Routledge
Taylor & Francis Group

Comparing Empirical Typologies of Premarital Couples from Four Chinese Countries and American Premarital Couples

XIAOHUI LI

School of Family, Consumer, and Nutrition Sciences, Northern Illinois University, DeKalb, Illinois, USA

DAVID OLSON

Department of Family Social Science, University of Minnesota Twin Cities, St. Paul, Minnesota, USA, and PREPARE-ENRICH, Roseville, Minnesota, USA

CATHERINE SOLHEIM

Department of Family Social Science, University of Minnesota Twin Cities, St. Paul, Minnesota, USA

This study developed an empirical couple typology using a convenient sample of premarital Chinese couples from Hong Kong, Malaysia, Singapore, and Taiwan and compared that typology with a premarital American couple typology. Cluster analyses were conducted with a sample of 7,567 premarital Chinese couples who completed the PREPARE inventory. Results identified four types of premarital Chinese couples: Vitalized, Harmonious, Traditional, and Conflicted. As hypothesized, the four premarital couple types were replicated across the Chinese and American samples, but the frequency of couples in each type differed. Couple typologies can be used to recommend premarital preparation approaches that fit each of the four couple types.

KEYWORDS   premarital couples, Chinese couples, couple typology, PREPARE inventory

Address correspondence to Xiaohui Li, School of Family, Consumer, and Nutrition Sciences, Northern Illinois University, 1425 W. Lincoln Hwy., DeKalb, IL 60115, USA. E-mail: xli@niu.edu

INTRODUCTION

Divorce is increasing in Chinese societies worldwide, raising concern among family scholars and practitioners. Because the transition from engagement to marriage is crucial for the early success of marriage, premarital education is important. However, even though premarital programs have been found to be effective in Western societies (Fowers, Montel, & Olson, 1996; Futris, Barton, Aholou, & Seponski, 2011; Hahlweg, Markman, Thurmaier, Engl, & Echert, 1998; Halford, Sanders, & Behrens, 2001; Holman & Linford, 2001), the Asian infrastructure to work with couples to provide education and support for successful transition to marriage is still developing. Programs developed in Western cultures can inform these efforts in other parts of the world, but it is critically important to avoid inappropriately applying interventions without thoughtful consideration of potential cultural differences. Thus, research that examines cultural influences on couple hood is imperative.

Recognizing that an ecological perspective provides a useful lens when studying premarital and marital couples (Gottman, 1994; Holman & Linford, 2001; Larson & Holman, 1994), Holman and Linford proposed a conceptual framework that considered three ecosystemic levels: individual, couple, and contextual. Contextual factors are "the wider social contexts in which the individual and dyad are embedded" (p. 18). It is important to consider cultural contexts when studying premarital courtship, marriage, and couple classification schemes (Gottman).

Confucianism in Chinese Couples

For Chinese couples globally, Confucianism is a cultural contextual factor that deeply influences their minds, thoughts, and behaviors. Confucianism-based Chinese family structures are hierarchical and patriarchal, with maleness and seniority indicating higher status; "the father is the symbolic authority of the family," whereas "the mother carries out executive commands" (Tzou, Kim, & Waldheim, 2012, p. 3). In addition, "children are taught from an early age to defer to their parents and to be obedient and submissive to other elder figures" and "sons are designated to carry on the family name and traditions while daughters are considered to be temporary residents of the family until they find their permanent placement in their husbands' homes" (Tzou et al., p. 3).

Even though westernization and modernization have changed Chinese people, Confucian expectations and obligations for gender roles, especially those related to marriage and family, are still prevalent among Chinese (Tzou et al., 2012). As a result, family research and practice with Chinese couples require thoughtful consideration of the unique characteristics of Chinese couples.

This report aims to contribute to a better understanding of the influence of couples' cultural contexts by examining couple types in a large sample of premarital Chinese couples and comparing them to existing couple types in a sample of European American premarital couples. Findings from this study are useful for clinicians who work with couples who bring increasingly diverse and complex cultural backgrounds into their relationships and marriage.

Advantages of Couple Typologies

Typologies are used to "ease the conceptualization and understanding of social phenomena" (Toomey, 2004, p. 24). According to Mandara (2003), levels of analyses in the social and behavioral sciences differ according to a researcher's focus on either variables or cases. One level of analysis is designed to "uncover nomothetic laws of the mechanisms and processes implicit in psychology" through variable centered quantitative methods (p. 129). Another level attempts to explain cases as "behavior of individuals in specific contextual settings" through predominantly qualitative methods (p. 130). The typological approach is an intermediary between the variable-centered and case-centered methods (Mandara, 2003). The variable- and case-centered approaches both offer advantages and disadvantages, while the typological approach, as addressed by Robins, John, Caspi, Moffitt, and Stouthamer-Loeber (1996) links the "theoretical and quantitative variable-centered approach with the application of the idiographic and qualitative case-centered approach" (Mandara, 2003, p. 144).

Couple typologies use a variety of variables to group "couples with similar relationship qualities and patterns of interaction" (Toomey, 2004, p. 24). Typologies create a "common language between researchers and clinicians by linking clinical descriptions with theoretical formulations" (Lavee & Olson, 1993, p. 325). Multivariate typologies synthesize large quantities of data into similar types so that the whole relationship with multidimensional characteristics can be examined, rather than a certain aspect of those relationships. Thus empirical typologies serve to increase the efficiency of both scientists and practitioners (Lavee & Olson; Toomey, 2004).

