Premarital Couple Predictors of Marital Relationship Quality and Stability: A Meta-Analytic Study

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PREMARITAL COUPLE PREDICTORS OF MARITAL RELATIONSHIP QUALITY AND STABILITY:
A META-ANALYTIC STUDY

by

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ABSTRACT

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The purpose of this study was to determine the most important premarital couple protective and risk factors associated with marital relationship quality and stability by utilizing meta-analytic procedures to calculate standardized effect sizes for each factor. Extant research was identified and evaluated using the following inclusionary criteria: the dependent variables had to measure some form of marital quality or stability, the independent variables had to be premarital in nature, the participants had to have married after 1969, and the statistics necessary for the computation of a zero-order correlation effect size had to be available. Meta-analytic procedures were then utilized to code studies meeting inclusionary criteria, aggregate conceptually-comparable variables across included studies, and calculate standardized zero-order correlational effect sizes for each
aggregated premarital factor. The predictive magnitude of premarital couple factors associated with subsequent marital outcomes was generally moderate. The results indicated both medium and small effect sizes for the various identified premarital couple predictors of marital relationship quality and instability. Positive premarital factors were generally associated with positive marital outcomes and negative premarital factors were generally associated with negative outcomes. The strongest significant protective and risk factors for marital distress and dissolution were as follows. The protective factors against marital distress included premarital relationship quality (e.g., love, satisfaction, support), premarital relationship stability (e.g., commitment, stability), attitude and value similarity (e.g., autonomy, lifestyle, expectations), positive premarital interactions (e.g., assertiveness, empathy, self-disclosure), religiosity similarity (e.g., religion importance, beliefs, denominational affiliation), and family-of-origin experience similarity factors (e.g., attachment, parent-child relationship, parents’ marriage, physical violence). The protective factors against marital dissolution included premarital relationship stability, religiosity similarity, premarital relationship quality, and positive interactions. The risk factors for marital distress included negative premarital interactions (e.g., conflict, criticism, demand-withdraw) and premarital violence (e.g., physical aggression, sexual coercion, violence). The risk factors for marital dissolution included negative interactions and premarital cohabitation with one’s spouse. No significant gender differences were identified for any of the premarital predictive factors. Study limitations, implications for future research, and recommendations for educators and clinicians are discussed.
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PURPOSE

Despite findings that 93% of Americans see having a happy marriage as a major life goal and that 70% of Americans believe that marriages should only end in extreme situations (Waite & Gallagher, 2000), approximately 50% of all marriages in the United States end in divorce (United States Census Bureau, 2008). Consequently, it is no wonder that marital outcomes are one of the most widely-researched aspects of marriage (Fincham & Lindfield, 1997), as scholars, researchers, educators, and practitioners seek increased understanding as to the most effective ways of strengthening marriage and preventing divorce. The purpose of this study was to determine which previously-researched premarital protective and risk factors best predict marital relationship quality and stability by conducting a meta-analysis of extant research.

In general, marital relationship outcomes can be categorized as either quality outcomes (e.g., adjustment, affection, attachment, communication, conflict, discord, disagreements, dissatisfaction, intimacy, love, satisfaction, support, violence, warmth) or stability outcomes (e.g., commitment, divorce, regret, separation, success, thoughts of leaving). Considerable stress and reduced quality of life have been associated with spouses who report low marital quality (Burman & Margolin, 1992; Hawkins & Booth, 2005), whereas satisfying marriages seem to promote family, mental and physical health (Kiecolt-Glaser & Newton, 2001; Waite & Gallagher, 2000). In fact, a large body of research indicates that healthy marriages yield a host of important benefits to spouses, children, families, and communities (National Marriage Project, 1999; Silliman, Stanley, Coffin, Markman, & Jordan, 2002).
Research also suggests that premarital events, perceptions, attitudes, and patterns of behavior can be organized into a profile of risk and protective factors for each couple and continue to have an effect on the quality of the relationship several years into marriage (Holman, Larson, Stahmann, & Carroll, 2001). Accordingly, numerous studies have found premarital factors to have predictive value with regard to subsequent marital outcomes (Halford, Markman, Kline, & Stanley, 2003; Holman, 2001; Larson & Holman, 1994; Niehuis, 2001; Wambolt & Reiss, 1989).

Although relationships between various premarital factors (e.g., quality and stability of parents’ marriages, personality traits, similarity on attitudes and values) and subsequent marital outcomes have been identified and explored, the degree to which these premarital factors are effective in predicting marital outcomes in relation to one another remains under-investigated. Furthermore, even though meta-analytic studies have been completed on premarital preparation programs (i.e., Carroll & Doherty, 2003; Giblin, Sprinkle, & Sheehan, 1985; Hahlweg & Markman, 1988), marital enrichment programs (i.e., Blanchard, Hawkins, Baldwin, & Fawcett, 2009; Butler & Wampler, 1999; Hawkins, Blanchard, Baldwin, & Fawcett, 2008; Hight, 2000; Reardon-Anderson, Stagner, Macomber, & Murray, 2005), and combined premarital and postmarital predictors of marital outcomes (i.e., Karney & Bradbury, 1995), a meta-analytic study specifically exploring premarital predictors of marital outcomes has yet to be conducted. Therefore, the purpose of this study was to determine the most important premarital couple protective and risk factors (i.e., factors relating to the relationship between both partners prior to marriage such as communication, interactional patterns, premarital pregnancy, cohabitation, and similarity of attitudes, backgrounds, and personality)
associated with marital quality and stability by utilizing meta-analytic procedures to calculate standardized effect sizes for each premarital couple factor.

Research Questions

This study addressed the following questions: (a) what are the standardized effect sizes for each of the identified premarital couple predictors of marital relationship quality and stability? (b) what are the strongest premarital couple predictors of marital relationship quality and stability (i.e., which protective and risk factors have the largest effect sizes)? and (c) what are the moderating effects of gender, ethnicity, length of marriage, study design (i.e., cross-sectional or longitudinal), and publication status (i.e., published or unpublished)?

BACKGROUND

Guiding Framework

_Prevention science_ is the guiding framework applied to this study. The science of prevention is a theoretical orientation focused on identifying protective factors and risk factors, and then constructing and evaluating interventions to enhance the identified protective factors and minimize the identified risk factors (Flay et al., 2005; Rishel, 2007). Prevention science is an intersection of human development, psychiatric epidemiology, psychopathology, and education (Coie et al., 1993). The philosophy of prevention science is the guiding framework behind premarital preparation programs and marriage enrichment programs (Carroll & Doherty, 2003; Williams, 2003), both of which deliver information and strategies based on protective factors and risk factors in an attempt to reduce the likelihood of marital distress and marital dissolution and improve marital quality and stability.
Premarital preparation programs (i.e., premarital counseling, premarital education) seek to provide couples with increased knowledge, awareness of risk and protective factors, and skills targeted at improving and sustaining relationships (Senediak, 1990). Premarital preparation programs are “any type of formal, standardized approach to preparing premarital couples for marriage” (Carroll & Doherty, 2003, p. 105). Common goals for premarital preparation programs include (a) increasing friendship, intimacy, and commitment, (b) improving interpersonal skills (e.g., expressiveness, empathy, listening, conflict management, problem-solving), (c) easing the transition to marriage, and (d) increasing relationship satisfaction and stability (Stahmann, 2000). Premarital preparation programs generally address similar educational content (Risch, Riley, & Lawler, 2003). For example, every well-established premarital preparation program contains some element of interpersonal skills training (Sayers, Kohn, & Heavey, 1998; Williams, 2003). Most premarital preparation programs address commitment, the effects of family of origin on romantic relationships, compatibility of personalities, marital roles, financial management, recreation/leisure interests, expectations (e.g., marriage, education, career, children, parenting, religion), and sexuality (Stahmann & Salts, 1993).

Research findings highlight the importance of prevention science. For example, comparisons of the outcome research on premarital preparation and marriage enrichment programs with couple therapy approaches for marital distress suggest that relationship distress prevention appears to be more effective than treating relationship distress after it develops (Jacobson & Addis, 1993). It is expected that the results of the present study will provide a valuable contribution to the field of prevention science and premarital
preparation by identifying the degree to which premarital factors protect against or increase the risk for marital distress and marital dissolution.

Premarital Predictors of Marital Relationship Outcomes

A review of literature on premarital predictors of marital outcomes suggests four broad conceptual categories for organizing premarital predictors: (a) familial factors, (b) individual factors, (c) contextual factors, and (d) couple factors (Busby, Holman, & Taniguchi, 2001; Holman, 2001). For the purposes of this study, the premarital factors identified in the literature (i.e., Cate & Lloyd, 1992; Gottman, 1994a; Halford et al., 2003; Holman, 2001; Karney & Bradbury, 1995; Kurdek, 2005; Larson, 2000; Larson & Holman, 1994; Murray & Holmes, 1999; Niehuis, 2001; Niehuis, Huston, & Rosenband, 2006; Spanier & Lewis, 1980; Sroufe, Egeland, Carlson, & Collins, 2005; Stahmann & Hiebert, 1997; Stanley, 2001; Surra, Gray, Boettcher, Cottle, & West, 2006; Surra, Gray, Cottle, & Boettcher, 2004; Wambolt & Reiss, 1989; White, 1990) as having predictive value with regard to marital outcomes were organized into the four broad conceptual categories (see Figure 1).

Familial Factors

The familial premarital predictors associated with marital outcomes consist of family-of-origin background factors of both partners. The familial factors include family cohesion and conflict, outcomes of parents’ marriages, quality of family communication, parents’ mental health, quality of parenting, family sociodemographic information, parent-child relationship quality, individuation from family, childhood stressor events, and unresolved family-of-origin issues.
Individual Factors

The individual premarital predictors associated with marital outcomes consist of individual characteristics of both partners. The individual factors include personality traits (e.g., anger, impulsivity, irritability, dependence, sociability), attitudes (e.g., values and attitudes about marriage, flexible and realistic relationship expectations), skills (e.g., ability to cope with stress, interpersonal skills, assertiveness), and emotional health (e.g., neuroticism, anxiety, depression, self-esteem, emotional stability, history of traumatic events, drug and alcohol abuse, secure attachment style).

Contextual Factors

The contextual premarital predictors associated with marital outcomes encapsulate the environments and circumstances surrounding both partners. The contextual factors include social network relationship approval (i.e., relationship approval from important relationships like parents and friends), sociocultural characteristics at the time of marriage (e.g., age at marriage, education, income/employment, socioeconomic status, race) and life events (i.e., developmental transitions and acute and chronic circumstances that affect either one or both partners like major illness and unemployment).

