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Hearts Resonate, Love Follows: Spousal Similarity and Marital Satisfaction

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Abstract

Similarity constitutes an important component of couples' marital satisfaction; however, current research on the relationship between the two has yielded contradictory conclusions. In which dimensions are couples actually similar, and what impact does similarity have on marital satisfaction? The present study recruited 638 Chinese couples as participants, employing a couple-centered approach (CCA) and utilizing profile-level similarity (PCS) and attribute-level dissimilarity (ADS) as indicators to integrate actor effects, partner effects, similarity effects, and dissimilarity effects, thereby investigating the relationship between similarity in individual, interaction, and family-of-origin variables across different marital stages and marital satisfaction. The results indicated: (1) actual couples were more similar than randomly paired couples; (2) compared to individual traits and interaction patterns, couples exhibited greater similarity in the family-of-origin dimension; (3) the effect of couple similarity on marital satisfaction showed gender differences across different marital stages; (4) although similarity exerted an influence on marital satisfaction, actor effects remained the strongest predictor of marital satisfaction.

Full Text

Hearts in Harmony, Love in Sync: Couple Similarity and Marital Satisfaction

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Abstract

Similarity constitutes an essential component of marital satisfaction, yet current research has yielded inconsistent conclusions regarding their relationship.

In which dimensions are couples actually similar, and how does similarity influence marital satisfaction? This study examined 638 Chinese couples using a couple-centered approach (CCA), integrating actor effects, partner effects, similarity effects, and discrepancy effects through profile-level similarity (PCS) and attribute-level discrepancy (ADS) indicators to investigate how similarity in individual, interactional, and family-of-origin variables relates to marital satisfaction across different marital stages. Results revealed: (1) Real couples demonstrated greater similarity than randomly paired couples; (2) Compared with individual traits and interaction patterns, couples showed greater similarity in the family-of-origin dimension; (3) The influence of couple similarity on marital satisfaction exhibited gender differences across marital stages; and (4) Although similarity affected marital satisfaction, actor effects remained the strongest predictor.

Keywords: marital satisfaction, similarity, APIM, couple-centered approach, family life cycle

1. Introduction

Marital relationships are widely regarded as the most important and optimal social form for fulfilling individuals' emotional needs (Zakhirehdari et al., 2019), with marital quality significantly impacting personal well-being, work performance, and interpersonal relationships (Tavakol et al., 2017). According to assortative mating theory, individuals tend to select partners who are similar to themselves—birds of a feather flock together (Fehr, 2008). For instance, people prefer to marry those with similar personality traits (Botwin et al., 1997). Research has indeed found that real couples exhibit significantly greater personality similarity than randomly paired couples (Luo & Klohnen, 2005; Thiessen et al., 1997), with couples showing strong similarity in age, religious beliefs, and political orientation (Luo & Klohnen, 2005; Watson et al., 2004), and moderate similarity in education, emotional intelligence, and values (Watson et al., 2004). However, does similarity guarantee happiness, and does dissimilarity necessarily lead to unhappiness? Current research presents contradictory findings. Some studies indicate that similar couples experience higher relationship satisfaction; for example, partners similar in openness to personality show greater intimacy satisfaction (Luo & Klohnen, 2005; Weidmann et al., 2017). Conversely, other research finds that personality similarity does not necessarily predict happiness (Chopik & Lucas, 2019; Gattis et al., 2004), and partners with less similar values may actually be happier (Luo et al., 2008). Some studies have even found no relationship between similarity and relationship satisfaction (Abe & Oshio, 2018; Brauer et al., 2022; Dyrenforth et al., 2010). For instance, Abe and Oshio (2018) discovered that similarity had no effect on marital satisfaction among couples with longer marital durations.

We propose four reasons for these inconsistent findings. First, previous research has inadequately considered marital duration, resulting in a lack of dynamic adaptability in conclusions. Shiota and Levenson (2007) found that similarity

in openness to experience had no effect on marital satisfaction among middle-aged couples with an average marital duration of 21.4 years, whereas Luo and Klohnen (2005) found that greater similarity in openness predicted higher marital satisfaction among newlyweds with an average marital duration of only five months. Gottman (1999) argued that shared experiences make couples increasingly similar over time, as couples become more alike in emotional responsiveness (Anderson et al., 2003). However, existing studies handle marital duration inconsistently—some treat it as a control variable while examining other predictors (Wang et al., 2018), and others explore its interaction with similarity without analyzing how similarity affects satisfaction across specific marital stages (Abe & Oshio, 2018). Since marital status changes throughout the family life cycle in response to shifting family environments and spousal interaction patterns (Bühler & Orth, 2022), with events such as marriage, childbirth, children' s schooling, and children leaving home serving as critical markers (Glick, 1977), this study examines how couple similarity influences marital satisfaction across distinct marital stages based on family life cycle criteria.