Review of Couple Typology Research

Researchers recognized the utility of using couple typologies to describe marital relationships in the early 1970s (Allen & Olson, 2001). Concurrently, family scholars proposed studying relationships through systemic approaches that utilize multiple interconnected variables (Whiteman & Loken, 2006). Typologies that reflect the couple relationship as a unit fit well with the systemic framework.

Miller and Olson (1990) identified two basic approaches to classifying marriage: intuitive and empirical. Although early typologies were based on intuitive analysis, it has become more scientifically appropriate to adopt empirical approaches with larger and more representative samples (Allen & Olson, 2001).

A number of studies have been conducted with U.S. couples to identify couple typologies: (a) Gottman's (1994) five types based upon couple patterns—validating, volatile, avoidant, hostile/engaged, and hostile/detached; (b) Snyder and Smith's (1986) five types based on relationship stress—type I and II couples were relatively nondistressed, type III couples were moderately distressed, and type IV and V couples were extensively distressed; and (c) Hall and MacDermid's (2009) four types based on work and family responsibilities—parallel type, second shift-career type, counterbalanced type, and second shift-nurture type.

This study builds on a typology developed by Fowers and Olson (1992; Olson & Fowers, 1993) using the PREPARE-ENRICH couple assessment. They identified four distinct types of U.S. premarital couples and five types of married couples: Vitalized, Harmonious, Traditional, Conflicted, and Devitalized (for married couples). Typologies were based on 11 dimensions: realistic expectations, personality issues, communication, conflict resolution, financial management, leisure activities, sexual expectations/relationships, children and parenting, family and friends, equalitarian roles, and religious orientation. "Vitalized couples" possessed the highest overall scores (higher = more positive) on all of the dimensions except for realistic expectations and religious orientation; "Harmonious couples" were described as possessing a moderate overall relationship quality; "Traditional couples" had the highest scores of any of the typologies on the realistic expectations, religious orientation and children and parenting scales, and they have strengths in the ability to make decisions and plan for the future; "Conflicted couples" had low scores across all of the 11 dimensions and "Devitalized couples" had the lowest scores on all the 11 dimensions.

THE CURRENT STUDY

Much of the existing literature on couple typologies ignores the influence of culture or ethnicity on the similarities or differences in couples' characteristics. For example, the four types of premarital couples identified by Fowers and Olson (1992) were derived from a primarily European American sample. Recognizing the limitation in generalizing these results to couples of different cultures, several studies have tried to replicate the couple typologies with different ethnic groups. Although Allen and Olson (2001) found the same five types of African American marriages as those identified by Olson and Fowers (1993), the numbers of couples in the two samples were different.

Vitalized couples constituted the smallest group among the African American sample, while Harmonious couples constituted the smallest group among the European American sample (Allen & Olson).

Asai and Olson (2004) examined the efficacy of using typologies to describe Japanese couples and found the number and pattern of the types were similar, but the number of couples in each type was different. Japanese couples scored higher on the family cooperation dimension of the Harmonious typology, suggesting the importance of parents and in-laws to the marriage (Asai & Olson). In addition, Garrett and Olson's study (2006) of couples in which one or both persons were Hispanic found high similarity in the frequency of couples in each of the four couple types across four ethnic combinations of married couples (both Hispanic, both Caucasian, Hispanic male–Caucasian female, Hispanic female–Caucasian male). To date, only one study (Young, 1995) has examined Chinese couple typologies based on the ENRICH inventory. However, the typology was limited because it included only married Chinese couples who lived in Hong Kong, was developed based on questions about marital life, and used a different method to create the couple typology.

To address the lack of research on premarital Chinese couples, this study pursued two main objectives: (a) to develop an empirically based relational typology for Chinese premarital couples by building on the model of Fowers and Olson's (1992) American premarital couple typologies and (b) to compare the Chinese types with those found in a predominantly European American sample of premarital couples (Fowers & Olson, 1992) and with types found in a recent European American sample (see details later).

Hypothesis 1: Chinese premarital couples will have a similar pattern and number of couple types as European American couples.

Hypothesis 2: Chinese premarital couples will have more traditional/conventional premarital couples than European American couples.

METHOD

Sample

The Chinese sample for the current study included 7,567 Chinese premarital couples who completed an English or Chinese version of the PREPARE couple inventory in PREPARE/ENRICH offices as part of their premarital counseling. All participating couples were ethnic Chinese living in Hong Kong, Singapore, Taiwan, and Malaysia. No data were collected from couples living in Mainland China because PREPARE/ENRICH offices are not located there.

The majority of men in the sample were between 26 and 35 years old (78.3%), and the majority of women were between 21 and 35 years old (92.3%). Average education level was more than 4 years of college for both men and women. About half of partners (45.5%) had known each other for 5 years or longer. The time to their planned marriage varied from 0 to 2 months to 13 months or longer. The majority of both men (90.5%) and women (89.2%) were working full-time.

