

## Cross-Cultural Perspectives on Self-Change in Close Relationships: Evidence From Hong Kong Chinese and European Americans

Personality and Social
Psychology Bulletin
1–16
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DOI: 10.1177/01461672211026129
journals.sagepub.com/home/pspb

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#### **Abstract**

Three studies examined cultural perceptions of self-change in romantic relationships. In Study I (N=191), Chinese participants perceived hypothetical couples who changed for the sake of the relationship to have better relationship quality than couples who did not, compared to European American participants. In Study 2 (N=396), Chinese individuals in a dating relationship were more likely to perceive that they had changed in the relationship, and self-change was a stronger predictor of relationship quality for them than for American dating individuals. In Study 3 (N=115 dyads), Chinese married couples perceived greater self-change, and their perceived self-change was due in part to higher endorsement of dutiful adjustment beliefs than American couples. Self-change was a stronger predictor of relationship quality for Chinese married couples than American couples. Our studies provide support for cultural differences in the role of self-change in romantic relationships, which have implications for partner regulation and relationship counseling across cultures.

#### **Keywords**

culture, self-change, relationship adjustment, romantic relationships

Received May 7, 2020; revised accepted May 27, 2021

Marriage is not 1+1=2, but 0.5+0.5=1

The quote above reflects the East Asian notion of how marriage works: in a marriage, each person must give up something of himself/herself so that they become one unit and fit with each other. East Asians perceive that a natural part of relationships is to change oneself according to the partner's wants and needs. The quote, however, may not capture ideal relationships in Western cultural contexts, in which maintaining one's own identity is crucial to healthy relationships. The idea of changing the self for the sake of another person may not be well received, as being an independent and autonomous individual is the key characteristic of the ideal self in Western cultures (Markus & Kitayama, 2010).

As illustrated above, cultural values, norms, and practices guide experiences in close relationships. Despite significant theoretical advancements in the conceptions of self, cognition, motivation, and social behavior to include non-Western perspectives, there has been little research on how cultural values and beliefs shape dynamics in romantic relationships (Henrich et al., 2010). In the present studies, we focus on cultural differences in the perception of self-change in romantic relationships. Specifically, we examine the value

and the implications of self-change in romantic relationships among Chinese and European Americans.

# **Cultural Theories of Self and Motivation and Self-Change**

Theories of romantic relationships mostly have been examined in Western cultural contexts. Therefore, the Western ideal of well-functioning individuals and their cognition, emotion, and behaviors form the building blocks of these theories. Here, we review two critical cultural theories that

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Minjoo Joo, Department of Psychology, Duke Kunshan University, No. 8 Duke Avenue, Kunshan, Jiangsu, China. Email: minjoojoo67@gmail.com explain why members of East Asian and Western cultures may differ in their views of self-change in close relationships: models of the self and motivation in close relationships.

## Cultural Theories of Self: Malleable Versus Consistent Self

East Asian societies tend to be oriented toward an interdependent model of the self, in which self-views are shaped and framed by close relationships (Markus & Kitayama, 1991). In this model of the self, boundaries between the self and others are porous, open, and flexible, and the wise and mature person seeks to fit into relationships and prioritizes relational harmony and fulfilling social obligations (for a review, see Cross & Lam, 2017). In contrast, individuals in Western cultures tend to have an independent self-construal, which is the model of self that emphasizes being independent, unique, and separate from one's social surroundings and relationship partners (Markus & Kitayama, 1991). Under this model of the self, being mature means to maintain one's self-definition across different contexts and to freely express one's true self. Therefore, the self-expressions that are congruent with one's core beliefs have been considered as building blocks of the integrated self (Rogers, 1961).

Indeed, compared to Westerners, East Asians are more likely believe that traits and abilities can change over time (Chiu et al., 1997, see also Spencer-Rodgers et al., 2010), and to describe themselves differently across different situations (e.g., Boucher, 2010; Suh, 2002). Furthermore, whereas having inconsistent self-views across situations predict poor psychological well-being and inauthenticity among Westerners, this association is weaker among East Asians (e.g., English & Chen, 2011; Suh, 2002). These cultural differences in the malleability of self-concept suggest that members of East Asian cultural groups may view self-change in close relationships more positively than do members of Western cultural groups.

## **Cultural Theories of Motivation**

Interdependent model of self shared by many East Asians promotes the goal of maintaining harmony in relationships. As a result, East Asians are attuned to information about how they have fallen short of their ingroup members' expectations or failed to live up to their social obligations. This self-critical tendency is in service of self-improvement so that the individual can become a better group member, family member, or co-worker (Heine et al., 2001; Kurman et al., 2012). Furthermore, East Asian societies have low relational mobility, meaning that there are few opportunities to voluntarily leave existing relationships and begin new ones (Yuki & Schug, 2012). As a result, individuals socialized in East Asian contexts seek to maintain the smoothness of their relationships by changing themselves to fit with others (termed

adjustment by Morling et al., 2002). In contrast, the independent model of self held by many members of Western cultures promotes standing out among others and expressing the true self, rather than fitting in. The relatively high levels of relational mobility in many Western contexts allow individuals to pick and choose their relationship partners fairly easily (Thomson et al., 2018; Yuki & Schug, 2012; for a review on relational mobility and romantic relationships, see Kito et al., 2017). In Western contexts, therefore, situations and relationships are relatively changeable, but individuals and the self are viewed as fairly stable. Consequently, when faced with a problematic situation or relationship, members of Western cultural contexts tend to take action to change the situation, not themselves (termed *influence* by Morling et al., 2002).

In summary, greater emphasis on social harmony in East Asian compared to Western cultural contexts is linked to different cultural models of self and to variation in primary motivations. These cultural differences suggest that East Asians (e.g., Chinese) and Westerners (e.g., European Americans) view relationship adjustment and self-change in romantic relationships somewhat differently. In this study, we use the term relationship adjustment to refer to the adjustment in thoughts, beliefs, and behaviors individuals make for the sake of their romantic partner (following cross-cultural studies; Morling et al., 2002). We view self-change as one form of relationship adjustment, in which individuals change their self-concepts to fit to the partner (for definitions and operationalizations, see Table 1).

## Western Perspectives on Relationship Adjustment and Self-Change in Romantic Relationships

Changing oneself is a common process in close relationships (Aron et al., 1991; Slotter & Lucas, 2013). The self-expansion theory suggests that individuals incorporate their partner's resources, perspectives, and characteristics into the self through "including others in the self" (Aron et al., 1991). Previous studies showed that individuals confuse descriptions of themselves and their partners, and individuals' self-descriptions become more diverse and similar to that of the partner when they fall in love (e.g., Aron et al., 1991).

On one hand, relationship adjustment and self-change have been linked to positive outcomes in Western contexts. When individuals put effort toward improving their relationships, as compared to those who did not, both the individual and their partner reported higher relationship satisfaction (e.g., Halford et al., 2007). Also, successful attempts to change and regulate the self enhance the partner's relationship quality (Hira & Overall, 2011) and alleviate the partner's distress in conflict situations (e.g., Rusbult et al., 1991). Importantly, self-change may contribute to perceived similarity between partners, which has been linked to relationship satisfaction and commitment (e.g., Amodio & Showers, 2005).

