitment – heritage identification was associated with *less* egalitarianism for both sexes, which in turn was related to *greater* commitment for women only (recall, though, that the test of mediation only approached significance). Chinese culture tends to endorse more traditional gender roles than does mainstream Canadian culture (Zuo, 2003), and so identifying with this culture may mean that one's relationship commitment is indirectly enhanced by following traditional roles that encourage obligation to one's partner and to heterosexual institutions, at least for women.

This study also revealed opposite partner effects for men's and women's mainstream identification. Specifically, men's mainstream identification was positively associated with their partner's intimacy, whereas women's mainstream identification was *negatively* associated with their partner's intimacy. What might account for this gender difference? As previously noted, men's mainstream identification was positively associated with their own egalitarianism, which in turn was associated with women's intimacy; women's mainstream identification, on the other hand, was not significantly associated with their own egalitarianism, nor was their own egalitarianism related to men's intimacy (see Figures 1 and 2). Thus, the putative pro-relationship effects of

egalitarianism appeared to produce dividends for men, but not for women. At the very least, the absence of a negative association between women's egalitarianism and men's intimacy suggests that men did not pull away from partners who claimed more equal treatment in Canadian contexts, in spite of missing out on the status and benefits that would be accorded to them in more traditional relationships.

Other than women's egalitarianism, then, what might have mediated the association of women's mainstream identification with men's lower intimacy? One possibility is that men who were less involved in the mainstream culture than their partners may have felt left behind, especially if their partners developed greater language competency and/or social, educational, and occupational connections that may have been perceived as threatening or detracted from time spent together. Additionally, women who were more involved in the mainstream culture may have had greater opportunities to meet men who were similarly involved in Canadian culture. This may have triggered their partners' insecurity, and in turn, their lower intimacy. Indeed, some research has found that Asian American women are more likely to engage in inter-ethnic dating than are Asian American men (Fujino, 2000).

Another unexpected finding was that gender role ideology did not mediate the association of heritage culture identification with commitment, at least not for men (there was a trend toward significance in the women's results). One reason may be that heritage identification tends to be a weaker predictor of gender role ideology than is mainstream identification (Lalonde et al., 2004; Phinney & Flores, 2002). As well, the commitment scale used here may not have sufficiently captured Johnson's (1999) operationalization of commitment as a multidimensional rather than global construct. The majority of items on

Sternberg's (1997) commitment scale reflect personal commitment, or wanting to stay with one's partner because relationship satisfaction is high (Johnson et al., 1999). Only two items, on the other hand, reflect moral commitment (e.g., "I will always feel a strong responsibility for my partner"), the facet that may be most strongly predicted by gender role traditionalism. Although personal commitment was controlled here at least in part by including relationship satisfaction as a covariate, future research would do well to separately measure all three facets of commitment. More precise measurement might indeed confirm that gender role ideology mediates the link between heritage identification and moral commitment. Nonetheless, the finding that heritage culture identification was positively related to women's commitment extends the work of Marshall (2008) by showing that culture may not only influence intimacy, but also commitment.

One must also consider the possibility that the association of heritage culture identification with commitment may not be mediated by gender role ideology, but rather by other aspects of Chinese heritage culture that encourage commitment. For example, the collectivistic ethos of Chinese culture emphasizes strong commitment to one's ingroup, including one's romantic partner and family (Gao, 2001; Hsu, 1985). As such, those who identify more strongly with this culture should also report greater collectivism and, in turn, greater obligation to these close relationships. Additionally, heritage culture norms may increase structural commitment by stigmatizing divorce, increasing financial interdependence between spouses, and encouraging married couples to have children. These norms may also impact personal commitment; for example, financial problems are often cited as a major source of marital discord in Western, individualistic couples, but

collectivistic norms that encourage extended family members to provide monetary aid to married couples in financial distress may buffer these couples against decreased satisfaction and, as such, decreased personal commitment (Goodwin & Cramer, 2000). It is up to future research to clarify whether the link between heritage culture identification and commitment is mediated by gender role ideology or by these other potential variables.

In sum, while the present results suggest that gender role ideology may have played a role in Chinese Canadian men's and women's intimacy and commitment, it is quite possible that other factors may have played a role as well. For example, among those participants who were relative newcomers to Canada, relational conflict resulting from the stress of acculturation may have negatively impacted both intimacy and commitment. Against this possibility, however, first- and second-generation Canadians showed the same pattern of results, and further analyses showed that there were no significant differences in intimacy or commitment between those participants who had lived in Canada for five years or less and those who had lived in Canada for more than five years. If anything, the shared experience of acculturation may result in self-expansion and, in turn, greater relationship satisfaction (Aron & Aron, 1997). A different possibility is that exposure to Western conceptions of romantic relationships, which tend to emphasize romantic love and intimacy more so than do Chinese conceptions of relationships (Dion & Dion, 1993), may have motivated mainstream-identified Chinese Canadians to maximize these experiences in their relationships. Along these lines, men's but not women's mainstream identification may be related to enhanced intimacy in the present study because Chinese men may be more attracted to these Western romantic

ideals than Chinese women, who tend to take a more pragmatic view of relationships (Moore, 1998).