About half of both men (48.5%) and women (50.4%) had professional occupations (executive-doctor-lawyer, manager-teacher-nurse). Protestant was the most commonly reported religious affiliation of men (42.7%) and women (46.7%). No couple was married at the time, and very few had been married before (men 3.5%, women 2.6%). More than 98% of the women were not pregnant. Male participants reported that most of their parents (86.2%) and friends (89.8%) as well as women's parents (80.5%) and friends (88.4%) had a positive reaction toward their impending marriage. More than 80% of the couples had never broken up or been separated.

Like the Chinese sample, the European American couples used for comparison in the current study also took the PREPARE inventory as part of their premarital preparation. A random sample of 5,000 couples was selected from over 100,000 couples who took the PREPARE couple inventory in 2011–2012 in the United States.

Most (79%) of the premarital European American couples were between age 21 and 30 years old and predominantly Caucasian (81%), with a few Hispanics (4%), African Americans (5%), and Asian Americans (3%). In general, they were well educated: about 30% completed some college, and 44% completed college or further. Most worked either full-time (77%) or part-time (14%).

More than 40% had known their partner for longer than 5 years and 28% had known their partner for 3 to 4 years. Two-thirds of the couples (67%) were planning to marry in 3 to 12 months. Most of their families (84%) and their friends (87%) were "very positive" about their impending marriage. Most of the couples (77%) had never broken up.

In summary, Chinese and European American samples were similar in age, education, and family and friends' support of their marriage.

Measures

The challenge in cross-cultural research is to use assessment scales that work well with all relevant cultural groups. The PREPARE-ENRICH scales have been validated in over 10 countries and translated into eight different languages. Individuals from any country can take the online assessment in their language of choice. The assessment works well across cultures primarily because the questions are about the couple relationship. Questions have been revised over a period of 25 years; this study used data from the fifth

version of the couple assessment. National norms were established several years ago for the Chinese version of PREPARE-ENRICH used in this study (Olson, 2010).

The PREPARE couple inventory is a self-report questionnaire completed independently by each partner in separate rooms. A facilitator administers the questionnaire, stays nearby to monitor for confidentiality, and answers basic questions. Individual and couple score data for this study were obtained from Life Innovations, a company that offers and scores the PREPARE/ENRICH assessment.

PREPARE is an inventory designed to identify relationship strengths and growth areas in 11 relationship areas: marriage expectation, personality issues, communication, conflict resolution, financial management, leisure activities, sexual expectations, children and parenting, family and friends, role relationship, and spiritual beliefs (Olson, 2010). Each of these scales has 10 items. In addition, the inventory has two 10-item scales assessing couple cohesion (togetherness) and couple adaptability (change) derived from the Circumplex Model of Family Systems (Olson, Russell, & Sprenkle, 1989). PREPARE questions are answered on a 5-point scale ranging from 1 ("strongly disagree") to 5 ("strongly agree").

The Chinese version of the PREPARE inventory was originally translated and back translated by professional colleagues at the Hong Kong office of PREPARE/ENRICH. Minimal differences between the Chinese and American versions are primarily in demographic items such as ethnicity income, education, residence, occupation, and religion. The first author, a Chinese native speaker, verified that the Chinese translation of PREPARE was accurate. There were slight differences in sentence structure and grammar, but the two versions were deemed equivalent and could be meaningfully compared. Specific descriptions of the scales can be found in the PREPARE/ENRICH manual (Olson, 2010).

Scoring

PREPARE's Version 2000 computer scoring produces a 15-page report for each couple that includes individual and couple scores for the 11 relationship areas. The report also includes a detailed summary of the couples' individual item responses to facilitate interpretation of the results and subsequent and counseling with the couple. It is rare to find missing data in couples' responses; it occurs less than 1 time of 1,000 responses.

The couple score is called *Positive Couple Agreement (PCA),* which indicates the level of positive agreement between partners in each of the content areas. It is a percentage score based on the number of responses in a given area on which both partners agree with positive items and disagree with negative items. To create a couple's PCA score, the number of items (10 per category) partners both agree with a positive item or both disagree with

a negative item are counted, then multiplied by 10. If partners agree with each other on a negative item or both disagree with a positive item, that item is called a "Special Focus" item. PCA scores range from 0 to 100, depending on the number of items in the scale on which both partners described their relationship in similarly positive terms.

Using PCA scores allowed for couple-level analysis. It also matched the approach used in previous typological analysis with PREPARE-ENRICH. PCA scores have been demonstrated to discriminate well between happy and unhappy couples (Olson, Olson-Sigg, & Larson, 2008).

Reliability and Validity

PREPARE scales have high validity in discriminating premarital American couples who get divorced from those who are happily married with 80% to 85% accuracy (Fowers, Montel, & Olson, 1996; Fowers & Olson, 1986). High reliabilities of 0.80 to 0.85 and test/retest reliability of 0.80 (average correlation) have been reported for PREPARE in American samples (Olson, 2010).

The adaptation of PREPARE for use in other cultures has also demonstrated high levels of validity and reliability. Previous factor analyses of the scales (Olson, 2010) indicated that they loaded on separate factors. Alpha reliability and test/retest reliability on all of the scales was between 0.75 and 0.85.