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Table 1. Definitions and Measures of Relationship Adjustment and Self-Change.

Terms		Measures							
	Definition	Study I	Study 2	Study 3					
Relationship adjustment	Making adjustments to fit the romantic partner's wants and needs (e.g., watching a horror film for the partner even though one dislikes it)								
Self-change  A type of relationship adjustment. Changing one's self-concept to fit the partner's wants and needs. (e.g., Becoming a true horror movie fan because of the partner)		Manipulated willingness to change (interests, hobbies, or personality characteristics) among couples in hypothetical situations	Perceived changes in the self in six aspects (worldviews, personality, interests, etc.)	Perceived Change in Relationships Scale (Slotter & Lucas, 2013)					
Agentic adjustment/ self-change	Adjustments/self-changes driven by one's choice		Self-initiated self- changes	Endorsement of agentic adjustment beliefs					
Dutiful adjustment/ self-change	Adjustments/self-changes driven by feeling obligated		Partner-initiated self- changes	Endorsement of dutiful adjustment beliefs					

On the other hand, self-change has also been associated with negative outcomes in Western contexts. Because Westerners value independence and authentic self-expression, they may be afraid of "losing themselves" in the course of accommodating to the partner's needs. Consider two different motives that arise in the course of close relationships: the motive to be independent and fulfill one's personal needs and the motive to be embedded within the relationship and fulfill the partner's needs (Optimal Distinctiveness Theory; Brewer, 1991; Slotter et al., 2014). Making accommodations for one's partner and the relationship can be a rewarding experience, but it can also conflict with the desire to maintain an independent and unique self. Indeed, being requested to change oneself by one's partner is often related to negative relationship consequences. For instance, when a person attempts to change their romantic partner, the target often feels they are not valued for who they are, and they become less satisfied with the relationship (Overall, 2012).

One explanation for these conflicting outcomes of selfchange efforts may be found in the rationale for changing oneself in a relationship. That is, whether individuals *choose* to change or are expected to do so may play an important role in the consequences of self-change, especially in Western contexts. In Western cultural contexts, duty often stands in opposition to agency and choice; complying with an obligation decreases one's sense of "I chose to do it" (Buchtel et al., 2018; Miller et al., 2011). Therefore, the presence of external reasons for behaviors such as punishment or obligation decreases the satisfaction and enjoyment of engaging in the behavior, as a result of threats to agency. For instance, in studies of Western couples, making an autonomous choice to give up one's own needs for the partner's sake has been linked to positive consequences (e.g., Impett et al., 2014). When individuals made sacrifices for approach-oriented reasons (e.g., to make the partner happy), they experienced

positive affect and high relationship quality. However, when they made sacrifices for avoidant reasons (e.g., to avoid conflicts), they were likely to experience negative affect and low relationship quality (Impett et al., 2014). More importantly, the effects of avoidant and approach reasons were largely accounted for by feelings of authenticity (Impett et al., 2013). Therefore, positive outcomes of sacrifice are more likely when individuals feel like they autonomously chose to sacrifice, but not when they feel fake or pressured to sacrifice.

Furthermore, literature on self-silencing suggests that changing the self for external reasons (e.g., to avoid a breakup) can be detrimental. Women in dissatisfying marriages were observed to protect relationships by self-silencing: putting the needs of others before the self and inhibiting self-expression and action to avoid relationship conflict or loss (Jack, 1991). Consequently, these women experienced feelings of loss of self and depression. In one study of married couples, self-silencing thoughts and behaviors were closely linked to depression, and self-silencing mediated the link between marital conflict and depression (Whiffen et al., 2007). In summary, although self-changes in relationships can be important and functional among Western couples, people who change the self for inauthentic reasons report negative outcomes. This may be because self-change motivated by external reasons versus autonomous choice hinders one's self-expression and independence, which conflicts with Western ideals of self and motivation.

## East Asian Perspectives on Self-Change in Romantic Relationships

As elaborated in the previous section, for East Asians, the line between the motive to belong and the motive to be independent may lean more toward the former, compared to Westerners. Therefore, being able to change and adapt for the

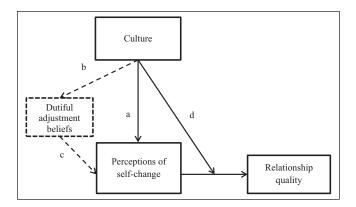
sake of relationships takes precedence over expressing the authentic self. Indeed, authenticity was less valued by Chinese, Indonesian, and Singaporean participants, compared to European Americans (Slabu et al., 2014). The emphasis on adjustment over authenticity may lead to a relatively positive perspective on self-change in romantic relationships among East Asians.

In East Asian contexts, duty and agency coexist. Confucian philosophy discusses duty and obligation as a chance to cultivate virtue rather than an obstacle to free will and agency (Buchtel et al., 2018). Therefore, East Asian individuals tend to accept being obliged to engage in expected behaviors. Buchtel and her colleagues (2018) found that Chinese people internalized social obligations more than U.S. individuals. In their study, although agentic motivations for adjustment were linked to positive emotion similarly in both Chinese and American contexts, feelings of obligation resulted in cultural differences: Chinese individuals who felt obligated to engage in a behavior were more likely to feel agency and were more satisfied with their actions compared to their U.S. counterparts. Furthermore, self-silencing is viewed as normative and sometimes even constructive in communication in East Asian cultural contexts (Gudykunst & Matsumoto, 1996; Kim, 2002). Taken together, East Asian individuals may view self-change for the partner motivated by external factors in a more positive light compared to Western individuals, whereas agency is an important factor for members of both cultures.

Given the differing views of obligation among East Asian and Western people, we expect differences in the ways members of these groups evaluate self-change driven by obligation (which we call *dutiful adjustment* in this paper). There is no evidence, however, to expect that they will differ in their evaluations of self-change that is self-chosen (termed *agentic adjustment* in this paper). Agency is viewed positively in both contexts (Buchtel et al., 2018), and agentic reasons for self-change are likely to have positive consequences for relationships in both groups.

## The Present Research

To date, no previous study compared the perception of self-change and its consequences in romantic relationships across Western and East Asian contexts, despite theories and empirical studies implying cultural differences. To fill this gap, we investigated how Chinese and European Americans view self-change in their romantic relationships. In this study, we conceptualize self-change in close relationships as the process that is motivated by the desire to fit to one's partner (as in Optimal Distinctiveness Theory; Brewer, 1991; Slotter et al., 2014). We focus on self-change to be similar to the partner, as individuals tend to become more similar to their romantic partner over the course of the relationship (e.g., Aron et al., 1991; Slotter & Gardner, 2009).



**Figure 1.** Conceptual model for the current studies. *Note.* Solid lines represent hypotheses related to cultural difference in perceptions of self-change and its impact on relationship quality. Dotted lines indicate the hypotheses related to cultural difference in the reasons for self-change.