But is mainstream identification necessarily an unmitigated good for intimacy? Research showing that identification with certain Western values may actually have a negative effect on relationships (e.g., Dion & Dion, 1991) suggests that mainstream identification might be better conceptualized as a double-edged sword than as a panacea. Indeed, just as Western culture may promote relationships through emphasizing egalitarianism, self-disclosure, and intimacy, it also tends to endorse self-contained, or extreme, individualism – a value orientation that is related to diminished intimacy and commitment, and higher incidence of divorce (Dion & Dion, 1991, 1993, 2005). Importantly, however, the results of the current study suggest that such potentially negative effects of mainstream identification may be offset by heritage culture identification. When Chinese Canadian women were highly identified with their heritage culture, they reported greater commitment to their relationships, indicating that the maintenance of Chinese values and behaviors may counterbalance some of the relationship-damaging aspects of mainstream Canadian identification. It is therefore an open question whether Chinese Canadian partners who maintain the most relationship-friendly aspects of their heritage culture, such as strong commitment to one's partner and family, while simultaneously embracing the most relationship-friendly aspects of mainstream Western culture, such as the emphasis on self-disclosure and intimacy, may also report the greatest relational quality.

### **Limitations and Future Directions**

This study sought to expand previous work by investigating the ways that within-group heterogeneity in cultural identification is related to systematic differences in relationship quality – an alternative to making simplified comparisons between groups. Although the approach used here has much to offer, it also has its shortcomings. For one, individuals who indicated weak cultural identification on explicit measures may still be strongly influenced by this culture on a more implicit level. Between-group comparisons may be better able to gauge the influence of culture that is beyond conscious awareness (Lalonde et al., 2004). Implicit cognition methods, however, may help to overcome some of the limitations of explicit measures by priming cultural symbols and assessing their effects within a group. For example, it might be possible to establish causality in the link between cultural identification, gender role ideology, and relational quality by capitalizing on the way that bicultural individuals typically frame-switch between different cultural identities when exposed to symbols associated with mainstream or heritage culture (Hong et al., 2000). Thus, presenting these symbols may implicitly activate each respective identity, and enable an estimation of the effects of these identities on gender role ideology and relational quality.

As noted earlier, the current findings are limited by some of the measures used here (e.g., Sternberg's commitment scale). In addition to adopting alternative measures, it would also be worthwhile to measure several related constructs: responsiveness and self-disclosure to clarify whether they mediated the link between men's mainstream identification and their own and their partner's greater intimacy; perceived and actual intrasex competition from members of the mainstream culture to assess whether it contributed to men's decreasing intimacy with women's increasing mainstream

involvement; and collectivism to ascertain whether it mediated the link between women's heritage identification and commitment.

Sample size was also a limitation in this study. Greater statistical power may have supported the significance of effects that at present only showed a trend towards significance. For example, men's egalitarianism as a mediator of the association of men's mainstream culture identification with women's intimacy, and women's egalitarianism as a mediator of the association of women's heritage culture identification with women's commitment, might both have been significant with a larger sample size.

Furthermore, as with many studies that rely on university student samples, the present results may not generalize beyond this age group. For one, young adults' dating relationships tend to be lower in structural commitment compared to marital relationships (Lydon, Meana, Sepinwall, Richards, & Mayman, 1999), suggesting that any associations found here between heritage culture identification, gender role traditionalism, and commitment might be different in an older, married sample. Moreover, young adults' weaker self-definitions relative to older adults' more crystallized identities (Sears, 1986) may affect their experiences of intimacy. According to Erikson's (1968) psychosocial model of development, an individual must establish a sense of identity before intimacy can be achieved. The bicultural youths in the present sample face the particularly challenging task of negotiating between two cultural identities, suggesting that they may have even more difficulty achieving intimacy than may be the case for non-bicultural youths or older adults, who may have already resolved their identity issues.

The pattern of associations between cultural identification, gender role ideology, and intimacy and commitment may also be particular to this cultural group. Because

processes of identification and acculturation may be uniquely experienced by each cultural group, rather than be uniform across groups (Bhatia & Ram, 2001), the present pattern of associations may not generalize beyond Chinese Canadian samples. Future research would therefore do well to examine the associations between these variables in different cultural and age groups, as well as different acculturating groups (e.g., international students, guest workers, refugees, immigrants).

### **Concluding Remarks**

Despite the need for further research, dyadic studies such as this provide a more socially contextualized perspective of cultural identity and relationships, reflecting the reality that individuals tend to be influenced not only by their own cultural identification, but also by that of close others. The proliferation of multilevel modeling techniques enables this more nuanced perspective, and allows us to arrive at a more truly social psychology of cultural influences on relationships. By understanding the effects of cultural identification, we may better develop means of enhancing the individual and relational well-being of people who negotiate the interface of differing cultural worlds.