Couple Factors

The premarital couple predictors associated with marital outcomes consist of factors relating to the relationship between both partners. The couple factors include quality of couple interactions (e.g., interactional patterns, communication, violence or abuse), relationship history (e.g., length of relationship, premarital pregnancy, cohabitation), similarity of attitudes and values (e.g., religion, gender role expectations),
similarity of backgrounds (e.g., age, race, socioeconomic status), and similarity of personality (e.g., neuroticism, kindness, emotional health).

The enormity of data available for all four conceptual categories necessitated the selection of only one category for analysis at this time. The couple premarital factors were specifically selected as the conceptual category of interest for this study because the mostly non-static nature of couple factors lend themselves more easily to intervention (e.g., communication skills training, problem solving skills). Although some studies have analyzed several premarital couple predictors, to date, no study has analyzed all of the identified premarital couple predictors of marital outcomes. Consequently, a meta-analytic study is necessary to identify whether each premarital couple factor is either a protective or risk factor and to determine the degree to which each premarital couple factor is associated with marital quality and stability. Because the present study was concerned specifically with premarital couple predictors of marital outcomes, postmarital couple predictors of marital outcomes were not analyzed.
METHODS

Meta-Analysis

Meta-analysis is a quantitative statistical method for aggregating, comparing, and summarizing results from different studies which address similar research questions (Lipsey & Wilson, 2001). Given the purpose of the present study, meta-analytic methods and procedures were the most appropriate methods and procedures for answering the research questions. The zero-order (i.e., standardized) correlation coefficient \( r \) is the common effect size metric employed in the present study.

Selection and Inclusion Criteria for Reviewed Studies

It is important briefly to underscore the relationship between inclusion of data from extant studies and associated limitations in a meta-analytic study. Missing effect sizes have been cited as the most pervasive limitation in meta-analytic methods (Hedges, 1992). Missing effect sizes tend to increase both sampling error and result bias, as well as decrease both the accuracy and generalizability of study findings (Lipsey & Wilson, 2001). The degree to which missing effect sizes impinge on the validity of the results depends on the degree to which the included effect sizes vary systematically from the missing effect sizes (Peterson & Brown, 2005). Failing to (a) identify relevant studies through search procedures, (b) obtain relevant studies that are not identified in extant literature (e.g., unpublished studies, dissertations, theses, studies rejected from publication), and (c) calculate relevant effect sizes (e.g., the necessary statistics for effect size calculation are missing from studies) are three common yet problematic causes of missing effect sizes (Peterson & Brown, 2005).
The limitations associated with missing effect sizes have been minimized in the present study by maximizing inclusivity with regard to effect sizes from extant studies. Specifically, inclusivity was increased by (a) implementing multiple strategies for identifying relevant studies; (b) including unpublished studies (Pigott, 1994; Vevea & Woods, 2005), studies in non-English languages, and studies conducted in foreign or non-English-speaking countries; (c) imputing effect sizes whenever possible when direct correlations were not reported; and (d) contacting study authors to obtain missing statistics necessary for inclusion.

The following inclusionary criteria were developed for determining extant research inclusion in this meta-analytic study.

*Outcome Variables*

The dependent variables of interest had to measure some form of marital quality or stability. Common *marital quality* outcome variables included adjustment, affection, attachment, communication, conflict, discord, disagreements, dissatisfaction, intimacy, love, satisfaction, support, violence, and warmth; common *marital stability* outcome variables included commitment, divorce, regret, separation, success, and thoughts of leaving (Larson & Holman, 1994; Lewis & Spanier, 1979; Niehuis, Huston, & Rosenband, 2006). Marital quality outcomes tended to be measured as subjective levels of satisfaction while marital stability outcomes tended to be measured both subjectively (e.g., levels of relationship commitment) and objectively (e.g., relationship status such as intact marriage, divorce, separation). Although many studies utilized standardized measures for marital quality outcomes such as the Dyadic Adjustment Scale (Spanier, 1976), the PREPARE Marital Satisfaction Scale (Olson, Fournier, & Druckman, 1986),
the Kansas Marital Satisfaction Scale (Schumm et al., 1986), or the Marital Adjustment Test (Locke & Wallace, 1959), some studies utilized single-item measures of overall marital quality. The data from included extant research studies were either obtained through self-report or third-party observation. Both individuals and couples were included as units of analysis.

**Predictor Variables.**

The independent variables of interest had to be premarital in nature. Although longitudinal extant research was preferable, many of the premarital factors associated with marital outcomes are typically measured cross-sectionally with retrospective postmarital data (e.g., cohabitation, courtship duration, premarital sex). Studies with retrospective premarital data for variables that have been found to have reasonably high continuity (i.e., fairly stable) over time (e.g., personality traits, McCrae & Costa, 1994; attitudes and values, Petty & Krosnick, 1995; religious affiliation, Sherkat, 2001) were included. The data from included extant research were either obtained through self-report or third-party observation.

**Timing of Marriage**

The participants in the extant study had to have married after 1969. Because marital relationships have undergone significant changes since the 1960s (e.g., more flexible and fluid gender roles, decreased social stigma for people who are not married, increased acceptance of cohabitation, increased acceptance of divorce on grounds of unhappiness, decreased pressure to have children; Cox, 2006), pre-1970s relationships may vary significantly from post-1970 relationships. Therefore, regardless of the year of publication, the study was included only if the vast majority of the participants were
married after 1969. Study sample descriptions were utilized to determine the timing of
marriage.

**Effect Size Computations**

The statistics necessary for the computation of a zero-order correlation effect size
\((r)\) had to be available for each included association between predictor and outcome
variables in the reviewed studies. The following combinations of statistics allow for the
computation of correlational effect sizes: \(r\) and \(n\); \(r\) and \(SE\); \(r\) and variance; Fisher’s \(Z\) and
\(n\); Fisher’s \(Z\) and \(SE\); Fisher’s \(Z\) and variance; \(r\) and \(t\)-value; \(t\)-value and \(n\); \(p\)-value, tails,
and \(n\); log odds ratio and \(SE\); and odds ratio, lower limit, upper limit, and confidence
level (Borenstein, Hedges, Higgins, & Rothstein, 2005). In addition, studies with results
presented as standardized regression (beta) coefficients were included because research
suggests that the inclusion of transformed standardized regression coefficients (i.e., \(r = \beta + 0.05\lambda\), where \(\lambda = 1\) when \(\beta\) is positive and \(= 0\) when \(\beta\) is negative; \(\beta\) must be between
\(+0.50\) and \(-0.50\)) in correlational meta-analyses is preferable to the limitations associated
with excluding relevant effect sizes (Peterson & Brown, 2005); therefore, the following
combinations of statistics also allowed for the computation of correlational effect sizes: \(\beta\)
and \(n\); \(\beta\) and \(SE\); and \(\beta\) and variance. Similarly, while acknowledging that there are slight
differences between log odds ratios and hazard ratios, for the sake of inclusion to
minimize limitations, in a few instances hazard ratios were treated as log odds ratios (J. P.
Hoffmann, personal communication, August 20, 2008).

**Procedures**

The present study of premarital couple predictors of marital outcomes utilized
data collected and coded as part of a larger ongoing meta-analytic study of premarital
family, individual, contextual, and couple factors associated with marital outcomes. The following procedures detail the study identification and coding procedures employed in the larger ongoing meta-analytic study, and therefore, in the present study as well.

Study Identification

The previously-identified premarital predictors of marital outcomes (Figure 1) were used to conduct a comprehensive and exhaustive review of literature. Reviews of premarital predictors of marital outcomes, search engines (e.g., Dissertation Abstracts International, EBSCO HOST Research Database, Google Scholar, Social Sciences Citation Index), and reference lists from studies were utilized to identify relevant extant research. Once identified, studies were obtained and evaluated in terms of the inclusionary criteria described above (see Appendix A).

Efforts were made to contact the author(s) of more recently-conducted studies in an attempt to remediate situations in which statistical information could not be imputed. In addition, premarital assessment questionnaire institutes (Facilitating Open Couple Communication Understanding Study [FOCCUS; Markey, Micheletto, & Becker, 1997], PREmarital Personal and Relationship Evaluation [PREPARE; Olson, Fournier, & Druckman, 1996], and RELationship Evaluation [RELATE; Holman, Busby, Doxey, Klein, & Loyer-Carlson, 1997]) known for their empirical research (Larson, Newell, Topham, & Nichols, 2002; Larson, Holman, Klein, Busby, Stahmann, & Peterson, 1995) were contacted about unpublished data that might meet inclusionary criteria (Lipsey & Wilson, 2001). Finally, all studies meeting the inclusionary criteria were incorporated in the meta-analysis.
Coding

Meta-analytic procedures (Hunter & Schmidt, 2004) were employed to prepare, manage, and analyze the data from included studies. A 79-item codebook was developed with the assistance of Hawkins et al. (2008) to facilitate the systematic coding of the studies (see Appendix B). Two primary types of information were coded: (a) the predictor variable, the outcome variable, and corresponding effect size data; and (b) numerous relevant moderators. Because this study is a correlational meta-analysis, zero-order correlation coefficients ($r$) were the preferred statistic. In instances where standardized regression coefficients were transformed and there were multiple regression models tested, the protocol was to code from the model with the least number of variables in an attempt to more closely approximate the calculation of a zero-order correlation coefficient.

The coding team consisted of ten individuals: one marriage and family therapy (MFT) doctoral student (the principal investigator), three MFT master’s students, and six undergraduate students from family science and other disciplines. The principal investigator was training through consultation with faculty who have expertise in meta-analysis. All of the master’s student coders were trained by the principal investigator and the three undergraduate student coders were trained by principal investigator and the master’s student coders. The coders met in pairs to reason through the most appropriate way to code each item in the codebook for each effect size from the included studies. In instances where the coders were not clear about the most appropriate way to code for an item, a third member of the coding team (generally the principal investigator) was consulted. In approximately 15 instances, consulting with a third member of the coding
team was insufficient to reach consensus, and a family studies faculty member with meta-
alysis expertise was consulted. In addition, a faculty statistician was routinely
consulted about effect size imputing. The coders kept systematic notes to document
decisions and rationales that required consultation. Therefore, inter-coder reliability was
not calculated as coder consensus was employed to identify the most appropriate coding
decision for each codebook item (Hawkins et al, 2008). The undergraduate students were
always paired with a graduate student for coding to increase coding accuracy. The coder
parings were varied so that the coders routinely worked with most of the other coders to
increase coding reliability.