We expected the role of self-change to be emphasized more in romantic relationships among East Asians compared to Westerners. Figure 1 depicts our proposed model that links culture, self-change, and relationship quality. In Studies 2 and 3, we examined cultural differences in how individuals perceive self-change in relationships (Figure 1, Path a). We hypothesized that Chinese individuals would be more likely to value self-change compared to their European American counterparts. In Studies 1, 2, and 3, we investigated the relation between self-change and relationship quality among Chinese and European American participants (Figure 1, Path d). We predicted that self-change would be more strongly associated with relationship quality in Chinese than European American relationships.

We examined factors that make Westerners more disinclined toward self-change than East Asians. Given that the lack of authenticity and choice is particularly detrimental for Westerners compared to East Asians, Westerners may perceive dutiful adjustment more negatively compared to East Asians. In Studies 2 and 3, we compared agentic and dutiful motivations for self-change across the two cultures. We expected dutiful adjustment to be endorsed less by European Americans compared to Chinese participants (Figure 1, Path b). However, individuals in these two cultures may equally value agentic adjustment. Furthermore, in Study 3, we examined whether the cultural difference in self-change is mediated by a belief in the importance of dutiful adjustment (Figure 1, Paths b and c; see Methodology file).

## Study I

In the first study, we examined cultural differences in beliefs related to self-change in romantic relationships (Figure 1, Path d). We asked participants to read a set of scenarios describing hypothetical dating couples and manipulated relationship adjustment in those scenarios. That is, in some

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scenarios, romantic partners were described as changing themselves to fit each other (relationship adjustment condition); in other scenarios, partners were described as trying to stay true to themselves despite differences in hobbies, interests, or personality characteristics (no adjustment condition). We expected Chinese individuals to be more likely to evaluate couples who change the self in a positive light compared to European Americans. In contrast, we expected European Americans to be more likely to evaluate couples who do not adjust in a positive light compared to Chinese.

#### Method

Participants and procedure. We recruited 92 Chinese (64 women; Mage = 18.52, SD = 1.37) and 99 European American college students (75 women; Mage = 18.86, SD = 1.12). European American participants were recruited from a departmental subject pool in a Midwestern university in the United States and received course credits for their participation; Chinese participants were recruited from a university in Hong Kong. They responded to a university-wide mass-email and received a small monetary reward for their participation.

Participants were invited to the laboratory and responded to questionnaires set up in Qualtrics. They read a series of scenarios and responded to several questions. About 26% of the Chinese participants were currently in a dating relationship, whereas about 47% of their European American counterparts were in a dating relationship.

Materials. Hypothetical scenarios of four couples were presented to the participants (see Supplementary Materials 1). The beginning of each scenario presented information about the length of their relationship (6 months for all couples), their majors in college, and how they met. More importantly, the two partners were described as having different interests, hobbies, or personality characteristics from each other. For instance, one partner is outgoing, whereas the other partner enjoys spending time at home. We manipulated the last part of the scenarios by stating either that both individuals were motivated to change their self-concept to fit each other or were motivated to be themselves without changing. That is, couples in two of the scenarios were willing to change or adjust (the *adjustment* scenarios), whereas couples in the other two scenarios were not (the *no adjustment* scenarios). These four scenarios were scrambled together with four other couple scenarios that were unrelated to the aim of the current study, and all the scenarios were presented to the participants in a questionnaire packet.

After reading each scenario, participants were asked to rate the relationship quality of the couple using five questions (e.g., "How much do you think they love each other?"). Each question was rated on a 7-point Likert-type scale (see Supplementary Materials 1 for all questions). Principal component analysis with direct oblimin rotation of the five items for each scenario indicated a single factor solution; reliabilities for each scenario in the Chinese sample ranged from  $\alpha$ s

**Table 2.** Means and Standard Deviations of Perceived Relationship Quality in Study 1.

Conditions	Chinese	Euro-American
Adjustment	5.11 (0.66)	4.80 (0.90)
No adjustment	3.88 (0.70)	4.27 (0.85)

= .85 to .90 and in the European American sample,  $\alpha s$  = .90 to .93 across scenarios. We created an index of perceived relationship quality by first averaging the five items for each scenario and then combining the ratings for the two adjustment scenarios and the two no adjustment scenarios separately; high scores indicate higher levels of perceived relationship quality. We also established measurement invariance across the two cultures for each index (see Supplementary Tables S1 and S2).

### Results and Discussion

We examined whether culture influences perceived relationship quality of the hypothetical couples using mixed analysis of variance (ANOVA); our between-subjects factor was culture (Chinese vs. European American), and the within-subjects factor was adjustment (adjustment vs. no adjustment). Table 2 summarizes the means and standards deviations across samples and conditions.

Participants evaluated the relationship quality of couples who adjusted themselves in the relationship to be higher compared to couples who did not adjust, F(1, 189) = 149.86, p < .001, d = 1.77. More importantly, a Culture  $\times$  Adjustment interaction was observed, F(1, 189) = 23.80, p < .001, d =0.70. The sensitivity power analysis for an alpha of .05, power of .80, revealed a minimum F value of 3.89 (Faul et al., 2013), suggesting that the sample size for the current study was large enough to detect the hypothesized effect. In particular, Chinese participants evaluated the couples who adjusted to be higher in relationship quality compared to European American participants, t(189) = 2.72, p < .01, d =0.40. In contrast, European American participants evaluated the no adjustment scenarios more positively than did Chinese participants, t(189) = -3.43, p < .001, d = 0.50. We obtained similar findings when participants' age, gender, and relationship status were controlled in the analysis (see Supplementary Analysis 2 for details).

These results suggest that Chinese are more likely than European Americans to believe that self-change is an important factor that influences relationship quality. Also, it is noteworthy that people from both cultural groups perceived that changing oneself to fit one's partner was linked to better relationship quality.

### Study 2

Study 1 showed that Chinese people more likely than European Americans to perceive that people who changed to fit their partner would be happier than those who did not change. Study 2 examined whether that belief would translate into individuals' own reports of self-change and their own relationship satisfaction. We hypothesized that Chinese would perceive that they changed more in the relationship, compared to European Americans (Figure 1, Path a). We also examined whether there are cultural differences with respect to how much Chinese and European Americans adjust for agentic or dutiful reasons. We measured agentic adjustment by investigating individuals' active attempts to change the self (i.e., selfinitiated changes) and dutiful adjustment by examining the degree to which an individual's self-change was in response to their partner's requests (i.e., partner-initiated changes). We hypothesized that Chinese participants would be more likely to attribute changes to their partner's request rather than to their own choice and that the opposite pattern would emerge for European American participants (Figure 1, Path b). Dutiful adjustment may be more valued among Chinese participants than among their European American counterparts because it reflects the individual's prioritization of harmony in the relationship over the expression of their own wishes. We also predicted that Chinese individuals would feel happier in their relationship if they perceived more change in themselves, whereas we expected this association between perceived selfchange and relationship quality to be weaker among European Americans (Figure 1, Path d).