## References

- Adams, G., Anderson, S., & Adonu, J. K. (2004). The cultural grounding of closeness and intimacy. In D. J. Mashek, & A. P. Aron (Eds.), *Handbook of closeness and intimacy* (pp. 321-339). Mahwah, NJ: Lawrence Erlbaum Associates.
- Aiken, L. S., & West, S. G. (1991). *Multiple regression: Testing and interpreting interactions*. Newbury Park, CA: Sage.
- Apparala, M. L., Reifman, A., & Munsch, J. (2003). Cross-national comparison of attitudes toward fathers' and mothers' participation in household tasks and childcare. *Sex Roles, 48*, 189-203.
- Aron, A., & Aron, E. N. (1997). Self-expansion motivation and including other in the self. In S. W. Duck (Ed.), *Handbook of personal relationships* (pp. 251-270). New York: John Wiley & Sons Ltd.
- Ataca, B., & Berry, J. W. (2002). Psychological, sociocultural, and marital adaptation of Turkish immigrant couples in Canada. *International Journal of Psychology, 37*, 13-26.
- Baron, R. M., & Kenny, D. A. (1986). The moderator-mediator variable distinction in social psychological research: Conceptual, strategic, and statistical considerations. *Journal of Personality and Social Psychology, 51*, 1173-1182.
- Bhatia, S., & Ram, A. (2001). Rethinking 'acculturation' in relation to diasporic cultures and postcolonial identities. *Human Development, 44*, 1-18.
- Berry, J. W. (1980). Acculturation as varieties of adaptation. In A. M. Padilla (Ed.), *Acculturation: Theory, models and some new findings* (pp. 9-25). Boulder, CO: Westview Press.

- Berry, J. W., Phinney, J. S., Sam, D. L., & Vedder, P. (2006). Immigrant youth: Acculturation, identity, and adaptation. *Applied Psychology: An International Review, 55*, 303-332.
- Best, D. L., & Williams, J. E. (1997). Sex, gender, and culture. In J. W. Berry, M. H. Segall, & C. Kagitcibasi (Eds.), *Handbook of cross-cultural psychology (Vol. 3)*, (2<sup>nd</sup> ed., pp. 163-212). Boston, MA: Allyn & Bacon.
- Bond, M. H., & Hwang, K. K. (1986). The social psychology of Chinese people. In M. H. Bond (Ed.), *The psychology of the Chinese people* (pp. 213-266). Hong Kong: Oxford University Press.
- Boski, P. (1994). Psychological acculturation via identity dynamics: Consequences for subjective well-being. In A. M. Bouvy, F. J. R. van de Vijver, P. Boski, & P. G. Schmitz (Eds.), *Journeys into cross-cultural psychology* (pp. 197-215). Lisse, Netherlands: Swets & Zeitlinger Publishers.
- Bradford, S. A., Feeney, J. A., & Campbell, L. (2002). Links between attachment orientations and dispositional and diary-based measures of disclosure in dating couples: A study of actor and partner effects. *Personal Relationships, 9*, 491-506.
- Campbell, L., & Kashy, D. A. (2002). Estimating actor, partner, and interaction effects for dyadic data using PROC MIXED and HLM: A guided tour. *Personal Relationships, 9*, 327-342.
- Chen, F. F. (2008). What happens if we compare chopsticks with forks? The impact of making inappropriate comparisons in cross-cultural research. *Journal of Personality and Social Psychology, 95*, 1005-1018.

- Chia, R. C., Moore, J. L., Lam, K. N., Chuang, C. J., & Cheng, B. S. (1994). Cultural differences in gender role attitudes between Chinese and American students. *Sex Roles, 31*, 23-30.
- Cota, A. A., & Xinaris, S. (1993). Factor structure of the sex-role ideology scale: Introducing a short form. *Sex Roles, 29*, 345-358.
- Cross, S. E., & Madson, L. (1997). Models of the self: Self-construal and gender. *Psychological Bulletin, 122*, 5-37.
- Dion, K. K., & Dion, K. L. (1991). Psychological individualism and romantic love. *Journal of Social Behavior and Personality, 6*, 17-33.
- Dion, K. K., & Dion, K. L. (1993). Individualistic and collectivistic perspectives on gender and the cultural context of love and intimacy. *Journal of Social Issues, 49*, 53-69.
- Dion, K. K., & Dion, K. L. (1996). Cultural perspectives on romantic love. *Personal Relationships, 3*, 5-17.
- Dion, K. K., & Dion, K. L. (2005). Culture and Relationships: The Downside of Self-Contained Individualism. In R. M. Sorrentino, D. Cohen, J. M. Olson, & M. P. Zanna (Eds.), *Cultural and social behavior: The Ontario Symposium, Vol 10* (pp. 77-94). Mahwah, NJ: Lawrence Erlbaum Associates Publishers.
- Eagly, A. H., & Wood, W. (1999). The origins of sex differences in human behavior: Evolved dispositions versus social roles. *American Psychologist, 54*, 408-423.
- Erikson, E. H. (1968). *Identity: Youth and crisis*. New York: Norton.