Second, limited research content has rendered findings incomparable. Previous similarity research has focused primarily on individual traits such as personality, attitudes, and values (Arránz Becker, 2013; Luo & Klohnen, 2005; Štěrbová et al., 2021). However, according to Karney and Bradbury' s (2020) theoretical framework, marital satisfaction predictors should encompass individual, interactional, and environmental dimensions. Individual traits refer to spouses'personal characteristics (Zhang, 2020), including not only personality and attitudes but also attachment styles and stress perception. For example, Conradi et al. (2021) found that similarity in insecure attachment affected relationship stability but not satisfaction, whereas Ben-Ari and Lavee (2005) found that both partners being insecurely attached predicted lower marital satisfaction. Thus, research on individual trait similarity and marital satisfaction remains inconclusive.

Interaction patterns, defined as specific modes of engaging with one' s partner (Karney & Bradbury, 2020), play a crucial role in marital satisfaction (Gottman, 1994). According to the interpersonal process model of intimacy, interaction forms the foundation for developing and maintaining close relationships (Reis & Shaver, 1988). Gottman (1999) found that similarity in conflict resolution strategies positively affected relationship outcomes when partners understood each other' s emotion regulation approaches. However, Velotti et al. (2016) discovered that similarity in expressive suppression correlated positively with wives' but not husbands' marital satisfaction, and this similarity became unrelated to satisfaction as marriages progressed. Thus, the influence of interactional similarity is closely tied to gender and marital duration. Finally, the family of origin, as a critical environmental factor affecting individual development, is closely linked to marital satisfaction (Wu et al., 2019). The Chinese tradition of "matching doors and households" emphasizes socioeconomic status equivalence (Du & Dong, 2023; Li, 2017), similar to Western patterns where Americans tend to marry those whose parents possess similar wealth (Charles et al., 2013). Yet Wen and Yang (2020) found that equivalent family backgrounds did not signif-

icantly affect marital satisfaction, and women with higher personal and family economic conditions than their husbands reported greater happiness (Wang & Li, 2014). Previous research has focused on socioeconomic status similarity while neglecting important factors such as parental marital quality. Therefore, how similarity in individual traits, interaction patterns, and family-of-origin variables affects marital satisfaction requires further investigation.

Third, different similarity indices have produced divergent conclusions. Current methods for assessing dyadic similarity fall into two categories: similarity and discrepancy indices (Gray & Coons, 2017). Previous studies commonly used Pearson correlation scores (PCS) to measure profile similarity (Furler et al., 2013; Luo et al., 2008; Wang et al., 2018) because PCS is more sensitive to dyadic relationship changes and reflects pattern consistency between spouses (Wang et al., 2018). Discrepancy is typically represented by the absolute difference score (ADS) between dyadic data, capturing the degree of difference between husbands and wives on given dimensions (Luo & Klohnen, 2005). However, ADS only indicates discrepancy on specific traits, whereas PCS reveals similarity across multiple characteristics (McCrae, 2008). For instance, Wang et al. (2018) found using PCS that overall personality consistency was more important for husbands' marital quality, while ADS results showed that different personality traits varied in their importance for explaining marital quality. Combining PCS and ADS thus captures both overall similarity and trait-specific discrepancy, yielding more precise conclusions.

Fourth, most previous similarity research has employed variable-centered approaches (VCA), combining actor effects (individuals' influence on themselves), partner effects (individuals' influence on partners), and similarity effects (influence of couple similarity on oneself) (Dyrenforth et al., 2010; Großmann et al., 2019; Luo & Klohnen, 2005). VCA calculates correlations between husbands' and wives' scores across all couples in a sample for a single characteristic (e.g., extraversion, intelligence). Although Wang et al. (2018) used different indices to explore personality similarity, their variable-centered approach could only examine similarity on single traits and provided no information about specific couples' similarity (Luo & Klohnen, 2005). Few studies have used couple-centered approaches (CCA) in similarity research (Brauer et al., 2022; Luo & Klohnen, 2005), which explicitly focus on couples and examine the degree of similarity between each husband and wife across multiple items (Luo & Klohnen, 2005). Only by analyzing each couple individually can we obtain more complete and comprehensive partner characteristic information (Rogers et al., 2018).