#### Method

Participants and procedure. We recruited 176 Chinese (115 women; Mage = 22.81, SD = 2.76 years) and 220 European American college students (161 women; Mage = 18.94, SD = 1.27 years). Chinese participants were recruited from a university in Hong Kong and they received a small monetary reward for their participation; European American participants were recruited from a Midwestern University and they received course credits for their participation. All participants reported that they had been in their current romantic relationship for more than 3 months; the average length of relationship was 24.62 months for Chinese (SD = 22.51) and 24.16 months for European Americans (SD = 16.86). About 15.34% of the Chinese participants were either engaged or married, whereas only one participant was engaged and none was married in the European American sample.

In both places, participants were invited in groups to complete a pen-and-paper questionnaire in a classroom setting. After completing evaluations of their relationship, participants completed demographic questions. Again, materials were presented in Chinese for Chinese participants after translation and back-translation or in English for European American participants.

## Materials

Perceived self-change in relationship. For perceived selfchange, participants read the instruction "Since you and your partner began your relationship, to what extent have you changed to be more similar to your partner?" and rated six aspects (worldviews/values, personality, interests/hobbies, attitudes about different things, lifestyles/habits, and communication/interaction styles) on a 7-point scale (1 = not at all to 7 = extremely large extent). Partial scalar invariance was established across cultures (see Supplementary Table S4).

Self-initiated versus partner-initiated self-change. After participants reported perceived changes in the relationship, they were asked the extent to which these changes were initiated by themselves or by their partner, similar to measures used in previous studies (e.g., Hira & Overall, 2011). Specifically, they were given the following two statements and responded using a 7-point Likert-type scale (1 = not at all to 7 = extremely large extent): I have attempted to change myself in the relationship; My partner wants me to change.

Relationship quality. The Quality of Relationship Index (QRI; Norton, 1983) measures participants' relationship quality on six items (e.g., "We have a good relationship") using a 7-point scale (1 = strongly disagree to 7 = strongly agree). The scale was highly reliable in both cultural groups ( $\alpha$ Chinese = .93;  $\alpha$ American = .94). Partial scalar invariance was established across cultures (see Supplementary Table S3).

#### Results and Discussion

Preliminary analysis. We conducted a principal component analysis using direct oblimin rotation for our measure of perceived self-change. We obtained a one-factor solution across cultural groups. As a result, we averaged the six items to create a variable of perceived self-change ( $\alpha$ Chinese = .86;  $\alpha$ American = .87). Higher scores indicate greater perceived self-change in the relationship. Table 3 presents the descriptive statistics and bivariate correlations for the main variables in the study.

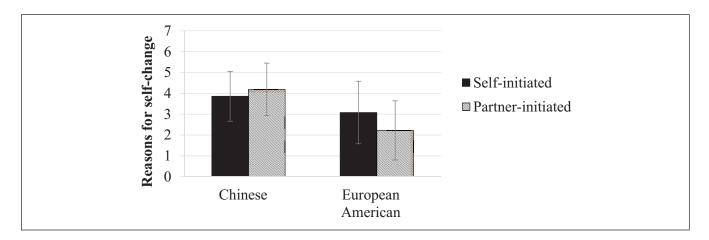
Cultural differences in perceived change in relationship. We expected Chinese participants to perceive more self-change in the course of the relationship compared to European American participants. We conducted ANOVAs to examine cultural differences in perceived changes in romantic relationships, entering culture as a predictor for perceived self-change. Throughout these analyses, we examined the role of gender, Gender × Culture, age and relationship length; the results remained the same with or without these covariates, so we dropped the covariates from the analyses (see Supplementary Analysis 3 for details).

We found that Chinese participants were more likely to perceive self-change compared to European Americans, F(1, 394) = 53.13, p < .001, d = 0.74. The sensitivity power analysis for an alpha of .05, power of .80, revealed a minimum F

Table 3. Descriptive	Statistics and	l Correlations f	for Major	Variables in Study 2.
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	Chinese		Euro-American					2	3	4
Variables in Study 2	M SD		M SD		ťª	d	1			
Perceived self-change	4.06	1.00	3.26	1.13	-7.29***	0.75	_	.44***	.40***	11
2. Self-initiated self-change	3.86	1.20	3.08	1.50	-5.59***	0.57	.47***	_	.41***	14*
<ul><li>3. Partner-initiated self-change</li><li>4. Relationship quality</li></ul>	4.19 5.78	1.26 1.08	2.22 6.22	1.42 0.91	-14.39*** 4.42***	1.46 0.45	.56*** .14	.38*** .01	.00	18** 

Note. Correlation matrix for the Chinese sample is in the lower panel, whereas that for the Euro-American sample is in the upper panel. alndependent t-tests comparing the variables across cultures. ds in this table are different from those in the results section because we take account of covariates in the ANCOVA analyses in the results section. p < .05. \*p < .01. \*



**Figure 2.** Reasons for self-change among Chinese and European Americans (Study 2). *Note.* Error bars indicate standard deviations.

value of 3.87 for the effect of culture on perceived self-change, suggesting that the sample size of the study was large enough to detect this effect (Faul et al., 2013).

Furthermore, we examined whether Chinese participants were more likely to attribute self-changes to their partner (i.e., partner-initiated changes) than to themselves (i.e., selfinitiated changes), compared to European American participants. We conducted mixed ANOVAs with culture as the between-subjects factor, and reasons for change (self vs. partner) as the within-subjects factor. There was a significant Culture  $\times$  Reasons for Change interaction effect, F(1, 393)= 63.60, p < .001, d = 0.82, as well as a significant main effect of Culture, F(1, 390) = 140.55, p < .001, d = 1.21. Decomposing the interaction, we found that Chinese participants attributed their changes more to their partner than to themselves, F(1, 391) = 9.99, p = .002, d = 0.32, whereas European American participants attributed such changes more to themselves than to their partner, F(1, 391) = 75.91, p < .001, d = 0.88 (Figure 2; see note 2 for the effect of gender when included, along with Supplementary Analysis 3).<sup>2</sup>

Self-change predicting relationship quality. We expected Chinese individuals who perceived more change in themselves

to have higher relationship quality, compared to European Americans. We regressed relationship quality onto perceived self-change, cultural group, and the interaction between these two. The results are summarized in Table 4. As expected, Chinese participants who perceived greater selfchange were more likely to perceive higher relationship quality compared to their European American counterparts (Culture  $\times$  Perceived self-change interaction; Cohen's  $f^2 =$ .02, small effect size).<sup>3</sup> Perceived self-change positively predicted relationship quality among Chinese individuals (b =0.15, p = .05, Cohen's  $f^2 = .02$ ) but not among European Americans (b = -0.09, p = .13, Cohen's  $f^2 = .01$ ). The sensitivity power analysis for an alpha of .05, power of .80, revealed a minimum Cohen's  $f^2$  of .02 for Culture  $\times$  Perceived change interaction for self-change, which suggests that the sample size of the study was large enough to detect the effect (Faul et al., 2013).