- Fletcher, G. J. O, Simpson, J. A., & Thomas, G. (2000). The measurement of perceived relationship quality components: A confirmatory factor analytic approach. *Personality and Social Psychology Bulletin, 26*, 340-354.
- Flores, E., Tschann, J. M., Marin, B., & Pantoja, P. (2004). Marital conflict and acculturation among Mexican American husbands and wives. *Cultural Diversity and Ethnic Minority Psychology, 10*, 39-52.
- Fujino, D. C. (2000). Structural and individual influences affecting racialized dating relationships. In J. L. Chin (Ed.), *Relationships among Asian American women: Psychology of women* (pp. 181-209). Washington, DC: American Psychological Association.
- Gagné, F. M., & Lydon, J. E. (2003). Identification and the commitment shift: Accounting for gender differences in relationship illusions. *Personality and Social Psychology Bulletin, 29*, 907-919.
- Gallagher, S. K. (2003). *Evangelical identity and gendered family life*. New Brunswick, NJ: Rutgers University Press.
- Gao, G. (2001). Intimacy, passion, and commitment in Chinese and US American romantic relationships. *International Journal of Intercultural Relations, 25*, 329-342.
- Goodwin, R., & Cramer, D. (2000). Marriage and social support in a British-Asian community. *Journal of Community & Applied Social Psychology, 10*, 49-62.
- Hanassab, S. (1991). Acculturation and young Iranian women: Attitudes toward sex roles and intimate relationships. *Journal of Multicultural Counseling and Development, 19*, 11-21.

- Harris, R. J., & Firestone, J. M. (1998). Changes in predictors of gender role ideologies among women: A multivariate analysis. *Sex Roles, 38*, 239-252.
- Hassebrauck, M., & Fehr, B. (2002). Dimensions of relationship quality. *Personal Relationships, 9*, 253-270.
- Helms, H. M., Proulx, C. M., Klute, M. M., McHale, S. M., & Crouter, A. C. (2006). Spouses' gender-typed attributes and their links with marital quality: A pattern analytic approach. *Journal of Social and Personal Relationships, 23*, 843-864.
- Hong, Y., Morris, M. W., Chiu, C., & Benet-Martinez, V. (2000). Multicultural minds: A dynamic constructivist approach to culture and cognition. *American Psychologist, 55*, 709-720.
- Hsu, F. L. K. (1985). The self in cross-cultural perspective. In A. J. Marsella, G. DeVos, & F. L. K. Hsu (Eds.), *Culture and self: Asian and Western perspectives* (pp. 24-55). London, England: Tavistock.
- Ickes, W., & Barnes, R. D. (1978). Boys and girls together – and alienated: On enacting stereotyped sex roles in mixed-sex dyads. *Journal of Personality and Social Psychology, 36*, 669-683.
- Jack, D. C. (1991). *Silencing the self: Women and depression*. Harvard University Press, Cambridge.
- Jetten, J., Spears, R., & Manstead, A. S. R. (1997). Strength of identification and intergroup differentiation: The influence of group norms. *European Journal of Social Psychology, 27*, 603-609.
- Johnson, M. P. (1999). Personal, moral, and structural commitment to relationships: Experiences of choice and constraint. In J. M. Adams & W. H. Jones (Eds.),

- Handbook of interpersonal commitment and relationship stability: Perspectives on individual differences* (pp. 73-87). Dordrecht, Netherlands: Kluwer Academic Publishers.
- Johnson, M. P., Caughlin, J. P., & Huston, T. L. (1999). The tripartite nature of marital commitment: Personal, moral, and structural reasons to stay married. *Journal of Marriage & the Family*, *61*, 160-177.
- Kagitcibasi, C. (1985). Culture of separateness - Culture of relatedness. In C. Klopp (Ed.), *1984: Vision and reality. Papers in Comparative Studies, Vol. 4* (pp. 91-99). Columbus: Ohio State University.
- Kalin, R., & Tilby, P. J. (1978). Development and validation of a sex-role ideology scale. *Psychological Reports*, *42*, 731-738.
- Kashy, D. A., & Kenny, D. A. (2000). The analysis of data from dyads and groups. In H. Reis & C. M. Judd (Eds.), *Handbook of research methods in social psychology* (pp. 451-477). New York: Cambridge University Press.
- Kenny, D. A., Kashy, D. A., & Cook, W. L. (2006). *Dyadic data analysis*. New York: The Guilford Press.
- Kim, J., & Hatfield, E. (2004). Love types and subjective well-being: A cross cultural study. *Social Behavior and Personality*, *32*, 173-182.
- Koutrelakos, J. (2004). Acculturation of Greek Americans: Change and continuity in cognitive schemas guiding intimate relationships. *International Journal of Psychology*, *39*, 95-105.