In summary, this study examined couples across different marital stages using a couple-centered approach, integrating actor, partner, similarity, and discrepancy effects through PCS and ADS indicators (Štěrbová et al., 2021) to investigate how similarity in individual, interactional, and family-of-origin variables relates to marital satisfaction. Using dyadic data, we addressed three questions: (1) Are real couples more similar than random couples? (2) On which dimensions are couples at different marital stages more similar? (3) How do these similarities

affect marital satisfaction?

2. Method

2.1 Participants

We recruited 638 Chinese couples through online advertisements, community outreach, and referrals. All participants were in their first marriage, had at least a junior high school education, and resided in Beijing or Tianjin, China. Based on the family life cycle, couples were divided into four marital stages (Wang et al., 2025). Stage 1 comprised newlyweds (n = 109; childless; marital duration = 0.89 ± 0.64 years). Stage 2 included parents of infants or preschoolers (n = 190; children in infancy or kindergarten; marital duration = 4.73 ± 2.88 years). Stage 3 comprised parents of school-age children (n = 144; children in primary or secondary school; marital duration = 13.32 ± 4.14 years). Stage 4 included empty-nest couples (n = 195; adult children had left home or were childless; marital duration = 32.74 ± 8.37 years). Additional demographic variables are presented in Table 1 .

Table 1 Descriptive statistics of demographic variables

Note: For education level, "1" = primary school or below; "2" = junior high; "3" = senior high (including technical/vocational); "4" = associate degree; "5" = bachelor' s; "6" = graduate (master' s or doctoral).

2.2 Measures

Marital Satisfaction. We used Norton' s (1983) Quality of Marriage Index (QMI), which assesses marital satisfaction from the perspective of subjective feelings and overall evaluation of one' s marriage. The scale contains six items requiring spouses to rate their marital satisfaction. The first five items use a 7-point scale from 1 (strongly disagree) to 7 (strongly agree); the sixth item uses a 10-point scale from 1 (very dissatisfied) to 10 (very satisfied), with higher scores indicating greater satisfaction. In this study, Cronbach' s α was 0.967 for the total scale, 0.972 for husbands, and 0.965 for wives. Mean marital satisfaction was 6.30 (SD = 1.37) for husbands and 6.03 (SD = 1.52) for wives.

Predictor Variables. Twelve independent predictor variables were assessed across three dimensions: individual (n = 5), interactional (n = 5), and family of origin (n = 2). These are summarized in Figure 1 [Figure 1: see original paper]; detailed scale information is provided in the supplementary materials. For dyadic data analysis, predictor scores from both spouses were included.

2.3 Procedure

Figure 1 illustrates the variable selection. First, we conducted descriptive statistics and paired-sample t-tests on predictor variables and marital satisfaction

across individual, interactional, and family-of-origin dimensions using SPSS. Second, we calculated ADS for real couples using SPSS and PCS using RStudio, then constructed random-pair PCS values. After Fisher r-to-z transformation, we computed means and standard deviations for both real and random couples and conducted one-sample t-tests comparing them. Third, we computed descriptive statistics for untransformed PCS and ADS across marital stages. Finally, we tested our model using Mplus with an enhanced Actor-Partner Interdependence Model (APIM) that included ADS and PCS (Luo et al., 2008) to assess how husbands' and wives' individual, interactional, and family-of-origin variables and their similarities predicted marital satisfaction (see Figure 2 [Figure 2: see original paper]).