Data Rehabilitation

Overall, very little estimation was required for the included effect sizes. Of the
704 predictor-outcome effect sizes included in the study, only one effect size required a
moderate estimation for inclusion (i.e., in order to transform a log coefficient into a zero-
order correlation coefficient, the $t$ value associated with the given $p$ value was used to
calculate the $SE$ for the log coefficient in question; because the log coefficient was not
significant, the $t$ value associated with a $p$ value of .10 was used), 26 required a slight
estimation for inclusion (e.g., averaging beta coefficients for the same variable from two
similar models, treating proportional hazards coefficients as log coefficients, using the p-
values to calculate standard errors, estimating the sample size for multiple waves), and
677 required no estimation.
Included Studies Summary

Studies

A total of 43 studies (study references are indicated by asterisks in the list of references) from the larger ongoing meta-analytic study database examining premarital couple predictors were identified and included in the present meta-analytic study. After controlling for non-unique samples (see Predictor Variable Aggregation under the Analysis section for a more detailed explanation), a total of 37 unique samples (K; hereafter referred to as studies) were analyzed in conjunction with the present meta-analysis. The studies were conducted between 1979 and 2007 (Mdn = 1991) and published between 1981 and 2009 (Mdn = 1999). The median sample size per study was 184 participants and the combined total sample size was 36,229 participants. With regard to sample recruitment, 16 of the studies recruited participants from local communities (43%), 11 of the studies recruited participants from across the United States (30%), 3 of the studies recruited participants from college campuses and courses (8%), 3 of the studies recruited participants from church congregations (8%), and each the 4 remaining studies recruited participants from one of the following sources: health-care organizations, high schools, online premarital assessment questionnaires, and therapy clinics (11%).

With regard to study design, 24 of the studies were cross-sectional (65%) and the other 13 studies were longitudinal (35%). With regard to data collection, 36 of the studies collected self-report data (97%) and 1 study collected observational data (3%; i.e., Smith, Vivian, & O'Leary, 1990). With regard to included effect size format, correlation coefficients were coded from 24 of studies (65%), beta coefficients were coded from 8 of
the studies (21%), log coefficients were coded from 2 studies (5%), t values were coded from one study (3%), both correlation coefficients and log coefficients were coded from 1 study (3%), and both correlation coefficients and t values were coded from 1 study (3%). With regard to publication, 25 of the studies were published (67%; e.g., journal articles), 11 of the studies were unpublished (30%; e.g., dissertations, theses, raw data), and 1 study had both published and unpublished elements (3%; see Publication Status under the Moderating Variables descriptions of the in the Analysis section for a more detailed explanation).

Participants

The participants in the study samples were predominately White heterosexual middleclass Americans. There were no reports of homosexual participants in any of the included studies. Based on the 32 studies (86%) that reported age at time of outcome data collection, the average age for males was 33.5 years ($SD = 9.2$) and the average age for females was 32.7 years ($SD = 9.4$). Based on the 26 studies (79%) that reported length of marriage at outcome data collection, the participants had been married between 3 months and 34 years ($Mdn = 5.2$ years; $M = 8.8$ years; $SD = 9.8$). Based on the 27 studies (73%) that reported participant ethnicity, 30% of the studies reported significant diversity (i.e., more than 33% of the participants were of non-White ethnicity), 22% of the studies reported moderate diversity (i.e., between 10% and 33% of the participants were of non-White ethnicity), and 48% of the studies reported little diversity (i.e., less than 10% of the participants were of non-White ethnicity). Based on the 36 studies that clearly reported the nationality of the participants, only 2 (5%) utilized non-American samples. Based on the 21 studies (57%) that reported participant socio-economic status, 9% had a sample of
primarily upper- and middleclass participants, 67% had a sample of primarily middleclass participants, and 24% had a sample of primarily middle- and lower-class participants.

Analysis

Computer software (Borenstein, Hedges, Higgins, & Rothstein, 2005) was used to convert each included extant study effect size into a zero-order correlation coefficient, weight each correlation coefficient by its inverse variance weight (the inverse of the squared standard error), calculate aggregated effect sizes by averaging the weighted correlation coefficients that were conceptually-comparable, and test the resultant aggregated effect sizes for statistical significance (Lipsey & Wilson, 2001). The aggregation of effect sizes was executed in a case-by-case fashion and based on (a) conceptual similarity among variables (i.e., “Are the variables in question apples and apples or apples and oranges?”) and (b) the number of variables from unique samples (i.e., “Are there enough occurrences of the variable in question to allow for analyses without additional aggregation?”). Variable homogeneity and comparability among aggregated variables was facilitated by employing random effect estimate models to control for heterogeneous effect size distributions within aggregated variables (i.e., variation beyond that attributable to sampling error; Hunter & Schmidt, 2004; Lipsey & Wilson), generally producing more conservative effect size results than fixed effect estimate models.

A total of 928 effect sizes from the larger ongoing meta-analytic study database examined premarital couple predictors, 704 of which were conceptually-similar enough to allow for aggregation (an average of 19 effect sizes per study). Aggregated effect sizes
include effect sizes generated from combinations of self-report data, partner-report data, and observational data.

Outcome Variable Aggregation

The outcome variables were aggregated as either marital quality or marital instability. As part of the aggregation process, outcome variables measuring decreased marital quality (i.e., hostility, conflict, dissatisfaction, and frequency of conflict) were recoded by changing the direction of the associated correlations to allow for aggregation with outcome variables measuring increased marital quality (i.e., adjustment, communication, happiness, harmony, love, positive interaction, satisfaction, satisfaction/commitment, sexual satisfaction, and support). Because the majority of the outcome variables for marital stability actually measured marital instability (i.e., disruption, dissolution, divorce, instability, and regret), outcome variables measuring marital stability (i.e., benefits from marriage, commitment, and stability) were recoded by changing the direction of the associated correlations.

Predictor Variable Aggregation

With regard to the aggregation of the predictor variables, broad organizing constructs such as couple interactions, relationship history, attitudes and values similarity, background similarity, and personality similarity decrease the utility of results and increase the likelihood of hiding predictive power by amalgamation; however, insufficient aggregation reduces statistical power and the reliability of effect sizes. Therefore, the process of aggregating the predictor variables was guided by an attempt to balance the issues of specificity and statistical power; predictor variables were aggregated as specifically as possible given the statistical power. The predictor variables were
aggregated into three primary categories (with associated subcategories noted in parentheses): (a) *couple interaction factors* (negative interactions, positive interactions, and violence), (b) *relationship factors* (marriage readiness, premarital relationship quality, premarital relationship stability, and premarital relationship history), and (c) *similarity factors* (attitudes and values, context, family-of-origin experience, personality, and religiosity). See Appendix C for a complete description of predictor variable components.

Combined total effect sizes were calculated for the aggregated factors that had subfactors for which aggregated effect sizes were also calculated: the *combined premarital couple factors* \((K = 37)\), the primary categories (*couple interaction factors*, *premarital relationship factors*, and *similarity factors*), the *relationship history* subcategory (i.e., premarital cohabitation, courtship duration, premarital pregnancy, and premarital sex), and the *personality similarity* subcategory (negative personality trait similarity and positive personality trait similarity). These combined total effect sizes were calculated by taking the absolute value for all the associated correlations to reduce the imprecision created by aggregating positive and negative correlations at more macro levels of conceptualization which, in essence, cancel one another out. Therefore, the precision of effect size magnitude was increased by eliminating effect size directionality.

Effect size statistical independence was facilitated by two processes. First, a conservative approach to insuring that each of the effect sizes for the same aggregated predictor variable was derived from a unique sample was employed by identifying studies analyzing the same primary data source, and subsequently recoding those studies as the same study for the purposes of analyses. Three primary data sources utilized by more
than one included study were identified (i.e., the Marriage License Office of Wayne County, MI: Orbuch, Veroff, Hassan, & Horrocks, 2002; Timmer & Orbuch, 2001. The National Survey of Families and Households [NSFH]: DeMaris & Rao, 1992; DeMaris & MacDonald, 1993; Heaton & Pratt, 1990. The PREParation for Marriage [PREP-M] longitudinal study on premarital predictors of marital outcomes: Holman, 1994; Holman, Busby, & Larson, 1991; Larson, Anderson, Holman, & Niemann, 1998; Rhoades, 1994.). Therefore, after controlling for non-unique samples, the total number of studies included in this study ($K$) was 37.

Second, situations in which more than one effect size for conceptually-related predictor variables from the same study existed were managed by computing an average effect size for each study, yielding only one effect size per sample per aggregated predictor variable (Lipsey & Wilson); this process was completed automatically by the computer software. For example, when the physical aggression, sexual coercion, and violence predictors were aggregated to form a couple interaction: violence predictor variable for marital quality, the Busby (2009) study had a total of four effect sizes that were computed into one average effect size (i.e., the female’s report of sexual coercion and marital satisfaction correlation, the male’s report of sexual coercion and marital satisfaction correlation, the female’s report of violence and marital satisfaction correlation, and the male’s report of violence and marital satisfaction correlation were all averaged into one correlational effect size). In addition, both self-report and partner-report effect sizes were included and subsequently aggregated. For instances in which studies provided both self-report effect sizes and partner-report effect sizes for the same predictor-outcome variable associations, the effect sizes were averaged together to yield
one combined effect size prior to aggregation. Finally, situations in which more than one effect size for the same predictor-outcome-variable combination from the same study were coded (e.g., premarital couple interaction: disengagement correlated with a Time 1 marital satisfaction, Time 2 marital satisfaction, and Time 3 marital satisfaction from Smith, Vivian, and O'Leary [1990]) were also managed by computing an average effect size for each study, yielding only one effect size per sample per aggregated predictor variable.

Moderator Variables

The data were also analyzed for differences between the categories for the following moderating variables: participant characteristics (gender, ethnicity, and length of marriage at outcome data collection), study design, and publication status. A random effects model was used to combine studies within each moderator category to yield a heterogeneity $Q$ test for statistical between-category differences. Heterogeneity $Q$ tests were conducted for each aggregated effect size to identify significant differences between moderator categories.