- Lalonde, R. N., Hynie, M., Pannu, M., & Tatla, S. (2004). The role of culture in interpersonal relationships: Do second generation South Asian Canadians want a traditional partner? *Journal of Cross-Cultural Psychology, 35*, 503-524.
- Laurenceau, J.-P., Feldman Barrett, L., & Rovine, M. J. (2005). The interpersonal process model of intimacy in marriage: A daily-diary and multilevel modeling approach. *Journal of Family Psychology, 19*, 314-323.
- Leaper, C., & Valin, D. (1996). Predictors of Mexican American mothers' and fathers' attitudes toward gender equality. *Hispanic Journal of Behavioral Sciences, 18*, 343-355.
- Lin, Y. C. (1992). *The construction of the sense of intimacy from everyday social interaction*. Unpublished doctoral dissertation, University of Rochester, NY.
- Liu, C. J. (2003). A relational self model of gender role identity of young Taiwanese women within their cultural context. *Dissertation Abstracts International Section A: Humanities & Social Sciences, 63(9-A)*, pp. 3357.
- Loscocco, K. A., & Bose, C. E. (1998). Gender and job satisfaction in urban China: The early post-Mao period. *Social Science Quarterly, 79*, 91-109.
- Lydon, J. E., Meana, M., Sepinwall, D., Richards, N., & Mayman, S. (1999). The commitment calibration hypothesis: When do people devalue attractive alternatives? *Personality and Social Psychology Bulletin, 25*, 152-161.
- Marshall, T. C. (2008). Cultural differences in intimacy: The influence of gender-role ideology and individualism-collectivism. *Journal of Social and Personal Relationships, 25*, 143-168.

- Matsumoto, D. (2000). *Culture and psychology, 2<sup>nd</sup> edition* (pp. 28-33). Pacific Grove, CA: Brooks Cole Publishing Co.
- Moore, R. L. (1998). Love and limerence with Chinese characteristics: Student romance in the PRC. In V. C. de Munck, *Romantic love and sexual behavior: Perspectives from the social sciences* (pp. 251-283). Westport, CT: Praeger Publishers/Greenwood Publishing Group, Inc.
- Murray, S. L., Holmes, J. G., Dolderman, D., & Griffin, D. W. (2000). What the motivated mind sees: Comparing friends' perspectives to married partners' views of each other. *Journal of Experimental Social Psychology, 36*, 600-620.
- Neff, K. D., & Suizzo, M. A. (2006). Culture, power, authenticity, and psychological well-being within romantic relationships: A comparison of European Americans and Mexican Americans. *Cognitive Development, 21*, 441-457.
- Phinney, J. S., & Flores, J. (2002). "Unpackaging" acculturation: Aspects of acculturation as predictors of traditional sex role attitudes. *Journal of Cross-Cultural Psychology, 33*, 320-331.
- Preacher, K. J., & Leonardelli, G. J. (2001). Calculation for the Sobel test: An interactive calculation tool for mediation tests [Computer Software]. Retrieved from <http://www.unc.edu/~preacher/sobel/sobel.htm>, November 19, 2008.
- Redfield, R., Linton, R., & Herskovits, M. J. (1936). Memorandum for the study of acculturation. *American Anthropologist, 38*, 149-152.

- Reis, H. T., & Shaver, P. (1988). Intimacy as an interpersonal process. In S. W. Duck (Ed.), *Handbook of personal relationships* (pp. 367-389). Toronto: John Wiley & Sons Ltd.
- Rogler, L., Cortes, D., & Malgady, R. (1991). Acculturation and mental health status among Hispanics: Convergence and new directions in research. *American Psychologist*, *46*, 584–597.
- Rubin, Z., Hill, C. T., Peplau, L. A., & Dunkel-Schetter, C. (1980). Self-disclosure in dating couples: Sex roles and the ethic of openness. *Journal of Marriage and the Family*, *42*, 305-317.
- Ryder, A. G., Alden, L. E., & Paulhus, D. L. (2000). Is acculturation unidimensional or bidimensional? A head-to-head comparison in the prediction of personality, self-identity, and adjustment. *Journal of Personality and Social Psychology*, *79*, 49-65.
- Sassler, S., & Goldscheider, F. (2004). Revisiting Jane Austen's theory of marriage timing: Changes in union formation among American men in the late 20<sup>th</sup> century. *Journal of Family Issues*, *25*, 139-166.
- Sassler, S., & Schoen, R. (1999). The effect of attitudes and economic activity on marriage. *Journal of Marriage & the Family*, *61*, 147-159.
- Sears, D. O. (1986). College sophomores in the laboratory: Influences of a narrow data base on social psychology's view of human nature. *Journal of Personality and Social Psychology*, *51*, 515-530.
- Snijders, T. A. B., & Kenny, D. A. (1999). The social relations model for family data: A multilevel approach. *Personal Relationships*, *6*(4), 471-486.