2.4 Data Analysis

Calculating PCS. To compute PCS for each variable using a couple-centered approach, we first recorded couples' scores on all scale items. We then used RStudio to calculate correlation coefficients between each column of data (these coefficients represent PCS). To avoid redundant calculations, we computed only the upper triangular matrix (with real couples' correlations on the diagonal and random-pair correlations elsewhere). To obtain highly reliable random-pair results, we calculated correlations for all possible pairings, yielding up to 203,203 random-pair correlations. However, due to some scales having few items or identical scores on certain items, the actual number of real and random couples varied by variable, with real-couple PCS ranging from 420 to 635 and random-pair PCS ranging from 113,055 to 202,413. We then performed Fisher r-to-z transformation on PCS values for both real and random couples using SPSS, computing transformed means and standard deviations. To determine whether real couples were more similar than random couples, we conducted one-sample t-tests for each variable across three dimensions, comparing real couples' similarity means against random-pair similarity means (using random-pair means as population values) and computing Cohen' s d effect sizes.

Examining Similarity Across Marital Stages. To identify dimensions where couples were more similar at different marital stages, we first computed absolute difference scores (ADS) between spouses on each variable, then compared mean untransformed PCS and ADS values across marital stages.

Examining Similarity-Satisfaction Relationships. To explore how couple similarity relates to marital satisfaction across marital stages, we used Mplus to test our model. Figure 2 presents the APIM linking husbands' scores, wives' scores, PCS, and ADS to both spouses' marital satisfaction. Specifically, husbands' satisfaction was predicted by their own scores (actor effect; path a), their wives' scores (partner effect; path b), PCS (similarity effect; path c), and ADS (discrepancy effect; path d). Wives' corresponding paths were labeled a' (actor), b' (partner), c' (similarity), and d' (discrepancy). The model included covariances among four independent variables and correlated error terms between two dependent variables. Analyses used untransformed PCS r-values, with missing

PCS values imputed using SPSS' s Expectation-Maximization algorithm (Dempster et al., 1977).

3. Results

3.1 Common Method Bias Test

We conducted Harman' s single-factor test on all variables except demographics. Results indicated 101 factors with eigenvalues greater than 1, with the first factor explaining 14.44% of variance—far below the 40% threshold—suggesting no significant common method bias (Zhou & Long, 2004).

3.2 Descriptive Statistics and t-Test Results for Real Couples

Table 2 presents means, standard deviations, and paired-sample t-test results for husbands and wives across variables. Results showed no gender differences in interactional support (t = -0.12, p = 0.905), conflict resolution (t = 1.03, p = 0.302), perceived partner responsiveness (t = 0.65, p = 0.519), or family-of-origin interference (t = 0.17, p = 0.862), but significant gender differences on all other variables.

Table 2 Descriptive statistics and t-test results

p < 0.05, ***p < 0.005,*** p < 0.001 (same below).*

3.3 Comparison of Real and Random-Pair Similarity

Table 3 presents descriptive statistics for couple similarity (PCS) after Fisher r-to-z transformation and missing value deletion. Real couples ranged from 347 to 635 pairs, with PCS means ranging from -0.03 to 0.58. Random pairs ranged from 111,158 to 202,413, with PCS means ranging from 0.07 to 0.89. Real couples showed considerable variability in similarity (SD range = 0.30 to 0.79), indicating some couples were very similar while others were quite dissimilar. One-sample t-tests revealed significant differences between real and random couples, with real couples being more similar on all variables except those in the family-of-origin dimension.

Table 3 t-test results comparing real and random-pair similarity

3.4 Descriptive Statistics for Real-Couple Similarity and Discrepancy

Tables 4 and 5 present descriptive statistics for couple similarity (PCS) and discrepancy (ADS) across marital stages. For similarity, except for Stage 4 couples who were most similar on interactional variables, couples at all other stages were most similar on family-of-origin variables. For discrepancy, couples at all stages showed the smallest differences on family-of-origin variables.

Table 4 Descriptive statistics for couple similarity (PCS) across marital stages

Table 5 Descriptive statistics for couple discrepancy (ADS) across marital stages

3.5 Similarity Effects

We used the enhanced APIM to simultaneously examine the unique contributions of husbands' scores, wives' scores, PCS, and ADS to both spouses' marital satisfaction. We allowed covariances among four independent variables and correlated error terms between two dependent variables. Because paired t-tests revealed significant gender differences, we did not constrain path coefficients. Results are presented in Tables 6 through 13 (Tables 8-13 are in supplementary materials); all models were saturated.