Gender. Of the 37 included studies, 17 (46%) reported the results by gender. Statistical tests for between-category differences for the gender moderator were facilitated by coding gender as a within-study subgroup and changing the unit of analysis from studies to subgroups. Because the gender subgroups (i.e., female, male, and individual, and couple) are mutually-exclusive and there is no participant overlap between them, each subgroup from each study was treated as a unique sample. Changing the unit of analysis to the gender subgroup was done to prevent the violation of meta-
analytic assumptions and subsequent accuracy impingement of the statistical test of between-gender differences.

**Ethnicity.** The ethnic diversity for each sample was determined by the percentage of non-White non-European participants. Each study was then assigned one of the following moderator categories: significant diversity (more than 33%), moderate diversity (between 10% and 33%), little diversity (less than 10%), or ethnic diversity not reported (see codebook #36 in Appendix B). Studies for which ethnicity was not reported (27%) were not included in the between-category-difference analyses.

**Length of marriage.** The length of marriage for each sample was determined by the length of time the participants had been married when the outcome data were collected. Each study was assigned one of the following moderator categories: 1 year, 2 years, 3 years, 4–5 years, 6–10 years, 11–20 years, 21–30 years, 31–40 years, or length of marriage not reported (see codebook #29 in Appendix B). In situations in which more than one effect size for the same predictor-outcome-variable combination from the same study were coded for the time-into-marriage moderator (e.g., *Time 1 marital satisfaction*, *Time 2 marital satisfaction*, and *Time 3 marital satisfaction*), the time-into-marriage moderator was calculated by including only the effect size for the furthest time-into-marriage measurement to provide more long-term information.

**Study design.** The potential moderating effect of study design was analyzed by designating each study as employing either a cross-sectional design or a longitudinal design.

**Publication status.** The potential moderating effect of publication status was analyzed by designating each study as either published or unpublished. Because studies
utilizing data from the same dataset were coded as one study (see *Predictor Variable Aggregation* for a more detailed explanation), the PREP-M sample consists of both published studies (i.e., Holman, 1994; Larson et al., 1998) and unpublished studies (i.e., Holman et al., 1991; Rhoades, 1994), resulting in a mixed publication designation.
RESULTS

The aggregated standardized zero-order correlational effect sizes results for the included premarital predictors of marital outcomes are presented in this section. The following ranges provide a guideline for interpreting the magnitude of correlational effect sizes: small ($r \leq .100$), medium ($0.101 \leq r \leq .399$), and large ($r \geq .400$; Lipsey & Wilson, 2001).

In meta-analysis, the larger the $k$ values are (i.e., the number of studies included in the various aggregated analyses), the greater the confidence in the reliability of the associated aggregated effect sizes. There is no minimum $k$ value standard for inferring reliability in meta-analysis. Because of the small $k$ values for some of the aggregated predictor variables and many of the moderator $Q$ tests, those results should be interpreted descriptively for the purpose of exploration as opposed to definitive statistical differences. In addition, the relatively small number of significant differences between moderator categories might have been a function of relatively small values for $k$.

Summary of Effect Size Results

Table 1 presents a summary of the aggregated standardized zero-order correlational effect sizes for the combined premarital couple factors, the three primary categories, and the associated subcategories as predictors of marital quality and instability. The analyses for the aggregated factors that had subfactors with aggregated effect sizes (i.e., the combined premarital couple factors, the primary categories, the relationship history subcategory, and the personality similarity subcategory) were derived from effect size absolute values of component variables to manage the inaccurate additive effect of component variables containing positive and negative effect sizes; consequently,
the precision of magnitude for those aggregated effect sizes was facilitated at the expense of effect size directionality. The aggregated effect sizes for each of the subcategories except relationship history and personality similarity are rank-ordered from largest to smallest absolute value for both marital quality and marital instability in Table 1.

General Findings

The combined aggregated effect size for all of the premarital couple component variables in this meta-analytic study yielded a significant medium effect size as predictors of both marital quality ($\mid r \mid = .203, p < .001, k = 33$) and marital instability ($\mid r \mid = .161, p < .001, k = 13$). The number of studies for each aggregated premarital predictor of marital instability, as well as the resulting effect sizes, was generally smaller compared to those of marital quality.

With regard to the primary categories, the combined premarital couple interaction factors yielded the largest aggregated effect size for marital quality ($\mid r \mid = .248, p < .001, k = 9$), followed by the combined premarital relationship factors ($\mid r \mid = .203, p < .001, k = 15$), and the combined similarity factors ($\mid r \mid = .165, p < .001, k = 19$). In terms of the primary categories as predictors of marital stability, the combined premarital relationship history factors yielded the largest aggregated effect size ($\mid r \mid = .184, p < .001, k = 11$), followed by the combined premarital couple interaction factors ($\mid r \mid = .136, p < .001, k = 2$), and the combined similarity factors ($\mid r \mid = .131, p < .001, k = 7$). Therefore, the primary categories consistently yielded medium statistically-significant effect sizes.

Significant Subcategory Findings

The following premarital predictors were determined to be significant because their aggregated effect sizes were (a) statistically-significant ($p < .050$), (b) of moderate
magnitude (.101 ≤ r ≥ .399), and (c) calculated based on at least two separate samples (k ≥ 2). Because there is no standard for the minimum k value for reliability in meta-analysis, the criterion of effect sizes calculated from at least two studies for determining significant findings was derived from logic similar to the criterion of independent replication for empirically supported treatments: study results must be replicated by a second independent research with a different sample in an attempt to control for potential bias and possible anomalous findings (Chambless & Hollon, 1998). Requiring that aggregated effect sizes be calculated based on at least two separate samples as part of being designated as a significant finding should be seen as “a minimum threshold rather than an optimal one” because “the more replications that have been conducted and the more different settings in which these replications have been carried out, the more confidence one has in the findings” (Chambless & Hollon, p. 8).

**Marital relationship quality.** The following premarital predictors of marital quality had statistically-significant medium effect sizes and k values of at least 2 for subsequent marital quality; they are presented in order of the absolute-value ranking from Table 1. Negative premarital interaction factors (r = -.304, p < .001, k = 8), premarital relationship quality factors (r = .257, p < .001, k = 6), family-of-origin experience similarity factors (r = .227, p = .058, k = 3), premarital relationship stability factors (r = .207, p < .001, k = 6), premarital relationship violence factors (r = -.188, p < .050, k = 3), attitude and value similarity factors (r = .186, p < .001, k = 9), positive premarital interaction factors (r = .176, p < .001, k = 8), and religiosity similarity factors (r = .126, p < .001, k = 13). Although the family-of-origin experience similarity factors did not reach the conventional level of statistical significance (i.e., p < .050) by a small margin (i.e., p
= .058), they were included with the significant premarital predictors of marital quality because they were approximately statistically-significant and are likely clinically-significant.

*Marital relationship instability.* The following premarital predictors of marital instability had statistically-significant medium effect sizes and \( k \) values of at least 2 for subsequent marital quality; they are presented in order of the absolute-value ranking from Table 1. Negative interaction factors \((r = .192, p < .001, k = 2)\), premarital cohabitation factors, \((r = .178, p < .001, k = 7)\), premarital relationship stability factors \((r = -.162, p < .001, k = 2)\), religiosity similarity factors \((r = -.148, p < .001, k = 7)\), premarital relationship quality factors \((r = -.133, p < .001, k = 2)\), and positive premarital interaction factors \((r = -.115, p < .001, k = 2)\).

Summary of Moderator Effect Size Results

Tables 2 through 5 present more detailed information and effect sizes for all of the factors summarized in Table 1, including effect sizes by moderator category and significance levels for moderator heterogeneity \( Q \) tests. Studies with unreported moderators were not included in the results. Therefore, discrepancies between the \( k \) for the total aggregated predictor variable and the \( k \) for the associated moderators in Table 2 through Table 5 suggests at least one aggregated study did not clearly report information necessary to assign a moderator category or, in the instance of gender, that the results were not reported by gender (i.e., the unit of analysis was the individual [i.e., only one member of the couple] or the couple, or the sample only consisted of one gender).

Because many of the between-moderator-category differences are based on a small number of studies \((k)\), confidence in the reliability of the moderated association
between the predictor variable and outcome variable is often limited. Therefore, although
tests for between-moderator-category differences were conducted for all of the
moderators for all of the aggregated factors, only significant moderator differences for
the combined premarital couple factors (i.e., the total aggregated effect sizes for all of the
predictor components for the three primary categories: couple interaction factors,
relationship factors, and similarity factors; see Table 2) are discussed in the text because
the statistical power is generally higher due to larger numbers of studies in the various
moderator categories. However, caution should be used because the k values for some of
the moderator categories are small, thus limiting the reliability of the moderator results.

**Gender**

No significant differences were identified between females and males for the
combined premarital couple factors as predictors of marital quality or instability.

**Ethnicity**

Although significant between-category differences ($Q$ significance level = .006)
were identified between samples with significant ethnic diversity (i.e., more than 33%;
$|r| = .070, p < .001, k = 2$) and samples with moderate ethnic diversity (i.e., 10 to 33%;
$|r| = .208, p < .001, k = 2$) for the combined premarital couple factors as predictors of
marital instability, the small number of studies ($k = 2$ per category) raises questions of
reliability. Conversely, higher statistical power for the combined premarital couple
factors as predictors of marital quality indicated no significant between-category
differences ($Q$ significance level = .196) between samples with significant ethnic
diversity ($|r| = .248, p < .001, k = 5$), moderate ethnic diversity ($|r| = .214, p < .001, k
= 8$), and little ethnic diversity (i.e., less than 10%; $|r| = .153, p < .001, k = 11$),
suggesting ethnicity may not moderate the predictive power of premarital couple factors for subsequent marital quality.

Length of Marriage

Significant between-category differences ($Q$ significance level = .005) were identified between participants who had been married for 6-10 years ($|r| = .098, p < .001, k = 5$) and participants who had been married for 1 year ($|r| = .214, p < .001, k = 6$), 2 years ($|r| = .272, p < .001, k = 3$), and 21-30 years ($|r| = .192, p < .001, k = 3$) for the combined premarital couple factors as predictors of marital quality. These results suggest that the length of marriage may moderate the association between premarital couple factors and subsequent marital quality; more specifically, that there appears to be a shift in marital quality around 6-10 years of marriage. Significant between-category differences ($Q$ significance level = .003) were also identified between participants who had been married for 1 year ($|r| = .112, p < .001, k = 3$) and participants who had been married for 21-30 years ($|r| = .241, p < .001, k = 2$) for the combined premarital couple factors as predictors of marital instability. These results suggest that the length of marriage may moderate the association between premarital couple factors and subsequent marital instability.