Reliability and validity of the Chinese language version of ENRICH for married couples were assessed with a Hong Kong Chinese sample of 102 couples by Young (1995). Cronbach's alpha (.67) was generally lower than for American samples. A Japanese language version of PREPARE demonstrated face validity and the internal consistency of the Japanese version was .70 (Asai & Olson, 2004).

The reliability of the PREPARE scales in the current study with Chinese couples showed slightly lower internal consistency coefficients than in American samples but were still generally good (0.70 to 0.89). One scale, role relationship, demonstrated much lower reliability (0.42 for males and 0.34 for females) and was not used in this study.

RESULTS

One goal of this study was to develop an empirically based relational typology for Chinese premarital couples. PCA scores of 11 PREPARE scales were used for the classification analysis. Previous typological studies using PREPARE/ENRICH were used as methodological guides in developing the Chinese PREPARE premarital couple types. These studies identified four American PREPARE premarital types (Fowers & Olson, 1992) and four

Japanese PREPARE premarital types (Asai & Olson, 2004). For married couples, there were five ENRICH marital types (Olson & Fowers, 1993), five African American ENRICH marital types (Allen & Olson, 2001), and seven ENRICH marital types (Lavee & Olson, 1993). The latter study used a different scoring method from the other studies. Two authors from these studies served as statistical consultants for the current study.

Exploratory Analysis Phase

The first step was the exploratory structure seeking hierarchical agglomerative cluster analysis ($n = 500$ couples) using average linkage within groups with Euclidean distance for computing either similarity or dissimilarity between subjects. Because Euclidean distance measurement is sensitive to the variables' units of measurement, the variables were standardized to avoid possible bias effects of differences in variance across variables. The coefficients statistic was used as the criterion for deciding how many clusters best fit the data (IBM SPSS Statistics Guides, www.norusis.com/pdf/SPC_v13.pdf). The coefficient statistic provides an indication of the appropriate number of clusters through local troughs.

To minimize biases inherent in specific cluster analytical methods, several other different methods of clustering the data were used, such as single linkage, centroid, and Ward's. These methods showed similar results. This consensus suggested that there were probably two, three, or four clusters. A series of k-means cluster analyses were conducted to further assess the appropriateness of these solutions. Cluster numbers were set at two, three, and four. All cluster solutions generated reasonably even distributions of couples.

Analysis of variance using an F test showed that clusters were well differentiated, except for the marriage expectation scale; a four-cluster solution was better able to differentiate couples in the marriage expectation area. The final cluster centers for the three solutions were saved as initial seeds for use in the second and third phases.

Four-Cluster Solution

The purpose of this phase was to classify a large enough sample of couples to achieve more stable profiles through k-means cluster analyses. Excluding the couples already clustered, the total pool or cases was randomly split, and k-means cluster analyses were conducted with data from 3,567 couples.

The number of clusters was set to two, three, and four separately, and initial cluster centers accordingly were predefined based on the agglomerative cluster results in the first phase. Given these initial cluster centers, each subject was assigned to the group with the closest center. The analysis re-

computed the center and reassigned subjects iteratively to the newly formed clusters.

All 3,567 couples were classified in this analysis. Cluster centers generated in this phase were similar to initial cluster centers in every cluster solution. Like the subsample of 500 couples, all cluster solutions for the 3,567 couples generated a reasonably even distribution of couples. Analysis of variance showed that, as with the 500 couples, the clusters of 3,567 couples were well differentiated, except for the Marriage Expectation scale where the four-cluster solution was better able to differentiate.

Another criterion used to determine the optimal solution was to compare the second stage four-cluster solution with previously reported four-cluster solutions by Fowers and Olson (1992) and Asai and Olson (2004). Their studies of premarital types used the same measurement instrument (PRE-PARE) with large, primarily European American and Japanese samples. This referent provided a convenient benchmark for testing the relative strength of the four-cluster solution in this study.

To validate the classification further, a k-means cluster analysis with four clusters predefined was repeated with data from the second subsample ($n = 3,500$), setting the same initial seeds generated from the subsample of 500 couples. The two samples produced similar profiles with almost the same final cluster centers and cluster membership distributions (cluster 1: 881, cluster 2: 826, cluster 3: 1,094, and cluster 4: 699).

Adding Cohesion and Flexibility Scales

Results showed that the Chinese sample was not well differentiated in the areas of Marriage Expectations and Role Relationship, while the European American sample was well differentiated in all areas (Fowers & Olson, 1992). Role Relationship for the Chinese premarital sample showed low internal consistency coefficients (0.42 for male and 0.34 for female).

Based on results from a previous study of 50,000 U.S. marriages that found Couple Closeness and Couple Flexibility differentiated couples well (Olson, Olson-Sigg, & Larson, 2008), those two dimensions were substituted for Marriage Expectations and Role Relationship to reclassify Chinese premarital couples and achieve a well-differentiated 4-cluster solution. A k-means cluster analysis of the updated 11 dimensions with four clusters predefined was performed with data from the primary subsample ($n = 3,567$) without setting the initial seeds. The analysis of variance using an F test showed that the clusters of 3,567 couples were well differentiated in all areas.