Summary. These results support our prediction that Chinese individuals, compared to European Americans, perceive themselves to have changed more in their romantic relationships. Furthermore, Chinese participants were more likely to perceive these changes to be partner-initiated than

Table 4.	Regression	of Relationship	Quality on I	Perceived Sel	lf-Change in R	Relationships in	Study 2.

					95% CI		
	Ь	SE	t	Þ	LL	UL	
Regression model							
Constant	6.51	0.20	32.17	<.001	6.12	6.91	
Culture	-1.33	0.37	-3.58	<.001	-2.05	-0.60	
Perceived self-change	-0.09	0.06	-1.51	.13	-0.20	0.03	
Culture $ imes$ Perceived self-change	0.23	0.09	2.45	.01	0.05	0.42	
Model R <sup>2</sup>	.06						
Simple effects							
Chinese	0.15	0.07	1.98	.05	0.00	0.29	
European American	-0.09	0.06	-1.51	.13	-0.20	0.03	

Note. In the analysis, we coded European American as 0 and Chinese as 1. CI = confidence interval; LL = lower limit; UL = upper limit.

self-initiated, whereas European Americans were more likely to attribute their change to themselves than to their partner. As expected, the more Chinese individuals perceived that they had changed and adjusted the more they perceived high relationship quality. In contrast, self-change was not related to relationship quality for European Americans. This result suggests that European American dating individuals may have less favorable views of changing themselves for the sake of the relationship compared to Chinese dating individuals.

## Study 3

Study 2 addressed an important question about cultural differences in adjustment in romantic relationships by focusing on dating individuals. Adjustment in relationships may be more relevant to married couples who spend more time together and become an economic unit, compared to dating couples. Furthermore, we used college samples in Study 1 and 2, who may be more accepting of self-change as they are still forming their identity. Hence, we extended our research to married couples in Study 3. Furthermore, in Study 2, we only assessed one person's subjective experience of their own change in their relationship. However, one's relationship quality may also be affected by one's partner's perception of their own change. For example, imagine that Alexander has become more conscientious since meeting Vanessa because she is a good student, and Vanessa has become more sociable after dating Alexander because he is a social butterfly. Alexander likes the ways he has changed; he thinks that Vanessa makes him a better person, which enhances his relationship quality. In addition, Vanessa's perception of her own change improves Alexander's relationship quality because she feels more comfortable engaging in social activities than before. This makes Alexander feel happy and supported as they go to more social events together. Hence, both Alexander's own perception of selfchange and Vanessa's perception of her change can affect

Alexander's relationship quality. In Study 3, we took the partner effect into account by examining dyads. We investigated the effect of the actor's perception of their own change accounting for the effect of their partner's perception of self-change on the actor's relationship quality, by using the Actor Partner Interdependence Model (APIM; Kashy et al., 2000).

Using samples of Chinese and European American married couples, we examined cultural differences in couples' perceptions of their own change in their marriage (Figure 1, Path a). We expected that members of Chinese couples would be more likely than members of European American couples to perceive changes in themselves. Second, we developed a measure of relationship adjustment beliefs based on previous cross-cultural research. In Study 2, agentic and dutiful adjustment were measured as perceptions of the initiator of actual self-change (e.g., self or partner). In Study 3, we focused instead on participants' beliefs about the importance of agency when adjusting in their relationship. Hence, we developed a measure that captures individuals' general endorsement of agentic and dutiful adjustment beliefs. To examine the endorsement of agentic adjustment, we created items based on the idea of self-change to fit with or harmonize with others (e.g., Morling et al., 2002) and on the ideas of self-improving and self-critical orientations (e.g., Heine et al., 1999) For the assessment of endorsement of dutiful adjustment, we generated items based on the notion of avoidance and self-silencing in relationships (e.g., Jack, 1991). We expected Chinese people to value dutiful relationship adjustment to a greater extent than their European American counterparts (Figure 1, Path b). Furthermore, we hypothesized that cultural differences in self-change would be mediated by beliefs in dutiful adjustment, but not by beliefs in agentic adjustment (Figure 1, Paths b and c). Agentic adjustment may be valued by members of both Chinese and European American couples because it does not undermine one's self-expression.

Third and finally, we predicted that members of Chinese couples would be more satisfied in their marriage if they

perceived greater self-change, whereas this association between self-change and marital quality would be weaker among European American couples (Figure 1, Path d). We examined the effect of the actor's perception of self-change on the actor's marital quality, accounting for the partner's perception of his or her own self-change. For example, we were able to examine the effect of both Vanessa's self-change and Alexander's self-change on each individual's perception of their own relationship quality. We hypothesized that members of Chinese couples who perceived a greater change in themselves would report greater relationship quality compared to members of European American couples.

#### Method

Participants and procedure. Married couples in heterosexual relationships were recruited. Chinese participants (N=54 couples) were parents from a secondary school in Hong Kong who responded to a research invitation from the school. The European American sample (N=61 couples) was recruited in several ways. We posted the research advertisement around the university campus, in a local newspaper, as well as on a public online forum. The sample size was not determined a priori; however, a total of 103 dyads would have had approximately .80 power to detect the small effect sizes as in Study 2.4

Both parties of a couple were invited to the laboratory, and they completed a questionnaire individually. If one of them was not able to come, we asked the person who showed up to take the instructions and the questionnaire back to his or her spouse and ask the spouse to send the packet back to us in a sealed envelope. Couples were paid for their participation. The mean length of marriage for Chinese couples was 15.55 years (SD = 6.73) and the couples on average had 1.74 children. The mean length of marriage for European American couples was 14.83 years (SD = 11.36) and the couples on average had 1.59 children. There were no differences across the cultural groups in these two demographic variables, ps > .05. However, Chinese wives and husbands (Mage for wives = 42.85, SD = 6.35; Mage for husbands = 44.48, SD = 6.32) were slightly older than their European American counterparts (Mage for wives = 39.07, SD = 15.05; Mage for husbands = 40.67, SD = 15.09), p = .09.

#### Measures

Perceived change in relationships. We used the Perceived Change in Relationships Scale (Slotter & Lucas, 2013) to measure the extent to which respondents perceived that they and their partners had changed after marriage. Respondents rated five items, such as "In my marriage, my personality tends to have shifted to be more similar to my spouse's personality" (αsChinese = .78 and .74 for wives and husbands, respectively; αsAmerican = .73 and .65 for wives and husbands, respectively). Partial scalar invariance for the measure was established (see Supplementary Table S9).

Relationship adjustment beliefs. We developed a 10-item measure to assess beliefs in relationship adjustment. Items were developed based on previous studies related to self-change, such as self-change to fit others (termed secondary control; Morling & Evered, 2006), self-improving and self-critical orientations (Heine et al., 1999; Kurman et al., 2012), and self-silencing (e.g., Yum, 2004). Respondents rated the list of relationship adjustment behaviors in terms of the importance of each behavior in maintaining their marriages. The importance ratings were made on a 5-point scale ( $1 = not \ at \ all \ important \ to \ 5 = extremely \ important)$ .