Study Design

No significant differences were identified between studies with cross-sectional and longitudinal designs for the combined premarital couple factors as predictors of marital quality or instability.
Publication Status

No significant differences were identified between published and unpublished studies for the combined premarital couple factors as predictors of marital quality or instability.
DISCUSSION

Summary of Results

The results of this research increase understanding of the premarital relationship aspects that are the most important in predicting subsequent marital relationship outcomes. Based on synthesized and summarized key findings from extant research predicting marital outcomes, the predictive magnitude of premarital couple factors associated with subsequent marital outcomes was generally moderate. The results indicated both medium and small effect sizes for the various identified premarital couple predictors of marital relationship quality and instability. The medium and small magnitudes of the results may be in part due to the distal nature of the premarital data compared to more proximal data collected for postmarital predictors of postmarital outcomes.

By controlling for non-unique samples and employing random effect estimate models, the aggregated effect sizes calculated as part of this analysis are conservative estimates. However, the limited number of aggregated studies (k) for many of the effect sizes limits the reliability of and confidence in many of the results from this study. Therefore, many of the results from this study should be viewed descriptively.

Similar to the results of a meta-analysis on predictors of marital outcomes (Karney & Bradbury, 1995), positive premarital factors were generally associated with positive marital outcomes and negative premarital factors were generally associated with negative outcomes. The number of studies for each aggregated premarital predictor of marital relationship quality, as well as the resulting effect sizes, was generally larger compared to those for marital relationship stability. Therefore, marital quality may be
more strongly predicted by premarital factors than marital stability. However, the larger effect sizes for marital quality compared to marital stability may be a function of fewer studies examining stability \( (k = 13) \) compared to quality \( (k = 33) \). Sample maturation may also account for the generally smaller effect sizes for marital stability compared to marital quality as significantly larger effect sizes for marital stability were identified for participants who had been married for 21-30 years compared to participants who had only been married for 1 year.

The following premarital predictors of marital outcomes were designated as significant findings based on statistically-significant \( (p < .060) \) medium effect sizes \( (.101 \leq r \geq .399) \) derived from at least two studies \( (k \geq 2) \). The significant premarital predictor findings are categorized as protective or risk factors for marital distress and/or dissolution and presented in order of the absolute-value ranking from Table 1 (see Appendix C for detailed descriptions of aggregated variables and Appendix D for a summary list of significant findings).

**Protective Factors**

*Marital relationship quality.* Premarital relationship quality factors, premarital relationship stability factors, attitude and value similarity factors, positive premarital interaction factors, religiosity similarity factors, and family-of-origin experience similarity factors were the strongest significant protective factors against marital distress.

*Marital relationship stability.* Premarital relationship stability factors, religiosity similarity factors, premarital relationship quality factors, and positive interaction factors were the strongest significant protective factors against marital dissolution.
It is important to note that premarital relationship quality was the significant protective factor against marital distress with the largest effect size and that premarital relationship stability was the significant protective factor against marital dissolution with the largest effect size. This finding suggests that having a quality premarital relationship may be the most important protective factor against marital distress and that having a stable premarital relationship may be the most important protective factor against marital dissolution. Therefore, the nature of the premarital relationship seems to be one of the best predictors of the nature of the postmarital relationship. Whether this finding is explained because relationship quality and stability are stable over time is unknown given that the results are correlational and not causal in nature.

**Risk Factors**

*Marital relationship quality.* Negative premarital interaction factors and premartial violence factors were the strongest significant risk factors for marital distress.

*Marital relationship stability.* Negative interaction factors and premarital cohabitation factors were the strongest significant risk factors for marital distress.

**Couple Interaction Factors as Marital Outcome Predictors**

Overall, couple interaction factors were the strongest predictors of marital quality, and the second-strongest predictors of marital stability. Therefore, premarital interactions appear to be the single-most important protective and risk factors for marital distress and dissolution. Various dimensions of couple communication such as empathy, accurate interpretation, and self-disclosure, have long been identified as significant predictors of current relationship quality (e.g., Bienvenu, 1970; Buerkle & Badgley, 1959; Burgess & Wallin, 1953; Dymond, 1954; Foote & Cottrell, 1955; Hobart & Klausner, 1959; Kahn,

The finding that negative premarital interactions are the risk factors with the largest effect sizes for both marital distress and dissolution is consistent with previous findings (Gottman, 1994b) such as the 5:1 Ratio (i.e., couples who stay married on average have five positive interactions for each negative interaction, while couples who divorce show only three positive interactions for each negative interaction), flooding (i.e., “a state of physical arousal accompanied by negative thoughts and feelings that can occur during conflict” Williams, 2003, p. 363), and the Four Horsemen of the Apocalypse (i.e., criticism, defensiveness, contempt, and stonewalling). Despite the existence of some studies with counterintuitive findings indicating that positive communication skills are detrimental to the levels of relationship satisfaction and stability (Filsinger & Thoma, 1988; Gottman & Krokoff, 1989; Karney & Bradbury, 1997; Kiecolt-Glaser, Bane, Glaser, & Malarkey, 2003), the frequency of effective communication has been found to be an accurate predictor of marital satisfaction as well as marital stability (Bradbury & Karney, 2004; Carroll, 1998; Holman, 2001; Johnson et al., 2005; Pasch & Bradbury, 1998).

There is a possible explanation for the relatively smaller relationship between premarital violence factors and marital outcomes compared to the negative and positive couple interaction factors. Perhaps most couples who experience violence during courtship do not marry because at least one partner perceives the violence as a red flag. If this is the case, couples who experience more frequent and/or severe violence are likely
missing from the relevant samples since only married people were included. As previously mentioned, the premarital violence effect sizes were based on the results of three studies, two of which (Busby, 2009; Holman et al., 1991) included samples with only 9% and 5% (respectively) of the participants who reported any violence. Thus, most of the participants experienced little or no premarital relationship violence, suggesting that the violence effect size may more accurately convey the absence of violence as a predictor of marital outcomes, or in other words, the absence of premarital violence is a less-strong predictor of marital quality and stability than other negative and positive couple interactions. In addition, the relatively smaller effect sizes for premarital violence factors may also be explained by a lack of variability within the violence predictor variables due to the low rates of violence in the samples; the low rates of premarital violence in these two samples may be a function of sampling and/or fewer couples who experience premarital violence choosing to marry.

\textit{Relationship Factors as Marital Outcome Predictors}

Overall, the relationship factors were the strongest predictors of marital stability, a finding which seems logical given that many of the premarital relationship factors have a stability element to them (e.g., marriage readiness, premarital relationship stability, courtship duration). Courtship duration was not a significant predictor of either marital quality or stability. Although cohabitation was a significant risk factor for marital instability, it is interesting to note that even with several aggregated studies ($k = 7$), cohabitation was not a significant predictor of marital quality. The reason for non-significance is most likely attributable to the fact that some included studies yielded positive effect sizes ($k = 2$; Amato & Booth, 2001; Rhoades, Stanley, & Markman, in
press) and other included studies yielded negative effect sizes ($k = 5$; Kline et al., 2004; Myers, 2006 [two unique samples]; Orbuch et al., 2002; Stanley, Amato, Johnson, & Markman, 2006), resulting in a small non-significant negative aggregated effect size ($r = -.098, p = .094$).

One of the more counterintuitive findings was that premarital pregnancy decreases the risk for marital dissolution and increases the risk for marital distress. Premarital pregnancy was the only factor in this study that had effect sizes with the same directionality for both marital quality and instability (see Table 1 for comparisons). Possible explanations include low statistical power ($k = 3$ for quality; $k = 4$ for instability) and the studies were based on data from participants who had been married between one and six years (although a couple of the studies did not report the length of marriage at outcome data collection), so perhaps findings would change based on more data further into marriage. In addition, the study samples were based on married participants; therefore samples contain participants who experienced premarital pregnancy chose to marry not those who chose not to marry, which may introduce confounding variables about the type of person who chooses to marry in the face of premarital pregnancy. Cross-sectional measurement did not yield statistically-different effect sizes for marital instability.

Despite research from the 1980s finding that premarital childbirth increases the likelihood of divorce (White, 1990), the negative associations between premarital pregnancy and both marital quality and instability are consistent with more recent findings (DeMaris & Roa, 1992). One of the source studies for premarital pregnancy found that couples who experienced premarital pregnancy were more likely to view
marriage as a source of stability and security, suggesting an emphasis by them on the practical benefits of marriage, as opposed to seeing marriage as a source of happiness and self-fulfillment (Timmer & Orbuch, 2001). However, because the findings of this study suggest that premarital pregnancy is also associated with increased marital distress, couples who marry for stability appear more likely to stay in a marriage of lower quality for the assurance of a stable home life for themselves and their child. It is important to note that age may be a confounding factor with premarital pregnancy and marital instability (Bahr & Galligan, 1984). People who marry as teenagers are twice as likely to divorce than people who marry when they are older after controlling for premarital pregnancy (Martin & Bumpass, 1989). Because the included studies did not specify participant age at premarital pregnancy, it was not possible to explore age at premarital pregnancy as a moderator variable.

Although two studies found negative correlations between premarital pregnancy and marital quality (i.e. Amato & Booth, 2001; Orbuch et al., 2002), the third of the three aggregated studies (i.e., Holman et al., 1991) found positive correlations between premarital pregnancy and marital quality. Upon closer review, only 5% of the Holman et al. participants had experienced premarital pregnancy, suggesting that the correlation between premarital pregnancy and marital quality may not be reliable due to a lack of variability for premarital pregnancy. Without the Holman et al. study, the aggregated effect size for premarital pregnancy as a predictor of marital quality more than doubled from -0.068 ($p > 0.050$) to -0.144 ($p < 0.001$).

It is also important to note that premarital sex was the risk factor with the largest effect size estimate for marital instability and the second-largest effect size estimate for
marital distress. However, this effect size was only based on the results of one study (i.e., Busby, 2009) with a very religious sample in which 91% of the participants were religious and 76% had never engaged in premarital sex. Therefore, the reliability of this finding is suspect given it is only based on one highly-religious sample.