A k-means cluster analysis of the updated 11 dimensions with four clusters predefined was also performed with data from the cross-validation subsample ($n = 3,500$ couples) without setting the initial seeds. A breakdown of the primary, cross-validation, and total samples into couple types based on the updated 11 relationship dimensions is presented in

TABLE 1 Chinese Couple Types

Relationship type	Primary sample		Cross-validation sample		Total sample	
	n	%	*n*	%	*n*	%
Vitalized	1,007	28	903	26	1,910	27
Harmonious	697	20	677	19	1,374	19
Traditional	1,177	33	1,167	33	2,344	33
Conflicted	686	19	753	22	1,439	20
Total sample	3,567	100	3,500	100	7,067	100

Table 1. Remaining results and discussions are based on the four-cluster solution generated by the updated 11 dimensions using the primary subsample ($n = 3,567$ couples).

Final Four Types of Chinese Premarital Couples

Chinese premarital types are identified in Table 1 in descending order based on their average PCA profiles. The four PCA cluster types for Chinese couples were given the same labels as those in Olson et al.'s study (1992) because the patterns in this study were quite similar: Vitalized, Harmonious, Traditional, and Conflicted (Figure 1).

Vitalized couples ($n = 1,007$; 28%) exhibited the highest mean PCA scores (Table 2). Despite fluctuations within this range, high scores were
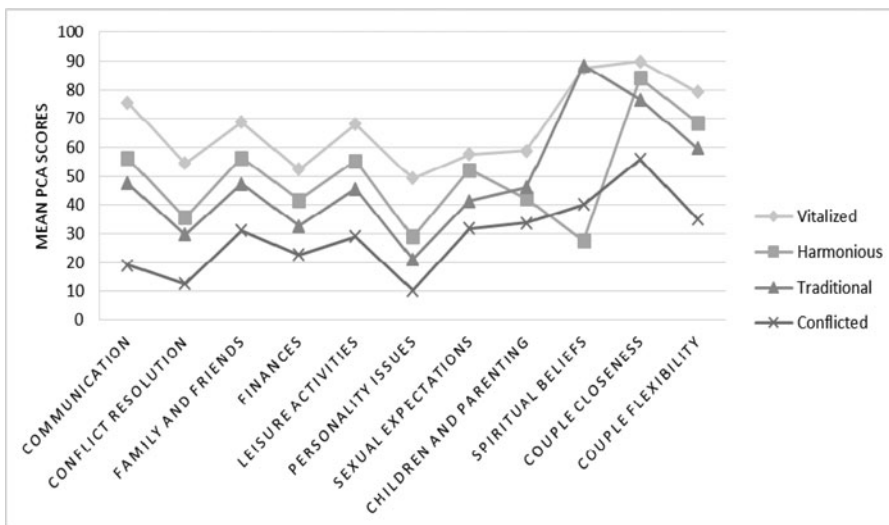

FIGURE 1 Four types of Chinese premarital couples.

TABLE 2 Four Chinese Premarital Types: Mean PCA

Relationship domain	M	Vitalized		Harmonious		Traditional		Conflicted	
		M	SD	M	SD	M	SD	M	SD
Communication	51.7*	75.6	14.1	56.2	19.2	47.5	18.2	19.1	14.5
Conflict resolution	34.7*	54.6	16.7	35.7	17.4	29.8	15.7	12.7	11.2
Family and friends	52.1*	68.8	18.7	56.5	20.1	47.4	18.6	31.1	18.0
Finances	38.1*	52.4	22.8	41.8	21.6	32.8	20.4	22.8	17.2
Leisure activities	50.8*	68.2	15.4	55.4	17.5	45.7	17.5	29.1	16.7
Marriage expectations	25.9	25.7	16.7	25.2	17.2	25.4	17.2	27.9	20.7
Personality issues	28.6*	49.3	21.4	29.1	17.5	21.2	14.6	10.4	10.4
Role relationship	68.7*	72.7	15.3	72.7	15.0	66.4	16.4	62.5	17.5
Sexual expectations	46.3*	57.7	16.3	52.3	16.9	41.5	17.8	31.9	17.1
Children and parenting	46.6*	58.9	20.3	42.4	19.4	46.2	20.7	33.8	18.6
Spiritual beliefs	67.1*	87.5	16.0	27.6	15.8	88.6	11.4	40.3	28.5
Couple closeness	77.9*	90.0	10.2	84.2	12.4	76.6	15.1	55.9	21.0
Couple flexibility	62.3*	79.3	14.7	68.6	16.5	59.8	17.9	35.1	18.5

*$p < .005$.

found across all relationship domains for the Chinese couples with one exception, Spiritual Beliefs. Similarly, Fowers and Olson's study (1992) found that European American couples in this type had the highest overall PCA scores of any group on all scales except Marriage Expectations and Spiritual Beliefs.

Harmonious couples in the Chinese sample ($n = 697$; 20%) exhibited slightly lower overall PCA scores than Vitalized couples, with peaks and troughs occurring at different points in their profile. There were peaks for Couple Closeness and Couple Flexibility, where scores were lower than for Vitalized couples and higher than the other two types. There was a trough for Spiritual Beliefs, where scores were lowest across all types. Harmonious couples' PCA scores for Children and Parenting were lower than scores for the Vitalized and Traditional groups, but higher than the Conflicted group. In the Fowers and Olson study (1992), European American Harmonious couples reported moderate overall relationship quality on PREPARE PCA scales, with lower scores on Marriage Expectations, Children and Parenting, and Spiritual Beliefs.