We conducted a principal component analysis using the direct oblimin rotation for the relationship adjustment belief measure using the whole sample of participants. Data from wives and husbands were combined in the analysis given that our sample size was relatively small (see Supplementary Tables S5 and S6 for measurement invariance). We observed a two-factor solution that explained 54.46% of the variance. One factor tapped the importance of self-initiated efforts to understand one's partner's needs, to fit with one's partner, and to seek advice from one's partner for ways to improve (e.g., "Ask for advice from one's partner"); we labeled this factor Agentic Adjustment Beliefs. The other factor tapped the importance of fulfilling an imposed role and restraining one's behaviors that may cause conflict (e.g., "Give up aspirations and goals to meet one's partner's expectations"); we labeled this factor Dutiful Adjustment Beliefs. One item of Dutiful Adjustment Beliefs that loaded also on Agentic Adjustment Beliefs ("Act on one's partner's suggestions and advice") was categorized into Dutiful Adjustment Beliefs, because it makes sense theoretically. Factor loadings are summarized in Table 5. No items were dropped, and there were five items in each adjustment beliefs measure.

The index for each adjustment factor was calculated by averaging scores of items. For Agentic Adjustment Beliefs, partial scalar invariance was established (see Supplementary Table S7) and reliability coefficients were acceptable in both cultural groups (αsChinese = .77 and .83 for wives and husbands, respectively; αsAmerican = .71 and .88 for wives and husbands, respectively). For Dutiful Adjustment Beliefs, partial scalar invariance was established (see Supplementary Table S8) and reliability coefficients were marginally acceptable in both cultural groups (αsChinese = .66 and .70 for wives and husbands, respectively; αsAmerican = .61 and .67 for wives and husbands, respectively).

Marital quality. We measured the participants' marital quality using the Perceived Relationship Quality Components Inventory (PRQC; Fletcher et al., 2000). The scale consists of 18 items that measure six components of one's relationship: satisfaction, commitment, intimacy, trust, passion, and love. Research showed that the six components loaded on a single factor of relationship quality (Fletcher et al., 2000).

Table 5. Target Rotated Factor Loadings for the Measure of Relationship Adjustment Beliefs in Study 3.

Item	Agentic adjustment (factor 1)	Dutiful adjustment (factor 2)
Try to understand and meet one's partner's needs.	.79	16
Ask for advice from one's partner.	.77	04
Anticipate what one's partner wants or needs.	.76	.02
Foresee problems in the relationship and work through them.	.70	.02
Adjust plans and goals to fit one's partner's needs.	.69	.14
To maintain harmony, do not say what one really thinks.	28	.79
Give up aspirations and goals to meet one's partner's expectations.	.11	.74
Avoid conflict with one's partner.	04	.67
Act on one's partner's suggestions and advice.	.45	.52
Go along with one's partner even if one does not agree with his/ her point of view.	.29	.52

Note. Factor loadings larger than .40 are bolded.

Table 6. Descriptive Statistics and Correlations for Major Variables in Study 3.

	Chinese		Euro-American									
Variables in Study 3	М	SD	М	SD	ťª	d	1	2	3	4	5	6
I. Actor's self-change <sup>b</sup>	4.67	0.89	4.08	1.03	4.64***	0.61	_	.09	.14	.07	.10	.04
2. Partner's self-change <sup>b</sup>							.36***	_	.12	04	.04	.10
3. Agentic adjustment beliefs	4.09	0.57	4.13	0.60	0.48	0.07	.34***	.25*		.33***	.28**	.16
4. Dutiful adjustment beliefs	3.46	0.57	2.90	0.66	6.93***	0.91	.31**	.08	.40***	_	08	06
5. Actor's relationship quality <sup>b</sup>	5.78	1.08	5.94	0.79	3.90***	0.17	.35***	.26**	.35***	.04	_	.45***
6. Partner's relationships quality <sup>b</sup>							.26**	.35***	.24*	06	.58***	_

Note. Correlation matrix for Chinese sample is in the lower panel, whereas that for Euro-American sample is in the upper panel. alndependent t-tests comparing the variables across cultures. b Because dyads were indistinguishable, individuals were both the actor and the partner within a dyad. Therefore, Means and SDs were the same for actors and partners. p < .05. \*p < .01. \*\*p < .01. \*\*p < .01.

Respondents rated each item (e.g., "How satisfied are you with your marriage?") on a 7-point scale ( $1 = not \ at \ all$  to 7 = extremely). The measure showed good reliability in both cultural groups ( $\alpha$ sChinese = .97 and .97 for wives and husbands, respectively;  $\alpha$ sAmerican = .95 and .93 for wives and husbands, respectively). Partial metric invariance was established across cultures (see Supplementary Table S10).

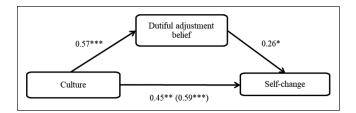
#### Results

Cultural differences in perceived self-change in marriage. As in Study 2, we examined the role of gender, Gender × Culture, age, and relationship length throughout all analyses; the results of interest remained the same with or without these covariates, so we dropped the covariates from the analyses (but see Supplementary Analysis 4 for details). We first hypothesized that Chinese individuals would perceive more self-change in their marriage than would European Americans. Multilevel analyses accounting for the nested effect of dyads were conducted with fixed effects of culture. Means and SDs are reported in Table 6. For perceived self-change,

we observed a significant effect of culture, b(SE) = 0.59(0.14), p < .001, 95% CI = [0.34, 0.89], Cohen's  $f^2 = .08$  (small to medium effect size). Chinese couples perceived greater self-change than did European American couples.

Cultural differences in relationship adjustment beliefs. We hypothesized that Chinese participants, compared to European American participants, would be more likely to endorse Dutiful Adjustment Beliefs. However, we did not expect cultural differences in the endorsement of Agentic Adjustment Beliefs. To test this, we again conducted multilevel analyses accounting for the nested effect of dyads with fixed effects of culture. As expected, Chinese participants, compared to European American participants, were more likely to endorse Dutiful Adjustment Beliefs (main effect of culture, b[SE] = 0.61[0.09], p < .001, 95% CI [0.43, 0.80]), Cohen's  $f^2 = .20$  (medium to large effect size). For Agentic adjustment, we did not find any effects of culture or gender, ps > .10.