**Similarity Factors as Marital Outcome Predictors**

Notwithstanding that similarity between partners is generally reported to be an important protective factor against marital distress and dissolution (Shiota & Levenson, 2007), the similarity factors generally had the smallest effect sizes of the three primary categories (see Table 1 and Table 5). Context similarity was not a significant predictor of either marital quality or stability, and attitude and value similarity factors was not a significant predictor of marital stability.

Although only approximately statistically-significant, the largest similarity factor effect size was for family-of-origin experience similarity and marital quality ($r = .227$, $p = .058$, $k = 3$), suggesting that partners from similar family backgrounds may be more likely to have higher-quality marital relationships. Due to data limitations, family-of-origin experience similarity only measures similarity of experience without distinguishing between types of similar experiences. For example, similarity designations were given for situations in which both partners grew up with divorced parents and for situations in which both partners grew up with non-divorced parents, whereas dissimilarity designations were given for situations in which one partner grew up with divorced parents and the other partner grew up with non-divorced parents; therefore, participants who had divorced parents were aggregated with participants who had non-divorced parents because of experience similarity at the couple level, albeit dissimilar
experiences from others with whom they were grouped. Thus, it is not possible to understand the specific mechanisms behind the family-of-origin experience similarity factors. Consequently, the family-of-origin similarity factors should be interpreted broadly and with caution. For instance, because family-of-origin similarity factors were associated with decreased risk for marital distress, perhaps partners learn how to be in close intimate relationships through their family-of-origin experiences, and therefore feel more comfortable with a partner who comes from a similar family background and who has learned to be in close intimate relationships in similar ways.

Interestingly, personality similarity, one of the principal factors utilized by online matching services, was the weakest predictor of both marital quality and stability (see Table 1). Perhaps even more intriguing was the finding that positive personality trait similarity (i.e., agreeableness, autonomy, conscientiousness, emotional maturity, extraversion, flexibility, kindness, openness, organization, and self-esteem) was not statistically associated with either marital quality or marital instability, while negative personality trait similarity (i.e., anxiety, depression, immaturity, neuroticism, and possessiveness) was not significantly associated with marital instability but somewhat associated with increased marital quality ($r = .095$, $p < .001$, $k = 4$). However, because the prevalent method for measuring similarity is to take the absolute value of the difference between partners’ scores for the variable in question, couples with high similarity scores may be similarly high with regard to low agreeableness or similarly high with regard to high agreeableness. For instance, couples that have similar levels of neuroticism are compared to couples who have dissimilar levels of neuroticism. Thus,
couples in which both partners have high levels of neuroticism are combined with couples in which both partners have low levels of neuroticism.

Therefore, the effect sizes for similarity of personality are not easily interpretable. Perhaps spouses with similar negative personality traits demonstrate more empathy for each other, or are less judgmental of their partners (e.g., perhaps two anxious spouses accept and even appreciate how each also worries about things), or maybe spouses with similarly low levels of negative personality traits are more likely to have quality marriages. Perhaps key significant personality similarities lie in the similarity between specific personality traits among partners (e.g., depression, extroversion, self-esteem) that this study was unable to explore due to insufficient numbers of studies to allow for such specific analyses. It is also possible that personality complementarity, rather than similarity, is more strongly associated with marital outcomes (Shiota & Levenson, 2007).

The findings from this study clearly indicate that (a) the degree to which personality similarity predicts marital outcomes, (b) the degree to which specific personality trait similarities (e.g., anxiety, immaturity, agreeableness, extraversion) predict marital outcomes, and (c) the degree which similarly high or low levels on specific personality traits remain largely unknown.

**Moderators**

*Gender.* One of the most noteworthy findings is that no significant differences were identified between females and males for any of the premarital predictive factors, suggesting that men and women are more similar than different when it comes to premarital factors associated with marital outcomes. The lack of significant gender differences suggests that the protective factors and risk factors for marital distress and
dissolution are the same for both female and male partners. This finding of gender similarity is consistent with extant research (Canary, Emmers-Sommer, & Faulkner, 1997). In fact, a recent meta-analysis of 46 meta-analyses on various psychological variables found gender differences to be non-significant or negligible for 78% of variables for which gender differences are commonly presumed (Hyde, 2005).

_Ethnicity_. Ethnicity does not appear to moderate the predictive power of premarital couple factors for subsequent marital quality. Although some significant differences were identified between samples with dissimilar levels of ethnic diversity, the number of studies per moderator category was generally small. Therefore, no conclusive results about ethnicity as a moderating factor in predicting marital outcomes were reached.

_Length of marriage_. The length of marriage may moderate the association between premarital couple factors and subsequent marital quality and stability. A noteworthy finding is the apparent significant decrease in the marital quality predictive strength of premarital couple factors 6-10 years into marriage and its apparent significant increase during the 21-30 years into marriage. This finding may perhaps be partially explained by the _seven-year itch_ effect in which couples experience a decline in marital quality several years into marriage (Kovacs, 1983; Kurdek, 1999) and by the U-shaped curve theory of marital quality study in which posits that the parenting years are associated with a temporary decrease in marital quality several years in marriage (Glenn, 1990; recent contrary evidence suggests marital satisfaction declines throughout the course of marriage [Glann, 1998; VanLaningham, Johnson, & Amato, 2001]).
**Study design.** No significant differences between aggregated effect sizes from cross-sectional and longitudinal studies were identified for the combined premarital couple factors with either marital quality or stability. One possible interpretation of this finding is that retrospective self- and partner-report data from cross-sectional marital outcome studies appear to yield effect sizes that on average do not differ significantly in magnitude from self- and partner-report data from longitudinal marital outcome studies.

**Publication status.** Although the effect sizes of published studies for violence, premarital relationship stability, and family-of-origin experience similarity with marital quality were significantly larger than the effect size for unpublished studies, no statistical differences were identified for effect size magnitude between published and unpublished studies when all of the effect sizes in the current study were aggregated (i.e. the combined premarital couple factors; see Table 2). It is important to note that finding no statistical differences between published and unpublished effect sizes is inconsistent with the general publication bias toward larger effect sizes (Lipsey & Wilson, 2001), suggesting additional reliability for the results of this study as the aggregated effect sizes appear not to be overestimated due to publication bias.

**Limitations**

First and foremost, because meta-analytical results are derived from the included studies, meta-analytical results are only as valid and reliable as the included studies (Lipsey & Wilson, 2001). Methodological issues that affect the included studies will also affect the aggregated effect sizes.

One of the most pervasive limitations for this meta-analytic study is the small number of aggregated studies ($k$) for some of the effect sizes (particularly the marital
instability predictor effect sizes) and many of the moderator \( Q \) tests. There is no standard for determining effect-size reliability based on the \( k \) value beyond the general guideline that the larger the \( k \) value, the greater the confidence in the reliability of the associated aggregated effect sizes. Therefore, aggregated predictor variables and moderators with small \( k \) values in this study should be interpreted descriptively.

One of the most problematic limitations of meta-analysis is the loss of detail through aggregation. The broader the predictor variables constructs are, the greater the statistical power and reliability, yet the lower the utility of the results (e.g., the combined premarital couple factors aggregated in Table 2 are less meaningful and likely conceal the predictive power of component variables). For example, virtually all of the effect sizes aggregated as the positive couple interaction factors were positive associations with a notable exception: for males, the negative correlation between increased relationship-needs assertiveness and conflict as a predictor of marital quality (Kelly, Huston, & Cate, 1985). Although the increased conflict was likely a function of more disagreements as female partners voiced previously-unvoiced needs, when aggregated with the other studies to construct the positive couple interaction factors, the understanding, specifically for counter-intuitive effect sizes, is lost. Although efforts were made to balance the issues of specificity and statistical power, loss of specificity remains a major limitation in this study.

Two relevant methodological limitations specific to correlational meta-analysis include results that indicate association not causation between the variables of interest and uncontrolled confounding associations among the variables of interest. Although the effects of moderators can be explored in correlational meta-analysis, the moderators are
generally methodological (e.g., study design, year of publication, publication status, sample characteristics, study measures) and not between the variables of interest (e.g., between negative premarital communication, cohabitation, personality similarity) as would typically be conducted through multiple regression analysis. Consequently, each predictor-outcome effect size is calculated independently without controlling for relevant moderators.

An additional meta-analytical methodological limitation is that the analyses only weight the effects sizes according to sample size without also weighting the number of effect sizes averaged into one effect size for aggregation. For example, the aggregation for personality similarity as a predictor of marital instability contained 40 effect sizes from Busby (2009) representing 13 different personality similarities (i.e., anxiety, autonomy, depression, extroversion, flexibility, immaturity, kindness, organized, possessiveness, and self-esteem), 16 effect sizes from Holman et al. (1991) representing 4 different personality similarities (i.e., depression, emotional maturity, independency, and self-esteem), and 1 effect size from Jarvis (2006) representing only one personality similarity (i.e., conscientiousness). The software created mean effect sizes for each study, resulting in three effect sizes weighted solely on sample size without addressing the range of component predictors. In this specific example, upon aggregation, the Busby (2009) and Holman et al. (1991) studies yielded negative mean effect sizes ($r = -.017, -.058$ respectively) while the Jarvis (2006) study contributed a positive correlation ($r = .160$), resulting in an aggregated effect sized biased toward similarity in conscientiousness over the other personality similarities. A similar instance occurred with the aggregation for
personality similarity as a predictor of marital quality in which similarity of flexibility was disproportionately-weighted based on the number of included effect sizes per study.

A further methodological limitation consists of the over-representation of the two sets of raw data (i.e., RELATE-L, Busby, 2009; PREP-M, Holman et al., 1991) throughout the meta-analysis. Not only were effect sizes from these two sets of raw data included in almost every aggregation, it was very common that the two sets of raw data were the only two studies aggregated for factors predicting marital instability. An additional limitation is the characteristics of the two raw data samples. As previously reported, there was very little variability in the samples for several of the premarital predictor factors (e.g., coerced sex, premarital pregnancy, premarital sex, violence). Similarly, almost all of the participants were religious (91% for Busby, 2009; 97% for Holman et al., 1991) and the majority of the participants were members of The Church of Jesus Christ of Latter-day Saints (LDS; 69% for Busby, 2009; 77% for Holman et al., 1991); however, research suggests that LDS populations do not differ significantly from non-LDS populations on couple and family interaction variables (Heaton, Goodman, & Holman, 1994).