Traditional couples in the Chinese sample ($n = 1,177$; 33%) exhibited slightly lower overall scores than the Harmonious type. However, these couples had the highest score on Spiritual Beliefs compared with other couple types. Moreover, the score on Children and Parenting was slightly higher than couples in the Harmonious group. In Fowers and Olson's study (1992), European American Traditional couples reported moderately low scores on scales including Personality Issues, Communication, and Conflict Resolution, but had the highest scores of any group on Marriage Expectations and Spiritual Beliefs and exhibited a relative peak on the Children and Parenting scale.

Conflicted couples in the Chinese sample ($n = 686$; 19%) had low PCA scores in all areas except Spiritual Beliefs, where the score was lower than Vitalized and Traditional types, but higher than the Harmonious type. Fowers and Olson (1992) named a very similar European American group as Conflicted because couples in this group were planning to marry in spite of obvious relationship difficulties, evidenced by particularly low PCA scores on Personality Issues, Communication, Conflict Resolution, Leisure Activities, and Sexual Relationship.

Demographic Comparisons Between Primary-Sample Types

Couple-type differences across demographic and background characteristics were examined using cross-tabulation and χ^2 analyses. *Kendall's tau-b* measures were computed for ordinal variables (like age, education level) and *Phi* and *Cramer's V* measures were computed for nominal variables (like Occupation, Religious Beliefs). Unlike previous studies, only a few of these showed significant differences among the four types.

The analyses showed a significant negative association between males' reactions to when they wanted children and premarital couple types, $tau = -.028$, $p = .06$. This tau is considered to be a small effect size (Cohen, 1988). This means that the longer the male wanted to wait before having children, the more likely they were classified as Conflicted couples. The shorter the time the male wanted to wait to have children, the more likely they were classified as Vitalized couples. However, there was no significant association between females' reaction to when they wanted children and premarital couple types.

For females, parents' reactions (*Phi* = .08 and *Cramer's V* = 0.46, $p = .03$), and friends' reactions to their relationship (*Phi* = .076 and *Cramer's V* = 0.44, $p = .056$) were significantly related to premarital couple types. The more negative parents' and friends' reactions to their relationship, the more likely they were classified as Conflicted couples. Spiritual Beliefs were also a predictor of couple types for females (*Phi* = .067 and *Cramer's V* = .039, $p = .079$); the less they reported having spiritual beliefs, the more likely they were Conflicted couples. However, there were no significant differences in Spiritual Beliefs or family/friend reactions to relationship for males across couple types.

Comparison With European American Sample

To test hypothesis 2, the distribution of the couples among the four types was examined. Among Chinese premarital couples, Traditional types were the most common, followed by Vitalized types, Harmonious types, and Conflicted types. In contrast for European American premarital couples, Vitalized types were the most common followed by Traditional and Harmonious types

TABLE 3 Clusters Distribution Comparison Between Chinese Sample and European American Sample

	2007–2011 collected Chinese sample		2011–2012 collected European American sample	
	n	%	n	%
Vitalized couple	1,007	28	2,663	52
Harmonious couple	697	20	883	18
Traditional couple	1,177	33	975	20
Conflicted couple	686	19	479	10
Total	3,567	100	5,000	100

and Conflicted types (Table 3). The Chinese sample was compared with a sample of 5,000 European American couples who completed the PREPARE inventory in 2011 and 2012. A comparison of American and Chinese samples found significant differences between the two groups in terms of the distributions of the four types ($\chi^2 = 20.93$, $df = 3$, $N = 8,567$, $p < .001$). Results support the study's hypothesis that there would be more Traditional couples in the Chinese sample than in the European American sample. Conversely, there were more Vitalized couples in the European American sample than in the Chinese sample.

DISCUSSION

There is an increasing trend of divorce in Chinese societies and, as a result, more interest in premarital preparation to prevent marital discord, an approach made popular in the United States (Hahlweg, Markman, Thurmaier, Engl, & Echert, 1998; Halford, Sanders, & Behrens, 2001; Markman & Hahlweg, 1993). The current report builds on studies of European American premarital couple typologies by examining couple types in a sample of 7,567 premarital Chinese couples living in Hong Kong, Singapore, Taiwan, and Malaysia and comparing them to European American premarital couples.

Hypothesis 1, which posited that couple types would be similar in pattern and number in Chinese and European American premarital couples, was supported. Results of this study indicated that Chinese premarital couples exhibited relational patterns and could be classified into four types that were similar to what has been reported for European American premarital couples (Vitalized, Harmonious, Traditional, and Conflicted).

Hypothesis 2 proposed that the two cultures would have different couple-type frequencies with Traditional being more common in the Chinese sample compared with the European American sample. This hypothesis was also supported. Traditional couples were the most common couple type found in this study's Chinese sample. In contrast, Vitalized couples were the most common type found in the European American samples.

It is important to discuss here the low reliability found for the Role Relationship scale, which did not discriminate between the four couple types, as was the case for the European America sample. This could mean that the Role Relationship scale in PREPARE did not reflect the cultural context of Chinese premarital couples (Larson & Holman, 1994). The implied bias towards egalitarian roles in the ten items that comprise the Role Relationship scale may not fit with the Confucian worldview, which emphasizes hierarchy and patriarchy within the Chinese family system.