Adjustment beliefs mediate the cultural difference in selfchange. To examine whether Dutiful Adjustment Beliefs



**Figure 3.** Self-restraint adjustment beliefs mediate the cultural difference in self-change (Study 3).

Note. In the analysis, we coded European American as 0 and Chinese as I. \*p < .05. \*\*p < .01. \*\*\*p < .001.

were a mechanism behind the cultural difference in self-change we tested for multilevel mediation as suggested in Bauer et al. (2006). We ran the model with culture as a predictor, Dutiful Adjustment Beliefs as a mediator, and perceived self-change as an outcome variable. Then, we used the Monte Carlo method based on 20,000 simulated resamples to create a confidence interval for the indirect effect (MacKinnon et al., 2004). As illustrated in Figure 3, Dutiful Adjustment Beliefs mediated the cultural difference in perceived self-change, 95% CI = [0.03, 0.28], with a small to medium effect size  $\kappa^2 = .07$  (Preacher & Kelley, 2011).<sup>5</sup> As expected, Agentic Adjustment Beliefs did not explain the cultural difference in perceived self-change, 95% CI = [-0.08, 0.05].<sup>6</sup>

The role of perceived change in the perception of marriage quality. In the following analyses, we addressed this question: How do the actor's self-perceived change and the partner's perception of his or her own change predict the actor's relationship quality among Chinese and European American couples? Following the Actor Partner Interdependence Model (Kenny et al., 2006), we conducted a Multilevel SEM analysis to examine this question. We tested for the effect of participant's gender and its interaction with the variables of interest within each culture, but they were not significant. Hence, we treated members of dyads as indistinguishable.<sup>7</sup>

We ran SEM multi-group analysis using Mplus with the actor's perception of self-change and the partner's perception of his or her own self-change as predictors, and the actor's relationship quality as the dependent variable. We treated relationship quality as a latent variable as measured by the six components: satisfaction, commitment, intimacy, trust, passion, and love. We compared cultural differences by comparing model fit after constraining paths to be equal across groups. Results are described in detail in Figure 4A and B (also see Supplementary Tables S13-S16). As expected, the actor's perception of self-change was more strongly linked to the actor's relationship quality among Chinese couples than European American couples ( $\Delta TRd[df]$ = 4.33[1], p = .04). The actor's perceived self-change was significantly linked to relationship quality among members of Chinese couples (b[SE] = 0.41[0.13], p = .001, 95% CI

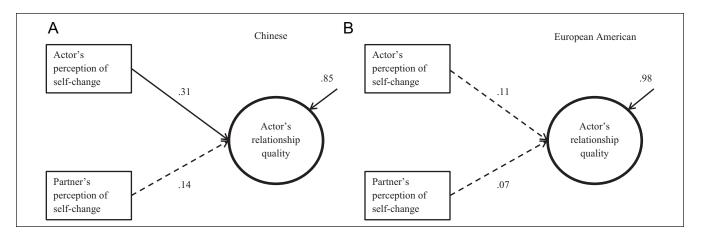
= [0.16, 0.66]) but not among members of European American couples (b[SE] = 0.10[0.10], p = .11, 95% CI = [-0.10, 0.30]) as we hypothesized. We did not find a significant cultural difference in the path from partner's perception of self-change to relationship quality ( $\Delta TRd[df] = 0.71[1]$ , p = .40). See Supplementary Material (Table S11 and Figure S1) for the results when relationship quality is treated as a manifest composite, and dyads were treated as distinguishable (Table S12 and Figure S2). Also see Supplemental Materials Table S17 for the tests of cultural differences in the relations between self-change and the individual subscales of relationship quality in Study 3.

Summary. As hypothesized, relationship adjustment was more prominent among Chinese couples than among European American couples. In line with the results of Studies 1 and 2, Chinese couples tended to perceive more self-change in their marriage compared to European American couples. Chinese and European Americans also had different views of the relationship adjustment beliefs. Specifically, dutiful adjustment was more important for Chinese couples than for European American couples; in contrast, members of these two cultural groups endorsed beliefs about agentic adjustment similarly. This difference in the belief in dutiful adjustment mediated the cultural difference in perceived self-change. Moreover, perceiving that one had changed was related to higher marital quality among Chinese couples but not among European American couples.

## **General Discussion**

Creating a satisfying relationship is valuable to both East Asians and Westerners, but cultural variations in self-views and motivations suggest that the ways individuals go about this task will vary. This research examined whether cultural context affects the degree to which changing oneself in a relationship is beneficial for one's relationship quality. In three studies, we observed both cultural similarities and differences in how people with East Asian versus Western cultural backgrounds perceive self-change in romantic relationship contexts. In Study 1, both Chinese and European American students evaluated couples who adjusted and changed themselves for the sake of the relationship more favorably than non-adjusting couples. Furthermore, agentic adjustment beliefs were equally endorsed across two cultures in Study 3.

As hypothesized, we also found that change in the self is more important in Chinese than in European American relationships. When evaluating hypothetical couples, Chinese were more likely to view the adjusting couples who changed for their relationship partner as having better relationship quality than did European Americans, and the reverse pattern was true for the evaluation of non-adjusting couples (Study 1). In addition, Chinese individuals were more likely than their



**Figure 4.** SEM with perceived self change and partner's self change predicting relationship (Study 3). *Note.* Dotted line denotes insignificant results. Estimates presented are standardized values. SEM = structural equation modeling.

European American counterparts to perceive changes in themselves (Studies 2 and 3). Furthermore, Chinese couples who perceived greater change in themselves rated their relationships higher in quality as compared to European American couples (Studies 2 and 3). These cross-cultural differences are in line with cultural theories that predict East Asians to embrace self-change to a greater extent compared to Westerners (e.g., Heine et al., 2001; Spencer-Rodgers et al., 2009).

As we expected, cultural differences in motivations for change also make a difference in how people perceive and endorse self-change in relationships. In Study 2, Chinese participants were more likely to attribute their change to the partner (i.e., a dutiful reason) than the self (i.e., an agentic reason), but European American participants tended to attribute self-change to the self rather than the partner. Furthermore, in Study 3, we obtained two factors of relationship adjustment beliefs, namely Agentic Adjustment Beliefs and Dutiful Adjustment Beliefs. Although Chinese and European American couples similarly endorsed Agentic Adjustment Beliefs, Chinese couples regarded Dutiful Adjustment as more important than did European American couples. Moreover, the endorsement of Dutiful Adjustment Beliefs explained the higher perception of self-change in relationships among Chinese couples compared to European American couples. That is, Chinese couples were more likely to believe that going along with one's partner and maintaining harmony in the relationship is important; this was linked to the extent they changed in the relationship. Although previous relationship research often conceptualized dutiful adjustment in a negative light (for instance, calling it suppression, neglect, etc.), we took a cultural perspective to conceptualize and measure dutiful adjustment. In East Asian cultural contexts, because people are expected to fit into their social groups and maintain harmonious relationships, there are many situations in which one needs to restrain one's feelings, desires, and actions to promote the interests of the group. As a result, dutiful adjustment was more valued by

Chinese couples as a way to maintain their marriages, compared to European American couples.

## **Implications**

Our research has implications for ways to encourage one's romantic partner to change and improve (i.e., partner regulation). Previous research in Western cultural contexts found that attempts to change one's romantic partner through explicit requests led to a decrease in the partner's relationship quality, because they felt negatively regarded and not accepted for who they are (for a review, see Overall, 2012). Results of our study align with these previous studies, in that European American participants were less likely than Chinese individuals to endorse statements that reflect dutiful adjustment (i.e., "[It is important to] go along with one's partner even if one does not agree with his or her point of view"), and European Americans' self-change was not linked to their relationship quality. Therefore, when members of European American couples want their partner to change or improve, they need to be cautious and consider that it may negatively impact their partner's feelings about the relationship. In contrast, for East Asian couples, changes desired by the partner may not be perceived negatively. Therefore, direct strategies for partner regulation among East Asian couples may not be as detrimental and unhealthy for the target as in Western couples.