In addition, many of the studies did not contain outcome data far enough into marriage to provide accurate predictions of marital outcomes. For instance, research indicates that the average duration of first marriages that end in divorce is eight years (United States Census Bureau, 2007); although the average duration of marriage in this study was 8.8 years ($SD = 9.8$), the median duration of marriage for this study was only 5.2 years. Therefore, the instability effect sizes calculated in this study may not accurately predict divorce.
Finally, almost all of the data upon which the aggregated effect sizes are based were obtained through self-report measures. Of the 37 included studies, 36 of the studies collected self-report data (97%) and only 1 study collected third-party observational data (3%; i.e., Smith et al., 1990); however, three additional studies utilized partner observations (i.e., Busby, 2009; Holman et al., 1991; Kline et al., 2004), but the partner-perception effect sizes were averaged with self-report effect sizes during aggregation. Related meta-analytic research has found larger effect sizes (possibly over-estimated) from observational measures compared to self-report measures (Blanchard et al., 2009). Research also suggests that individuals with satisfying couple relationships and good mental health are less accurate at rating the self than are professionals, objective coders, or even recent acquaintances (John & Robins, 1994; Murray, Holms, & Griffin, 2003; Taylor & Brown, 1988). Furthermore, self-report measures may be more susceptible to participant selective attention and attributional biases (Heyman, 2001). Consequently, given that most of the effect sizes in this study (and most couple research) were based on self-report measures, the resulting aggregated effect sizes may be under-estimated and less reliable than if they had been based more substantively on observational measures.

Implications

*Research Implications*

Although this study provides additional insight to the premarital couple factors associated with marital quality and stability, it is, in large part, limited based on the available extant research. Therefore, the limitations of this study provide suggestions for future research. First and foremost, more high-quality research on premarital couple predictors of marital quality and stability is needed. Only 37 unique samples were
identified that met the relatively inclusive criteria for this study. Furthermore, each included study only addressed a narrow range of premarital predictors, resulting in fewer included effect sizes than might be supposed. Moreover, more research specifically on premarital couple predictors of marital stability is needed; of the 37 identified studies, only 13 evaluated marital stability as an outcome.

All of the premarital predictors of marital quality and stability explored in this study would benefit from additional research. Based on the number of included studies, the following premarital predictors have been understudied, and would particularly benefit from additional research: premarital violence, marriage readiness, courtship duration, premarital pregnancy, premarital sex, contextual similarity, family-of-origin experience similarity, and personality similarity. Furthermore, an increased understanding of how premarital couple factors are associated with marital outcomes will be clinically valuable.

As evidenced by the fact that only 35% of the studies identified for inclusion in this study were longitudinal, additional longitudinal research is needed to better understand premarital couple predictors of marital quality and stability. Specifically, more longitudinal research following couples further into marriage (e.g., middle-age marriage, elderly marriage) is needed, as well as more studies examining both quality and stability instead of one or the other which is the case for most of the extant longitudinal research.

More couple observational research is also needed, specifically for couple interaction factors as predictors of marital quality and stability. As previously indicated, 97% of the included studies utilized self-report measures and only 3% utilized third-party
observational measures. Similarly, more premarital partner perception (versus self-perception) research on subsequent marital outcomes is needed. Only 8% of the included studies included partner perceptions as predictors of marital outcomes. Recent research (Busby et al., 2001) suggests that partner perceptions may be more predictive of relationship outcomes for both self and partner than self-perceptions. Specifically, more partner perception research is need for couple interaction factors and similarity factors.

Although this study corroborated the predictive association between the quality of couple interactions and subsequent marital outcomes, the results of this study do not allow for the identification of the particular mechanisms behind the couple interactions (e.g., interpersonal skill implementation, intentions and motivations, romantic attachment). Thus, even though the results of this study indicate the presence of negative interactions as a risk factor for marital distress and the presence of positive interactions as a protective factor against marital distress, the specific mechanisms associated with the presence of positive and negative interactions remain unclear. The mechanisms behind couple interactions that affect marital outcome may be as straightforward as the knowledge and implementation of communication and problem-solving skills, or as complex as the intentions and motivations behind the interactions (Burleson & Denton, 1997; Carroll, 2006), the quality of romantic relationship attachment (Feeney, 1994; Heene, Buysse, & Oost, 2005), and skill implementation. A more clear understanding of the mechanisms behind negative and positive couple interactions would be a valuable contribution by future research.

The aggregation of family-of-origin experience similarity and personality similarity was somewhat problematic because it contained similarity of different factor
subtypes. Research with stratified subcategories of similarity and dissimilarity is needed for family-of-origin experience similarity and personality similarity. For example, stratified subcategories for family-of-origin experience similarity might include similarly close maternal relationships among partners, similarly distant maternal relationships among partners, and dissimilarly close maternal relationships among partners such as female partner with a close maternal relationship and male partner with a distant maternal relationship, and female partner with a distant maternal relationship and male partner with a close maternal relationship. An example of stratified subcategories for personality similarity between partners might include (a) similarly low levels of neuroticism, (b) similarly average levels of neuroticism, (c) similarly high levels of neuroticism, (d) and dissimilarly matched levels of neuroticism (i.e., one partner low and the other partner high, one partner low and the other partner average, one partner average and the other partner high). These types of stratified subcategories would allow for more powerful levels of interpretation in meta-analysis. For instance, in terms of clinical utility, it would be important to know if there is a difference between couples in which both partners have high levels of neuroticism and couples in which both partners have low levels of neuroticism and subsequent marital outcomes.

In addition, further research is essential to better understand the role of ethnicity and race in predicting marital outcomes. Because most of the included studies contained samples with participants representing multiple ethnicities, the utility of ethnicity moderator analyses was severely compromised. Consequently, how and the degree to which ethnicity moderates predictors of marital outcomes remains largely unknown; how and the degree to which specific ethnicities moderate predictors of marital outcomes is
virtually unknown. Future research on premarital predictors of marital outcomes with race-specific samples (e.g., exclusively African-American, exclusively Asian, exclusively Latino, exclusively Native American) will allow for meta-analytic findings that provide more specific and useful information about the function of ethnicity in predicting marital outcomes.

Perhaps one of the most potentially-valuable foci for future research is determining whether or not premarital protective factors and risk factors are cumulative. If premarital protective factors and risk factors were determined to be additive in nature, future research might also be able to develop a valid and reliable marital aptitude risk profile.

Clinical Implications

The results of this study may potentially improve the quality of marriages via (a) augmenting the efficacy of premarital education and counseling by focusing on the most salient predictors of marital outcomes and (b) assisting couples in their decision to marry both directly through dissemination of study results and indirectly by informing revisions of premarital assessment questionnaires.

Premarital preparation programs. Premarital preparation programs can be beneficial through (a) fostering deliberation about the decision to marry, (b) sending a message that marriage is important, (c) helping couples become aware of support services should they need help after marriage, and (d) lowering the risks for marital distress and/or dissolution (Stanley, 2001). Premarital preparation program efficacy may be increased by emphasizing the marital distress and dissolution protective and risk factors identified in this study. In addition to recommending that premarital educators simply inform people
of the protective and risk factors identified by this study, the following are suggestions for incorporating the results from this study into premarital prevention programs.

It is already widely-accepted that interpersonal skills training (e.g., expressiveness, empathy, listening, conflict management, problem-solving) is an essential and effective aspect of premarital counseling (Carroll & Doherty, 2003; Holman, 2001; Sayers et al., 1998; Stahmann & Salts, 1993). The results of this study reinforce the important protective nature of positive interaction patterns and the risks associated with negative interaction patterns. Based on the results of this study, it may be inferred that improving a couple’s communication and conflict management skills provides them with the tools to manage other issues and differences. Furthermore, it may be important to assess the couple for negative premarital interaction factors (i.e., conflict, contempt-defensiveness, criticism, demand-withdraw, destructive process, disengagement, flooding, negativity, negative interactions, post-conflict distress, stonewalling, and verbal aggression), and warn them that these negative interactions compose one of the largest overall risk factors for marital distress and dissolution. Premarital couples who have experience with successfully managing conflict are more likely to develop conflict management skills that will help them have a satisfying adjustment to married life (Stahmann & Hiebert, 1997). Therefore, it is strongly recommended that premarital preparation programs emphasize interpersonal skills training (e.g., Guerney, 1987; Markman, Stanley, & Blumberg, 2001; Miller, Miller, Nunnally, & Wackman, 1991), reducing emotional reactivity while promoting acceptance and tolerance (Gottman, 1999; Gottman & Silver 1999; Jacobson & Christensen, 1996; Jacobson, Christensen, Prince,
Cordova, & Eldridge, 2000), and strengthening romantic attachment patterns through emotionally focused therapy processes (Johnson, 2004).

Because premarital relationship quality and premarital relationship stability were both identified as protective factors against both marital distress and marital dissolution, exploring the couple’s relationship history with regard to quality and stability may be a helpful method for identifying relevant strengths and challenges. For example, the degree to which the partners are satisfied with their premarital relationship and its relative stability may be good indicators of how happy they will be after marriage. Similarly, some related topics premarital educators might consider exploring include how much the partners love each other, the intensity of problems they have faced as a couple, and the degree to which the partners feel supported by one another. In addition, exploring the partners’ relationship commitment and history of break-ups would also identify potential protective and/or risk factors. Stahmann and Hiebert (1997) provide a list of relevant relationship history questions.

Because family-of-origin experience similarity was also identified as a protective factor against marital distress, genogram work highlighting family-of-origin similarities as relationship strengths and family-of-origin differences as potential challenges that may play out in their relationship may be beneficial. As the adage suggests, when you marry someone, you marry their family, too. Important family-of-origin similarities to identify and discuss include birth order, family discipline styles (i.e., authoritative, authoritarian, permissive), family system reorganizations around crisis and transitional periods (e.g., launching, marriage, birth, divorce, retirement, death), and degrees of differentiation from family-of-origin. In addition, the process observed during the creation of the genogram
(e.g., how partners talk about key relatives, who they avoid, who they are excited about, how they react to what the other person says, interaction patterns like monopolize/abdicate, interaction styles like extrovert/introvert) provides helpful information about the couple interaction patterns.

Because attitude and value similarity was identified as a protective factor against marital distress, premarital assessment questionnaires (e.g., FOCCUS, PREPARE, RELATE) may be employed to identify and discuss attitude and value similarities and dissimilarities. Because religiosity similarity was identified as a protective factor against both marital distress and dissolution, discussing the premarital partners’ religious orientation, personal religiosity, religious beliefs, the role that religion currently plays in their lives and the role that they want it to play in their lives once they are married, and then highlighting similarities and differences may also be helpful.