For similarity effects, husbands' marital satisfaction was most strongly influenced by family-of-origin similarity in Stage 1, and by individual trait similarity in all other stages. For wives, individual trait similarity dominated in Stages 1 and 4, while family-of-origin similarity was primary in Stages 2 and 3. For discrepancy effects, only Stage 2 husbands and Stage 4 wives were most affected by individual trait and interactional discrepancy, respectively; all other stages showed family-of-origin discrepancy as most significant. Different variables contributed differently to satisfaction across marital stages and effects. Across all stages and both spouses, actor effects were the strongest predictors.

Table 6 Standardized path coefficients predicting husbands' marital satisfaction in Stage 1 from actor, partner, similarity, and discrepancy effects

Table 7 Standardized path coefficients predicting wives' marital satisfaction in Stage 1 from actor, partner, similarity, and discrepancy effects

4. Discussion

This study expanded the breadth and depth of similarity research by examining individual traits, interaction patterns, and family-of-origin variables within Karney and Bradbury' s (2020) theoretical framework. Grounded in the family life cycle, we investigated how couple similarity and marital satisfaction change across marital stages. Methodologically, we employed a couple-centered approach integrating profile-level similarity and trait-level discrepancy indices to more precisely quantify couple similarity.

4.1 Real Couples Are More Similar Than Random Couples

Our findings confirm that real couples are more similar than random couples, further validating assortative mating theory—individuals tend to select similar partners for intimate relationships (Fehr, 2008). People are attracted to others with similar attitudes and behaviors (Baumeister & Leary, 1995) and choose partners with similar characteristics for long-term romantic relationships (Chopik & Lucas, 2019; Fehr, 2008). Moreover, similarity in intimate relationships is not static; initially similar partners may become increasingly alike over

time (Gonzaga et al., 2007) as shared experiences shape both partners (Mejía & Gonzalez, 2017). To maintain relational harmony, partners may consciously or unconsciously adjust themselves to accommodate each other, further intensifying their similarity. Thus, it is unsurprising that real couples are more similar than random couples across numerous variables.

4.2 Real Couples Show Greater Similarity in Family of Origin

Similarity and discrepancy results revealed that real couples were more similar on family-of-origin variables than on individual traits or interaction patterns. From a sociocultural perspective, China' s deeply rooted tradition of "matching doors and households"leads people to select partners of comparable status (Dong, 2020), making family-of-origin characteristics like parental marital quality important mate-selection criteria. Unlike Western countries, however, grandparent involvement in child-rearing is common in Chinese families (Guo, 2014), making parental interference in adult children' s marriages more prevalent (Yuan & Fang, 2022) and further strengthening similarity in the family-of-origin dimension. From an intergenerational transmission perspective, socialization theory posits that parents serve as role models, with their marital relationship patterns (e.g., divorce or remarriage) transmitted through modeling, creating templates for children' s intimate relationship expectations (Ryan et al., 2009) and leading them to select partners with similar family-of-origin patterns. Therefore, real couples show greater similarity in the family-of-origin dimension.

4.3 Gender Differences in Similarity Effects Across Marital Stages

Family-of-origin similarity and discrepancy significantly influenced both spouses' marital satisfaction, but wives were more strongly affected. This gender difference stems primarily from wives bearing greater child-rearing pressures (Hou et al., 2019). In traditional Chinese culture, marriage represents not just a union of two individuals but of two families (Yuan et al., 2015), making it difficult for adult children to separate completely from their families of origin, with grandparents frequently participating in child-rearing (Chen et al., 2011). Family-of-origin involvement can create triangulated relationships that affect marriages through interference (Song et al., 2022; Yuan, 2019). According to the family life cycle and the U-shaped curve of marital quality, Stages 2 and 3 represent critical child-rearing periods when wives typically bear primary responsibility (Breton et al., 2025; Kellerman & Katz, 1978). Due to interdependence in family parenting roles, mothers' parenting stress is closely related to grandmother-child relationships (Zou et al., 2020). Thus, wives interact more frequently with grandparents during child-rearing and are more influenced by their families of origin than husbands. Additionally, traditional gender role expectations assign wives more domestic responsibilities while husbands focus on external social roles, leaving wives more susceptible to chronic stress (Hou et al., 2019) and making them more sensitive to family-of-origin factors. Consequently, wives' marital satisfaction is more strongly affected by family-of-origin

similarity throughout the child-rearing process.