Implications for Marriage Education Programs

As demonstrated in previous studies (Allen & Olson, 2001; Asai & Olson, 2004; Fowers & Olson, 1992; Lavee & Olson, 1993; Olson & Fowers, 1993), a couple typology is useful in premarital education programs. Knowing the four Chinese premarital couple types identified in the current study provides an initial summary of a couple's strengths and growth areas, thus allowing them to tailor their marital preparation program to the couple's needs. For example, Vitalized couples, who have many relationship strengths, might not need as many premarital sessions compared with Conflicted couples, who have few strengths but need help developing their communication and conflict resolution skills. Professionals working with Harmonious couples might want to start by identifying their relationship strengths in the areas of couple closeness, couple flexibility, sexual expectations, and communication but spend time resolving personality and spiritual beliefs' issues and working on conflict resolution skill.

In the current study, Chinese Traditional premarital couples who comprised more than one third of the sample, disagreed on some relationship dimensions but had consensus on child-related issues and were quite religiously oriented. However, they had low scores on Communication and Conflict Resolution. They would benefit from learning effective communication and conflict resolution strategies before beginning their marriage. (For those who would like to know more about the PREPARE assessment, go to: www.prepare-enrich.com.)

LIMITATIONS AND FUTURE RESEARCH DIRECTIONS

All Chinese couples in the current study were living in Hong Kong, Singapore, Taiwan, and Malaysia, although some of them may have originally come from Mainland China. Future research would benefit from studying couples from Mainland China where the characteristics of the population are widely varied in education and income levels and where the majority of Chinese people reside in rural areas. It is also speculated that Mainland Chinese couples are more likely to be characterized as traditional. Although this

study was able to identify four couple types, involving couples from Main-land China where the majority of ethnic Chinese live, is needed to confirm these couple typologies.

The Chinese version of the PREPARE inventory, which was taken by the Chinese premarital couples in the current study, was translated directly from the English version of PREPARE used by European American premarital couples with minor changes on demographic and background questions. However, it is not known which language version (Chinese or English) of the inventory was used by specific couples. Further, a translated English-language instrument in English that was developed for U.S. couples might not be as sensitive to relationship dynamics in Chinese premarital couples. Qualitative research is encouraged to more fully understand the cultural context of Chinese couples with a goal of adapting premarital assessments that more closely reflect those cultural variations.

PREPARE did not include a satisfaction measure with the Chinese sam-ple, and we were unable to come up with a validation measure with the data available. Future studies on premarital couples need to identify valida-tion variables that could contribute to a better understanding of relationship quality. The current study's use of self-report measures might have produced mono-method bias and threatened construct validity. Future studies would benefit from a multi-method approach to classify and predict outcomes for couples.

Longitudinal studies are needed to examine which PREPARE measures predict marriage outcomes in Chinese couples. It would be interesting to examine the longer-term outcomes of each couple type in terms of mari-tal satisfaction/discord and stability/dissolution. Longitudinal designs would also allow researchers to follow premarital Chinese couples through marriage and into the childrearing phase of their couple/family development.

CONCLUSION

Seeing the increasing trend of divorce in Chinese societies and the effective-ness of premarital preparation in preventing marital discord or dissolution, the current report built on typology studies of European American premarital and marital couples, examining the couple types existing in 7,567 premari-tal Chinese couples living in Hong Kong, Singapore, Taiwan, and Malaysia. Four relational patterns: Vitalized, Harmonious, Traditional, and Conflicted, were identified through a three-phase cluster analysis. Results showed that these four couple types were almost identical to the four premarital types found in the U.S.-based sample using a similar cluster analysis procedure. Couple type differences were only found for a few demographic and back-ground characteristics, for example, parents' and friends' reaction toward the couple relationship. Compared with U.S. couples where the Vitalized type

is the largest group, Traditional couples were most prevalent in the current study's sample of Chinese premarital couples. The study increases our understanding of Chinese premarital couples, contributing to the growing field of premarital education in Asia and couple therapy practice with Chinese couples.

REFERENCES

Allen, W. D., & Olson, D. H. (2001). Five types of African-American marriages. *Journal of Marital and Family Therapy*, *27*(3), 301–314. doi:10.1111/j.1752-0606.2001.tb00326.x

Asai, S. G., & Olson, D. H. (2004). Culturally sensitive adaptation of PREPARE with Japanese premarital couples. *Journal of Marital and Family Therapy*, *30*(4), 411–426. doi:10.1111/j.1752-0606.2004.tb01252.x

Fowers, B. J., Montel, K. H., & Olson, D. H. (1996). Predicting marital success for premarital couple types based on PREPARE. *Journal of Marital and Family Therapy*, *22*(1), 103–119. doi:10.1111/j.1752-0606.1996.tb00190.x

Fowers, B. J., & Olson, D. H. (1986). Predicting marital success with PREPARE: A predictive validity study. *Journal of Marital and Family Therapy*, *12*(4), 403–413. doi:10.1111/j.1752-0606.1986.tb00673.x

Fowers, B. J., & Olson, D. H. (1992). Four types of premarital couples: An empirical typology based on PREPARE. *Journal of Family Psychology*, *6*(1), 10–21. doi:10.1037/0893-3200.6.1.10

Futris, T. G., Barton, A. W., Aholou, T. M., & Seponski, D. M. (2011). The impact of PREPARE on engaged couples: Variations by delivery format. *Journal of Couple & Relationship Therapy*, *10*(1), 69–86. doi:10.1080/15332691.2011.539175

Garrett, J., & Olson, D. H. (2006). *Hispanic and Caucasian couples have similar couple types*. Unpublished manuscript. Minneapolis, MN: Life Innovations.