- Sobel, M. E. (1982). Asymptotic confidence intervals for indirect effects in structural equation models. *Sociological Methodology, 13*, 290-312.
- Sternberg, R. J. (1997). Construct validation of a triangular love scale. *European Journal of Social Psychology, 27*, 313-335.
- Tang, T. N., & Tang, C. S. (2001). Gender role internalization, multiple roles, and Chinese women's mental health. *Psychology of Women Quarterly, 25*, 181-196.
- Terry, D. J., & Hogg, M. A. (1996). Group norms and the attitude-behavior relationship: A role for group identification. *Personality and Social Psychology Bulletin, 22*, 776-793.
- Tharp, R. G., Meadow, A., Lennhoff, S. G., & Satterfield, D. (1968). Changes in marriage roles accompanying the acculturation of the Mexican-American wife. *Journal of Marriage and the Family, 30*, 404-412.
- The New York Times (2005, October 4). Women in China embrace divorce as stigma eases. Retrieved May 19, 2008  
[www.nytimes.com/2005/10/04/international/asia/04divorce.html?hp&ex=1128398400&en=c318e297077be582&ei=5094&partner=homepage](http://www.nytimes.com/2005/10/04/international/asia/04divorce.html?hp&ex=1128398400&en=c318e297077be582&ei=5094&partner=homepage)
- Thompson, E. H., & Pleck, J. H. (1986). The structure of male role norms. *American Behavioral Scientist, 29*, 531-543.
- Valentine, S., & Mosley, G. (2000). Acculturation and sex-role attitudes among Mexican Americans: A longitudinal analysis. *Hispanic Journal of Behavioral Sciences, 22*, 104-113.
- Williams, J. E., & Best, D. L. (1990). *Sex and psyche: Gender and self viewed cross-culturally*. Newbury Park, CA: Sage.

Xu, X., Hudspeth, C. D., & Bartkowski, J. P. (2005). The timing of first marriage: Are there religious variations? *Journal of Family Issues*, 26, 584-618.

Zuo, J. (2003). From revolutionary comrades to gendered partners: Marital construction of breadwinning in post-Mao urban China. *Journal of Family Issues*, 24, 314-337.

## Notes

<sup>1</sup> Although responsiveness is equally if not more important than self-disclosure for enhancing intimacy (Lin, 1992), the current focus on self-disclosure was justified by previous research demonstrating that it was significantly associated with gender role ideology, whereas responsiveness was not (Marshall, 2008).

<sup>2</sup> Other data from these participants have been reported in an earlier investigation (Marshall, 2008).

<sup>3</sup> Because dating partners are less likely than married couples to be constrained by external obligations (e.g., having children, owning property together), they tend to be lower in structural commitment (Lydon, Meana, Sepinwall, Richards, & Mayman, 1999), and therefore this facet of commitment was not measured in this study.

<sup>4</sup> Including proportion of life lived in Canada and generational status (1 = 2nd generation, -1 = 1st generation) as covariates in the regression analyses did not change the significance of the associations between key variables, therefore these covariates were removed from the regression models.

<sup>5</sup> These tests of the mediational hypotheses were conservative for several reasons. First, actor *and* partner effects were included in these models, which conventionally only include actor effects. Second, rigorous two-tailed Sobel tests were conducted rather than one-tailed tests, which would have yielded *p*-values of .02 and .05 for men and women, respectively.

<sup>6</sup> One relationship effect did emerge as significant: the interaction of actor's and partner's heritage identification was associated with actor's egalitarianism ( $b = .07$ ,  $t(51) = 2.41$ ,  $p = .02$ ). Following the procedures developed by Aiken and West (1991) for decomposing

interactions between two continuous variables revealed that even though actor's egalitarianism was higher when the actor was low in heritage culture identification (-1 SD below the mean), this effect was more pronounced when partners were also low in heritage culture identification. When actor's heritage culture identification was high (1 SD above the mean), actor's egalitarianism was low regardless of partner's heritage identification. Thus, the association of actor's heritage identification with actor's egalitarianism was stronger when partners were low (simple slope test,  $b = -.83$ ,  $t(103) = 4.32$ ,  $p > .0001$ ) rather than high (simple slope test,  $b = -.69$ ,  $t(103) = 3.58$ ,  $p = .0005$ ) in heritage identification.

Table 1

*Raw Means and Standard Deviations (in Parentheses) for Continuous Variables*

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	Men ( <i>n</i> = 60)	Women ( <i>n</i> = 60)
Intimacy	96.32 (14.19)	99.17 (13.17)
Commitment	46.52 (9.57)	46.87 (8.62)
Satisfaction	20.03 (4.49)	20.40 (4.01)
Egalitarianism	94.23 (14.66)	102.58 (12.49)
Mainstream involvement	36.97 (5.73)	35.97 (6.22)
Heritage involvement	39.28 (6.34)	39.83 (6.12)

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Table 2

*Intercorrelations for Relationship Variables, Gender Role Ideology, and Cultural Identification for Men (n = 60) and Women (n = 60)*

Variable	1	2	3	4	5	6
1. Intimacy	<b>0.56***</b>	0.80***	0.67***	0.14	0.10	0.08
2. Commitment	0.84***	<b>0.36**</b>	0.60***	0.02	0.12	0.13
3. Satisfaction	0.79***	0.83***	<b>0.47***</b>	0.26*	-0.07	-0.21
4. Egalitarianism	0.43***	0.20	0.14	<b>0.13</b>	0.17	-0.37**
5. Mainstream	0.39**	0.23 <sup>†</sup>	0.25*	0.33**	<b>0.44***</b>	-0.01
6. Heritage	0.15	0.20	0.23 <sup>†</sup>	-0.18	0.33**	<b>0.14</b>

*Note.* Men's data is presented below the diagonal, and women's data is presented above the diagonal. Correlations along the diagonal are between dyad members.