When children become independent and leave home, family-of-origin influence wanes, and wives' marital satisfaction aligns with husbands' in being most strongly influenced by individual trait similarity. With more time together and their core roles shifting from parents to partners (Gorchoff et al., 2008), couples refocus on each other. Individual characteristics significantly affect relationships (Badr et al., 2001) and shape behavior patterns in intimate relationships (Asendorpf & Wilpers, 1998; Auhagen & Hinde, 1997). For example, partners with similar attachment styles experience greater emotional resonance and better mutual understanding (Murray et al., 2002). When couples share high similarity in individual characteristics, they tend to respond similarly to life situations, thereby affecting marital satisfaction. Therefore, individual trait similarity becomes an important factor for both husbands and wives in Stage 4.

4.4 Limited Influence of Similarity Effects on Marital Satisfaction

Integrating actor, partner, similarity, and discrepancy effects revealed that actor effects were the strongest predictors of marital satisfaction across all marital stages, followed by partner effects, with similarity effects being weaker. This aligns with previous findings (Dyrenforth et al., 2010; Großmann et al., 2019). In representative samples from Australia, Britain, and Germany, actor effects accounted for approximately 6% of variance in relationship satisfaction, partner effects accounted for 1-3%, and similarity effects accounted for less than 0.5% after controlling for actor and partner effects (Dyrenforth et al., 2010). Stronger actor effects indicate that individual similarity is not a core factor in marital relationships but rather a "bonus." Essentially, similarity stems from people's belief that shared attributes are driven by deep-seated essences, yet individuals are more strongly influenced by their own traits than by similarity itself (Chu & Lowery, 2023). We also found that PCS had stronger effects on marital satisfaction than ADS, consistent with previous research (Luo & Klohnen, 2005; Luo et al., 2008). PCS captures consistency in couples' responses across items, reflecting similar (positive), unrelated (zero), or opposite (negative) relationships, whereas ADS only captures discrepancy on specific traits and cannot encompass the complex patterns of couple similarity. Moreover, ADS is a linear transformation of self and partner scores (absolute difference), making it often non-significant in APIM analyses. This confirms that PCS is a more sensitive and effective similarity index than ADS (Gaunt, 2006).

4.5 Limitations and Future Directions

This study used dyadic data from couples at different marital stages to examine similarity-satisfaction relationships across multiple dimensions while considering actor, partner, similarity, and discrepancy effects, providing important implications for future research. However, several limitations exist. First, data were entirely self-reported. Future research could incorporate physiological measures to directly record physiological synchrony during interactions (Li et al., 2022)

for more precise investigation of similarity-satisfaction relationships. Second, although our Beijing and Tianjin sample provided valid data, participants lived in first-tier cities, requiring caution when generalizing nationally. Additionally, this study focused solely on Chinese culture; future cross-cultural research could compare dimensional differences in couple similarity and their effects on marital satisfaction across cultures to enhance generalizability. Finally, although we examined similarity-satisfaction relationships across marital stages, cross-sectional design precludes causal conclusions. Future longitudinal research should investigate whether similarity leads to higher marital satisfaction or whether satisfaction makes partners more similar.

5. Conclusion

Overall, real couples exhibit greater similarity than randomly paired couples, but this similarity has relatively limited explanatory power for marital satisfaction; actor effects remain the primary predictor. Notably, compared with individual traits and interaction patterns, real couples show more pronounced similarity in family-of-origin characteristics, and this similarity significantly impacts wives—particularly those in child-rearing stages—more than husbands.

Supplementary Materials

1. Empathy

We used the Interpersonal Reactivity Index for Couples (IRI; Péloquin & Lafontaine, 2010), comprising 13 items across two dimensions: empathic concern (7 items) and cognitive perspective-taking (6 items). Using a 5-point scale from 1 (strongly disagree) to 5 (strongly agree), four items (2, 6, 7, 8) were reverse-scored, with higher scores indicating greater perspective-taking and empathic concern. In this study, Cronbach' s α for husbands ranged from 0.627 to 0.734 across subscales and the total scale; for wives, α ranged from 0.606 to 0.735.

The following items describe thoughts and feelings about events between you and your partner. Please respond based on your actual situation.