Furthermore, our studies have implications for relationship counseling. Maintenance of one's autonomy is an implicit building block for a well-functioning person and relationships in Western contexts (Deci & Ryan, 2008). Hence, relationship counseling often implicitly or explicitly centers around the idea of being oneself and pursuing individual interests and goals (Pedersen et al., 2015). However, the strong focus on the pursuit of individual goals may not be as beneficial in East Asian contexts, as the results of our studies point to the importance of relationship adjustment for

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satisfying relationships among East Asians. Our results also suggest that the relationship behaviors that warrant concern in Western contexts, such as directly requesting the partner to change, may not be as problematic in East Asian culture (Pedersen et al., 2015).

#### Limitations and Future Directions

Limitations related to measurement and study design calls for future studies; the newly developed measure of relationship adjustment beliefs needs to be refined and further validated in future research. Also, some scholars have pointed out problems of using multi-dimensional scales, such as the Relationship Quality measure used in these studies (e.g., Fincham & Bradbury, 1987). Global measures of relationship quality can be difficult to distinguish from other related constructs, which in turn limits clear interpretations of studies and theory development. Furthermore, the mediation model in Study 3 was based on cross-sectional data of married couples. It is important to examine the long-term consequences and causality of relationship adjustment and relationship evaluation using other designs and samples, such as by examining the trajectories of relationship adjustment and relationship quality among newlyweds across cultures.

In addition, we focused on a specific type of self-change in our studies: self-change to be similar to the partner. There can be other types of self-change, however, such as being different from the partner, which may serve to enhance the relationship. (e.g., One can try to become a calm person to soothe the anxious partner). Furthermore, if similarity between the partners is not valued, couples may not change to be similar to each other. For example, East Asians tend to tolerate personality differences in a couple more than do Westerners (Schug et al., 2009). Future research can include additional dimensions for evaluation, such as differences in communication and emotional expression styles. Finally, we acknowledge that the results may not be generalizable to other East Asian and Western groups. For example, we sampled Hong Kong Chinese individuals living in a highly developed society who may have experienced impact of industrialization and globalization; their norms in close relationships may differ from those in rural areas due to shifts in values (Yeh et al., 2013). Thus, the results need to be replicated in other sociocultural groups in future studies.

The small to medium effect size of the mediating role of dutiful adjustment in the cultural difference in perceived self-change in Study 3 suggests the presence of other mediators. For instance, East Asian individuals' tendency to believe that the self to be inconsistent and changeable across time and context (i.e., dialectical self; Spencer-Rodgers et al., 2018) may also account for the cultural difference in self-change. Similarly, commitment may also

predict the degree to which individuals are willing to change for their relationship. When relationship commitment was included as a covariate in some analyses in Study 3, we found that it was a significant predictor of perceived self-change and self-change beliefs (see Supplementary Analysis 1 for effects of commitment on results). These findings align with previous studies in which participants differ in their experience of relationship adjustment depending on their level of commitment (e.g., Cao et al., 2017).

Finally, we base our predictions on cultural theories of independent and interdependent social orientations, but we have not empirically examined the specific mechanisms behind these cultural differences. Given that there are no previous studies examining cultural differences in self-change in close relationships, the current research prioritized demonstrating the hypothesized cultural differences predicted by well-established cultural theories. As a next step, it is crucial to examine specific mediators of cultural differences in perceptions of self-change. Domain-specific exploratory frameworks should be considered, rather than relying only on the theories of independent and interdependent social orientations. For example, individuals who perceive low relational mobility may feel a stronger need to change the self in relationships as they have less freedom to leave the relationship compared to those who perceive high mobility (Yuki & Schug, 2012). Therefore, future studies can examine perceived relational mobility as a mechanism behind observed cultural differences.

## **Conclusion**

Despite extensive evidence for cultural variation in self-construal, motivation, emotion, and cognition, researchers have seldom examined relationship processes in light of these cultural differences. Across three studies, using experimental and dyadic designs, as well as dating and married samples, we found that perceptions of self-change are more important in East Asian romantic relationships than in Western ones. By extending relationship theories beyond Western populations, we can re-evaluate the value of adjustment in relationships, even when it means that an individual has to be "0.5" to become one unit with the partner.

#### **Declaration of Conflicting Interests**

The author(s) declared no potential conflicts of interest with respect to the research, authorship, and/or publication of this article.

## **Funding**

The author(s) disclosed receipt of the following financial support for the research, authorship, and/or publication of this article: This research was in part supported by the General Research Fund (#15606320) funded by the Research Grants Council, and the Departmental General Research Funds, Hong Kong Polytechnic University, awarded to Ben C. P. Lam and Sylvia Xiaohua Chen.

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#### **Supplemental Material**

Supplemental material is available online with this article.

#### **Notes**

- We obtained similar patterns of findings even when we examined the four scenarios separately—without combining them into adjustment and no adjustment scenarios.
- 2. When covariates were included, there were significant effects of gender, F(1, 381) = 19.56, p < .001, Gender  $\times$  Reason interaction, F(1, 381) = 6.06. p = .01, and a Gender  $\times$  Culture  $\times$  Reason interaction, F(1, 381) = 5.69, p = .02. Across cultures, men were more likely to attribute self-change to the self than to the partner, F(1, 381) = 14.09, p < .001. However, women were equally likely to attribute the self-change to the self and the partner p = .20. Among Chinese participants, women were more likely to attribute the self-change to the partner than the self, F(1, 381) = 15.65.  $p \le .001$ , but men were equally likely to attribute the change to the self and the partner, p = .39. For European American participants, both men and women were more likely to attribute the self-change to the self than to the partner Fs > 19.22, ps < .001 (See Supplementary Analysis 3 for the means).
- 3. Cohen (2013) suggested the following cutoffs for  $f^2$ : small (.02), medium (.15), and large (.53).
- We used the Optimal design software to estimate sample size of multilevel model, with alpha of 0.05 and power of 0.8 (Spybrook et al., 2011).
- 5. Preacher and Kelley (2011) notes that  $\kappa^2$  can be interpreted in the same light as Cohen's  $r^2$  such that small, medium, and large effect sizes are .01, .09, and .25, respectively.
- The mediating effect of the Dutiful Adjustment Beliefs of the self remains the same when we also include partner's Dutiful Adjustment Beliefs.
- 7. An interesting effect of Culture  $\times$  Gender emerged when covariates were included. Specifically, relationship quality was similar for men (M = 5.98, SE = .11) and women (M = 5.89, SE = .11) among European American couples p = .40, but men had higher relationship quality (M = 5.72, SE = .12) than women (M = 5.28, SE = .11) among Chinese couples p < .001.

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