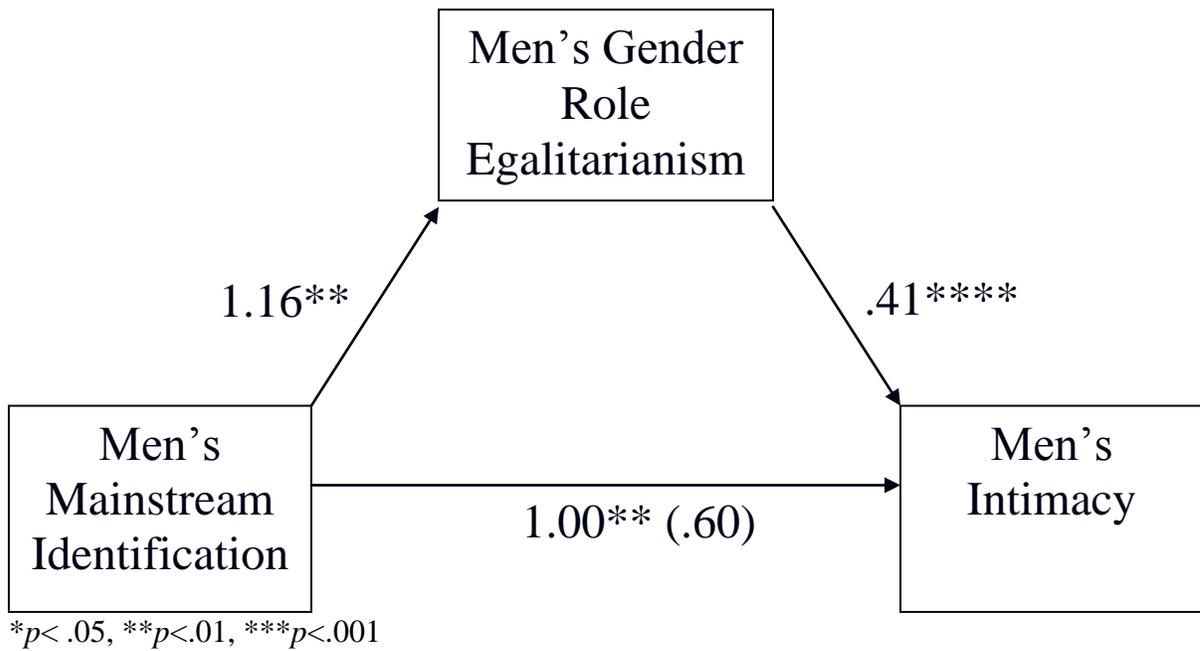
<sup>†</sup> $p < .10$ . \* $p < .05$ . \*\* $p < .01$ . \*\*\* $p < .001$ .

## Figure Captions

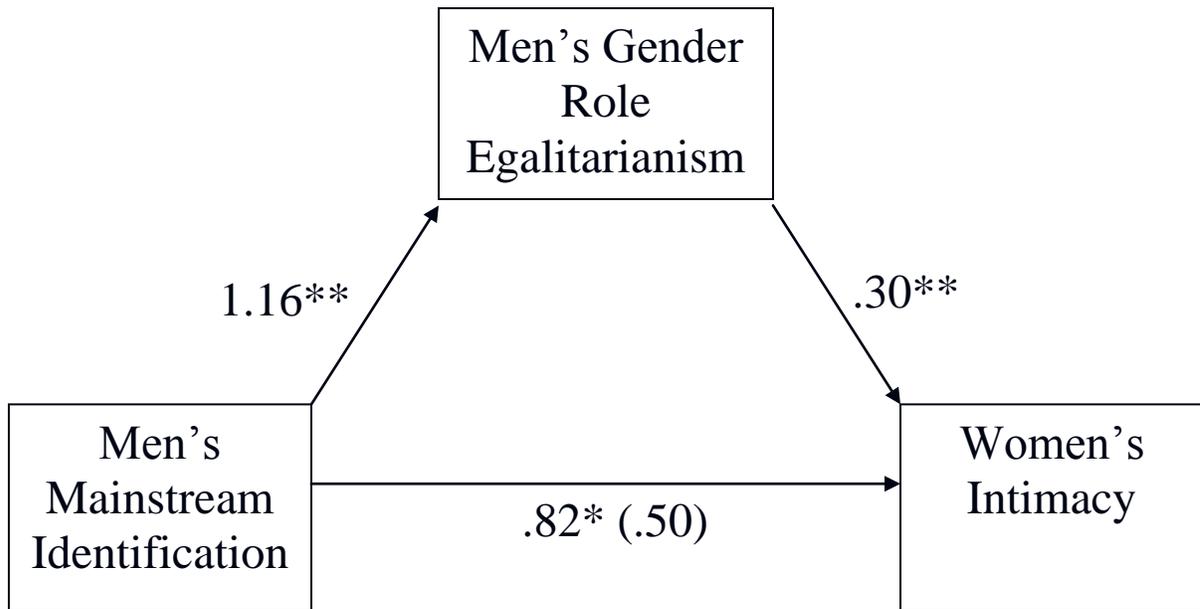
*Figure 1.* Testing men's gender role egalitarianism as a mediator of the actor effect of men's mainstream culture identification on men's intimacy, controlling for all other variables in the model. Note: The coefficient in parentheses refers to the association between men's mainstream identification and men's intimacy after men's egalitarianism was introduced into the model. The Sobel test indicated that the decrease in this coefficient was significant ( $p = .02$ ).