Gottman, J. M. (1994). *What predicts divorce?: The relationship between marital processes and marital outcomes*. Mahwah, NJ: Lawrence Erlbaum.

Hahlweg, K., Markman, H. J., Thurmaier, F., Engl, J., & Eckert, V. (1998). Prevention of marital distress: Results of a German prospective longitudinal study. *Journal of Family Psychology*, *12*, 543–556. doi:10.1037/0893-3200.12.4.543

Halford, W. K., Sanders, M. R., & Behrens, B. C. (2001). Can skills training prevent relationship problems in at-risk couples? Four-year effects of a behavioral relationship education program. *Journal of Family Psychology*, *15*, 750–768. doi:10.1037/0893-3200.15.4.750

Hall, S. S., & MacDermid, S. M. (2009). A typology of dual earner marriages based on work and family arrangements. *Journal of Family and Economic Issues*, *30*(3), 215–225. doi:10.1007/s10834-009-9156-9

Holman, T. B., & Linford, S. T. (2001). Premarital factors and later marital quality and stability. In T. B. Holman & Associates (Eds.), *Premarital prediction of marital quality or breakup: Research, theory, and practice* (pp. 1–27). New York, NY: Kluwer Academic/Plenum.

Larson, J. H., & Holman, T. B. (1994). Premarital predictors of marital quality and stability. *Family Relations*, *43*(2), 228–237. doi:10.2307/585327

Lavee, Y., & Olson, D. H. (1993). Seven types of marriage: Empirical typology based on ENRICH. *Journal of Marital and Family Therapy*, *19*(4), 325–340. doi:10.1111/j.1752-0606.1993.tb00996.x

Mandara, J. (2003). The typological approach in child and family psychology: A review of theory, methods, and research. *Clinical Child and Family Psychology Review*, *6*, 129–146. doi:10.1023/A:1023734627624

Markman, H. J., Floyd, F. J., Stanley, S. M., & Storaasli, R. D. (1988). Prevention of marital distress: A longitudinal investigation. *Journal of Consulting and Clinical Psychology*, *56*(2), 210–217. doi:10.1037/0022-006X.56.2.210

Markman, H. J., & Hahlweg, K. (1993). The prediction and prevention of marital distress: An international perspective. *Clinical Psychology Review*, *13*, 29–43. doi:10.1016/0272-7358(93)90006-8

Miller, B. C., & Olson, D. H. (1990). Types of marital interaction: Using cluster analysis. In T. Draper & A. Marcos (Eds.), *Family variables* (pp. 67–89). Newbury Park, CA: Sage.

Olson, D. H. (2010). *PREPARE-ENRICH Counselor Manual: Customized Version*. Minneapolis, MN: Life Innovations.

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

Olson, D. H., Olson-Sigg, A., & Larson, P. J. (2008). *The couple checkup*. Nashville, TN: Thomas Nelson.

Olson, D. H., Russell, C. S., & Sprenkle, D. H. (1989). *Circumplex model: Systemic assessment and treatment of families*. New York, NY: Routledge.

Robins, R. W., John, O. P., Caspi, A., Moffitt, T. E., & Stouthamer-Loeber, M. (1996). Resilient, overcontrolled, and undercontrolled boys: Three replicable personality types. *Journal of Personality and Social Psychology*, *70*, 157–171. doi:10.1037/0022-3514.70.1.157

Snyder, D. K., & Smith, G. T. (1986). Classification of marital relationships: An empirical approach. *Journal of Marriage and the Family*, *48*(1), 137–146. doi:10.2307/352237

Toomey, A. L. (2004). *Typological shift among newly married couples following completion of a marital enrichment program*. Unpublished master's thesis, Oklahoma State University, Stillwater.

Tzou, J. Y. J., Kim, E., & Waldheim, K. (2012). Theory and practice of positive feminist therapy: A culturally responsive approach to divorce therapy with Chinese women. *International Journal for the Advancement of Counselling*, *34*, 143–158. doi:10.1007/s10447-012-9146-8

Whiteman, S. D., & Loken, E. (2006). Comparing analytic techniques to classify dyadic relationships: An example using siblings. *Journal of Marriage and Family*, *68*(5), 1370–1382. doi:10.1111/j.1741-3737.2006.00333.x

Young, K. P. H. (1995). *Understanding marriage: A Hong Kong case study*. Hong Kong: Hong Kong University Press.

Zhang, Y., & Kline, S. L. (2009). Can I make my own decision? A cross-cultural study of perceived social network influence in mate selection. *Journal of Cross Cultural Psychology*, *40*, 3–23. doi:10.1177/00220221083261