2. Attachment Style (Attachment Anxiety and Avoidance)

We used the Experiences in Close Relationships-Revised scale (ECR-R; Fraley et al., 2000), which measures two dimensions—attachment anxiety and attachment avoidance—with 36 items rated on a 7-point scale from 1 (strongly disagree) to 7 (strongly agree). Ten items (3, 15, 19, 25, 27, 29, 31, 33, 35, 22) were reverse-scored, with higher scores indicating greater attachment avoidance or anxiety. In this study, Cronbach' s α for husbands ranged from 0.791 to 0.824 across dimensions and the total scale; for wives, α ranged from 0.836 to 0.852.

3. Stress Perception

We used Cohen et al.' s (1983) Perceived Stress Scale (PSS-14), comprising two dimensions—perceived distress and perceived coping—with 14 items assessing subjective stress over the past month on a 5-point scale from 1 (never) to 5 (always). Seven items (4, 5, 6, 7, 9, 10, 13) were reverse-scored, with higher scores indicating greater perceived stress. In this study, Cronbach' s α for husbands ranged from 0.804 to 0.845; for wives, α ranged from 0.796 to 0.828.

4. Emotional Expression

We used the Trait Affection Given Scale (TAS-G), which measures affection expression toward partners and others. The 10-item scale assesses individual differences in affection expression. Based on Horan and Booth-Butterfield' s (2010) revision specifying "romantic partner" rather than "people," we adapted item 2 accordingly. Couples rated their emotional expression on a 7-point scale from 1 (strongly disagree) to 7 (strongly agree), with five items (4, 5, 6, 8, 10) reverse-scored. Higher scores indicate greater emotional expression. In this study, Cronbach' s α was 0.826 for husbands and 0.859 for wives.

5. Conflict Resolution

We used the conflict resolution strategies subscale from Kerig' s (1996) Conflict and Problem-Solving Scales (CPS), which measures conflict resolution strategies in partner relationships across six dimensions (44 items total): cooperation (9 items), avoidance-surrender (9 items), stalemate-resistance (5 items), verbal aggression (8 items), physical aggression (8 items), and child involvement (5 items). We focused on the cooperation dimension using a 4-point scale from 1 (never) to 4 (often) to assess frequency of strategy use, with higher scores indicating greater use. In this study, Cronbach' s α was 0.803 for husbands and 0.795 for wives.

6. Emotion Regulation

We used the Emotion Regulation Questionnaire (ERQ; Gross & John, 2003), comprising two dimensions—cognitive reappraisal (5 items) and expressive suppression (5 items)—with 10 items rated on a 7-point scale from 1 (strongly disagree) to 7 (strongly agree). Higher scores indicate greater use of cognitive reappraisal and expressive suppression. In this study, Cronbach' s α for husbands ranged from 0.721 to 0.830; for wives, α ranged from 0.749 to 0.827.

7. Communication Patterns

We used Navran's (1967) revised Primary Communication Inventory (PCI). The original 25-item scale was reduced to 19 items measuring two dimensions: verbal communication (13 items) and nonverbal communication (6 items). Couples rated each description on a 5-point scale from 1 (never) to 5 (always). Two items

(7, 13) were reverse-scored, with higher scores indicating better communication quality. In this study, Cronbach' s α for husbands ranged from 0.696 to 0.881; for wives, α ranged from 0.779 to 0.906.

8. Interactional Support

We used the Support in Intimate Relationships Rating Scale (SIRRS; Barry et al., 2009), comprising four dimensions: informational support (8 items), physical comfort (4 items), esteem/emotional support (8 items), and instrumental support (5 items). Using a 5-point scale from 1 (never) to 5 (often), higher scores indicate more frequent partner support. In this study, Cronbach' s α for husbands ranged from 0.907 to 0.953; for wives, α ranged from 0.917 to 0.957.

9. Perceived Partner Responsiveness

The Perceived Partner Responsiveness Scale (PPRS; Reis et al., 2017) is a self-report measure assessing perceived partner responsiveness across three dimensions: feeling understood, feeling supported and validated, and general partner responsiveness (18 items total). Couples rated perceived responsiveness on a 9-point scale from 1 (not at all) to 9 (completely), with higher scores indicating greater perceived responsiveness. In this study, Cronbach' s α for husbands ranged from 0.847 to 0.974; for wives, α ranged from 0.836 to 0.969.