*Figure 2.* Testing men's gender role egalitarianism as a mediator of the partner effect of men's mainstream culture identification on women's intimacy, controlling for all other variables in the model. Note: The coefficient in parentheses refers to the association between men's mainstream identification and women's intimacy after men's egalitarianism was introduced into the model. The Sobel test indicated that the decrease in this coefficient approached significance ( $p = .09$ ).

*Figure 3.* Testing women's gender role egalitarianism as a mediator of the actor effect of women's heritage culture identification on women's commitment, controlling for all other variables in the model. Note: The coefficient in parentheses refers to the association between women's heritage identification and women's commitment after women's egalitarianism was introduced into the model. The Sobel test indicated that the decrease in this coefficient was not significant ( $p = .17$ ).

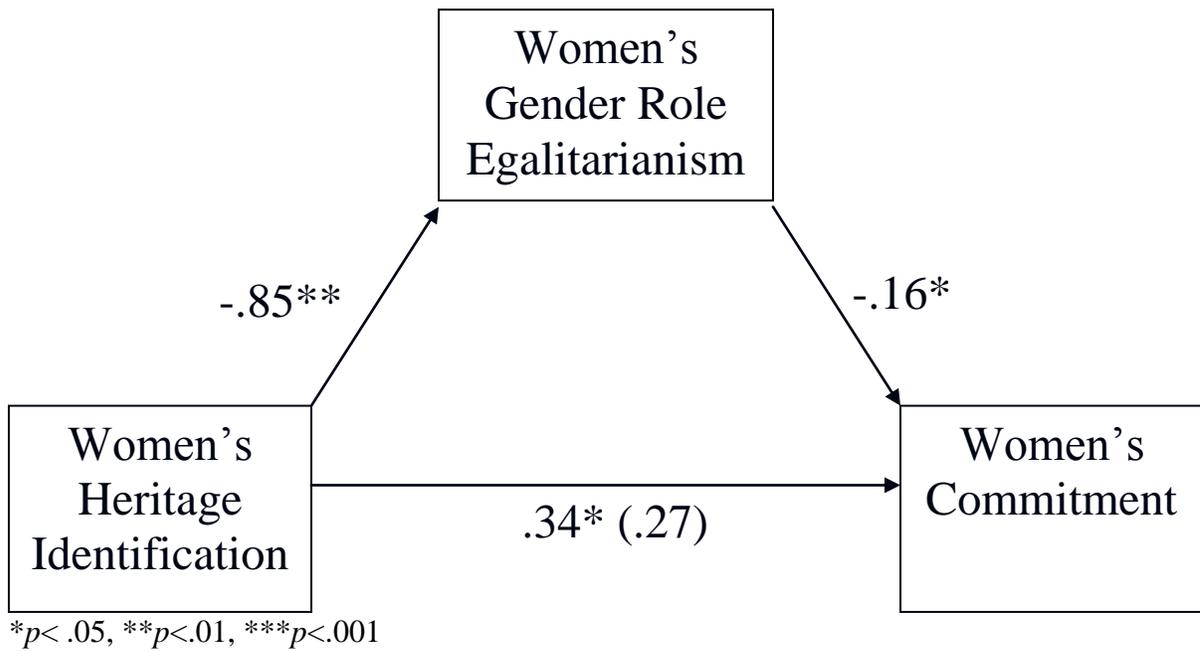


*Figure 1.* Testing men's gender role egalitarianism as a mediator of the actor effect of men's mainstream culture identification on men's intimacy, controlling for all other variables in the model. Note: The coefficient in parentheses refers to the association between men's mainstream identification and men's intimacy after men's egalitarianism was introduced into the model. The Sobel test indicated that the decrease in this coefficient was significant ( $p = .02$ ).



\* $p < .05$ , \*\* $p < .01$ , \*\*\* $p < .001$

Figure 2. Testing men's gender role egalitarianism as a mediator of the partner effect of men's mainstream culture identification on women's intimacy, controlling for all other variables in the model. Note: The coefficient in parentheses refers to the association between men's mainstream identification and women's intimacy after men's egalitarianism was introduced into the model. The Sobel test indicated that the decrease in this coefficient approached significance ( $p = .09$ ).



*Figure 3.* Testing women's gender role egalitarianism as a mediator of the actor effect of women's heritage culture identification on women's commitment, controlling for all other variables in the model. Note: The coefficient in parentheses refers to the association between women's heritage identification and women's commitment after women's egalitarianism was introduced into the model. The Sobel test indicated that the decrease in this coefficient was not significant ( $p = .17$ ).