10. Parental Marital Quality

We adapted Zhang' s (2009) Parental Marital Quality Questionnaire, based on Olson' s (1999) scale, to evaluate both partners' parents' marriages. The 4-item scale assessed spouses'evaluations of their own and their partners'parents'marital quality, with higher scores indicating better parental marital relationships. In this study, Cronbach' s α was 0.587 for husbands and 0.531 for wives.

11. Family-of-Origin Interference

We used items from the Family-of-Origin Involvement Scale (Yuan et al., 2015), adapted from Li's (2011) mother-in-law interaction scale, measuring interference from families of origin across two dimensions: family life interference (13 items) and personal life interference (7 items). After removing redundant items, we selected 9 items covering five aspects of family life interference (marital conflict, household division, finances, daily routines, child-rearing) and four aspects of personal life interference (work, interpersonal relationships, entertainment, values). Couples rated interference frequency from both sets of parents on a 4-point scale from 1 (never) to 4 (often), with higher scores indicating more interference (0 if parents deceased). In this study, Cronbach' s α for husbands ranged from 0.977 to 0.987; for wives, α ranged from 0.974 to 0.984.

12. Marital Satisfaction

Quality of Marriage Index

The following items describe marital situations. Please circle the number corresponding to your actual situation.

References

Barry, R. A., Bunde, M., Brock, R. L., & Lawrence, E. (2009). Validity and utility of a multidimensional model of received support in intimate relationships. *Journal of Family Psychology, 23*(1), 48−57. https://doi.org/10.1037/a0014174

Cohen, S., Kamarck, T., & Mermelstein, R. (1983). A global measure of perceived stress. *Journal of Health and Social Behavior, 24*(4), 385−396. https://doi.org/10.2307/2136404

Fraley, R. C., Waller, N. G., & Brennan, K. A. (2000). An item response theory analysis of self-report measures of adult attachment. *Journal of Personality and Social Psychology, 78*(2), 350. https://doi.org/10.1037/0022-3514.78.2.350

Gross, J. J., & John, O. P. (2003). Individual differences in two emotion regulation processes: Implications for affect, relationships, and well-being. *Journal of Personality & Social Psychology, 85*(2), 348−362. https://doi.org/10.1037/0022-3514.85.2.348

Horan, S. M., & Booth-Butterfield, M. (2010). Investing in affection: An investigation of affection exchange theory and relational qualities. *Communication Quarterly, 58*(4), 394−413. https://doi.org/10.1080/01463373.2010.524876

Kerig, P. K. (1996). Assessing the links between interparental conflict and child adjustment: The conflicts and problem-solving scales. *Journal of Family Psychology, 10*(4), 454−473. https://doi.org/10.1037/0893-3200.10.4.454

Li, Y. Q. (2011). *A study on husband' s cognition of mother-in-law' s rights, marital intimacy and coping strategies for mother-in-law conflict* (Unpublished master' s thesis). University of Tainan.

Navran, L. (1967). Communication and adjustment in marriage. *Family Process, 6*(2), 173−184. https://doi.org/10.1111/j.1545-5300.1967.00173.x

Olson, D. H., & Fowers, B. J. (1993). Five types of marriage: An empirical typology based on ENRICH. *The Family Journal, 1*(3), 196−207. https://doi.org/10.1177/1066480793013002

Péloquin, K., & Lafontaine, M. F. (2010). Measuring empathy in couples: Validity and reliability of the interpersonal reactivity index for couples. *Journal of Personality Assessment, 92*(2), 146−157. https://doi.org/10.1080/00223890903510399

Reis, H. T., Crasta, D., Rogge, R. D., Maniaci, M. R., & Carmichael, C. L. (2017). Perceived Partner Responsiveness Scale (PPRS) (Reis & Carmichael,

2006). In *The Sourcebook of Listening Research: Methodology and Measures* (pp. 516−521). https://doi.org/10.1002/9781119102991.ch57

Yuan, X. Y., Fang, X. Y., Deng, X.Y., & Lin, L. Y. (2015). Development of Support and Interference from Family of Origin Scale. *Chinese Journal of Clinical Psychology, 23*(02), 242−245. https://doi.org/10.16128/j.cnki.1005-3611.2015.02.012

Zhang, J. T. (2009). *The relationship between parents' marriage, self-differentiation and marital quality and stability of urban couples* (Unpublished doctoral dissertation). Beijing Normal University.

Note: Figure translations are in progress. See original paper for figures.

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