Because premarital violence was identified as a risk factor for marital distress, the use of relationship violence assessment questionnaires such as the Conflict Tactics Scale–Revised (CTS–2; Straus, Hamby, Boney-McCoy, & Sugarman, 1996) is recommended. The use of relationship violence assessment questionnaires is especially important given that as many as 25% of premarital couples report premarital violence (Sellers & Bromley, 1996). Because premarital cohabitation was identified as a risk factor for marital dissolution and premarital sex was identified as a risk factor for both marital distress and dissolution, it would be important to inform partners of these findings and discuss their thoughts about these findings with them.

Because premarital cohabitation was identified as a risk factor for marital dissolution, premarital educators may consider providing psychoeducation about the risks
of cohabitation. Finally, because no significant gender differences were found with regard to the protective and risk factors for marital distress and dissolution, premarital preparation programs may be simplified and streamlined.

Premarital assessment questionnaires. The results of this study may also be helpful in informing revisions of premarital assessment questionnaires (e.g., FOCCUS, PREPARE, RELATE) to more accurately target the strongest protective and risk factors for marital distress and dissolution (see Appendix D for a summary).

Conclusion

Premarital red flags and green lights for marital quality and stability appear to exist and matter. Couple interaction factors and couple relationship factors were identified as stronger predictors of marital outcomes than couple similarity factors. The predictive strength of personality similarity factors for marital outcomes is largely unknown. Additional research is needed to provide increased meta-analytic clarity and reliability for premarital couple predictors of subsequent marital quality and stability.
REFERENCES

Studies marked with an asterisk (*) indicate studies included in the meta-analysis.


the Kansas Marital Satisfaction Scale. *Journal of Marriage and the Family, 48*, 381-387.


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Williams, L. (2003). Communication training, marriage enrichment, and premarital
counseling. In L. L. Hecker & J. L. Wetchler (Eds.), *An introduction to marriage
and family therapy* (pp. 337-368). New York: Haworth.

*Woods, L. N., & Emery, R. E. (2002). The cohabitation effect on divorce: Causation of
**Figure 1. Premarital Factors Associated with Marital Relationship Outcomes**

### I. Familial Factors

#### Family of Origin
- Level of family cohesion and unity
  - Family conflict
  - Family expressiveness
- Level of individuation from family (enmeshed/disengaged)
- Quality of parents’ marriage
  - Level of satisfaction/happiness
  - Level of stability/divorce
- Quality of family communication (volatile/avoidant/validating/hostile)
- Quality of parents’ communication and conflict management
- Parents’ mental health
- Unresolved family-of-origin issues
  - Having come to terms or worked through family-of-origin issues
- Family Structure
  - Father’s family structure
  - Mother’s family structure
  - Parental divorce is related to lower levels of adult psychological adjustment such as emotional adjustment, anxiety and life satisfaction

#### Parent-Child Relationship Quality (Healthy/Abusive)
- Attachment theory
- Styles of parenting
  - Authoritative
  - Authoritarian
  - Permissive
- Quality of parenting
  - Level of caring
  - Over-protection
  - Neglect
  - Emotional/psychological abuse
  - Physical abuse
  - Sexual abuse
  - Parental substance abuse

#### Sibling Relationships
- Attachment to siblings

#### Family-of-origin Sociodemographic Background
- Parents’ education
- Parents’ occupation
- Parents’ social class
- Parent’s Socioeconomic status
- Parents’ income
- Parents’ occupation
- Birth order
- Number of siblings
- Parent’s religious orientation

#### Childhood Stressor Events

#### Childhood Happiness
Figure 1. Premarital Factors Associated with Marital Relationship Outcomes Continued

### II. Individual Factors

#### Personality Traits
- Neuroticism
  - Anger
  - Aggressiveness
  - Impulsivity
  - Irritability
  - Self-consciousness
  - Self-confidence
  - Anxiety
  - Depression
  - Self-esteem
  - Emotional stability (ability to regulate negative affect (i.e., low neuroticism))
  - Emotional dependence
- Sociability
  - extroversion
  - introversion
- Companionable
- Kindness
- Nurturance

#### Attitudes
- Values and attitudes about marriage
- Flexible and realistic relationship expectations
- Dysfunctional beliefs
- Perception of attractiveness

#### Skills
- Ability to cope with stress
- Interpersonal skills
- Assertiveness
- Flexibility

#### Emotional Health
- History of traumatic events (i.e., post-traumatic stress disorder)
- Drug and alcohol abuse
- Secure attachment style (i.e., low anxiety about abandonment and comfort with emotional closeness)
Figure 1. Premarital Factors Associated with Marital Relationship Outcomes Continued

### III. Contextual Factors

<table>
<thead>
<tr>
<th>Social Network Relationship Approval</th>
<th>Sociocultural Characteristics</th>
</tr>
</thead>
<tbody>
<tr>
<td>(relationship approval from important relationships)</td>
<td>(primarily at the time of marriage)</td>
</tr>
<tr>
<td>• Parents</td>
<td>• Age at marriage</td>
</tr>
<tr>
<td>• Siblings</td>
<td>• Education</td>
</tr>
<tr>
<td>• Friends, acquaintances, co-workers</td>
<td>• Income/employment</td>
</tr>
<tr>
<td>• Quality of in-law relationships</td>
<td>• Socioeconomic status</td>
</tr>
</tbody>
</table>

### Pressures to Marry

- Internal pressure to marry
  - I should be married
- External pressure to marry
  - Parents are worried because their child is not married yet
  - Friends are getting married

### Life Events or Stressors

(developmental transitions and acute and chronic circumstances that effect either one or both partners)

- Transition to parenthood
- Relocation
- Major illness
- Unemployment
Figure 1. Premarital Factors Associated with Marital Relationship Outcomes Continued

IV. Couple Factors

Similarity of Attitudes and Values
- Religion
- Religious beliefs
- Church attendance
- Morals
- Importance of marriage
- Importance of family
- Sexual attitudes
- Family planning
- Values
- Number of children desired
- Gender role expectations
- Career
- Finances and material wealth
- Autonomy
- Couple boundaries (e.g., excessive intrusion by family)

Similarity of Backgrounds
- Race (interracial relationships)
- Religion
- Socioeconomic Status
- Education Level
- Intelligence
- Age

Similarity of Personalities
- Perceived similarity on individual personality characteristics

Relationship History
- Length of relationship
- Degree of acquaintanceship
  - Depth of knowledge
  - Breath of experience
- Cohabitation
- Premarital sex
- Pregnancy

Quality of Couple Communication and Interaction
- Interactional patterns
- How differences are managed/resolved
  - Conflict management skills
  - Problem-solving skills
- Positive or effective communication
  - Self disclosure
  - Accuracy of nonverbal communication
  - Frequency of successful communication
  - Understanding between spouses
  - Empathy
  - Sensitivity
  - Consensus
  - Communication style (e.g., volatile, hostile, validating, avoidant)
- Attributions of relationship problems to partner characteristics
- Perception of other approval
- Sense of “We-ness”
- Working together to overcome
- Taking personal responsibility to improve the relationship (e.g., monitoring, attending to the relationship, having goals for the relationship, self-initiative)
- Presence/severity of violence or abuse
Table 1. Summary of Premarital Couple Factors as Predictors of Marital Relationship Quality and Instability

<table>
<thead>
<tr>
<th>Aggregated Predictor</th>
<th>Marital Relationship Quality</th>
<th>Marital Relationship Instability</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>k</td>
<td>r</td>
</tr>
<tr>
<td>Premarital Couple Factors</td>
<td>33</td>
<td>.203***</td>
</tr>
<tr>
<td>Couple Interaction Factors</td>
<td>9</td>
<td>.248***</td>
</tr>
<tr>
<td>Negative Interaction Factors</td>
<td>8</td>
<td>-.304***</td>
</tr>
<tr>
<td>Positive Interaction Factors</td>
<td>8</td>
<td>.178***</td>
</tr>
<tr>
<td>Violence Factors</td>
<td>3</td>
<td>-.188*</td>
</tr>
<tr>
<td>Relationship Factors</td>
<td>15</td>
<td>.203***</td>
</tr>
<tr>
<td>Marriage Readiness Factors</td>
<td>1</td>
<td>.209**</td>
</tr>
<tr>
<td>Quality Factors</td>
<td>6</td>
<td>.257***</td>
</tr>
<tr>
<td>Stability Factors</td>
<td>6</td>
<td>.207***</td>
</tr>
<tr>
<td>Relationship History Factors</td>
<td>10</td>
<td>.174***</td>
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<tr>
<td>Premarital Cohabitation</td>
<td>7</td>
<td>-.098</td>
</tr>
<tr>
<td>Courtship Duration</td>
<td>2</td>
<td>.218</td>
</tr>
<tr>
<td>Premarital Pregnancy</td>
<td>3</td>
<td>-.068</td>
</tr>
<tr>
<td>Premarital Sex</td>
<td>1</td>
<td>-.291***</td>
</tr>
<tr>
<td>Similarity Factors</td>
<td>19</td>
<td>.165***</td>
</tr>
<tr>
<td>Attitude/Value Factors</td>
<td>9</td>
<td>.186***</td>
</tr>
<tr>
<td>Context Factors</td>
<td>2</td>
<td>.056</td>
</tr>
<tr>
<td>Family-of-Origin Experience Factors</td>
<td>3</td>
<td>.227**</td>
</tr>
<tr>
<td>Personality Factors</td>
<td>5</td>
<td>.144*</td>
</tr>
<tr>
<td>Negative Traits</td>
<td>4</td>
<td>.095***</td>
</tr>
<tr>
<td>Positive Traits</td>
<td>5</td>
<td>-.031</td>
</tr>
<tr>
<td>Religiosity Factors</td>
<td>11</td>
<td>.126***</td>
</tr>
</tbody>
</table>

Note. All effect estimates are derived from random effect estimate models to control for heterogeneity between aggregated variables. The k is the number of studies included in the analysis and r is the zero-order correlation effect size. Lower and upper limits are based on a 95% confidence level. The rank is the rank ordering of the aggregated effect sizes from largest to smallest absolute value.

*Effect size absolute values were utilized to more precisely aggregate negative and positive effect sizes; therefore the aggregated results indicate effect size magnitude but not effect size direction. The aggregated effect sizes based on absolute values were not ranked.

aThe similarity of family-of-origin experience factors as predictors of marital quality were approximately statistically significant (i.e., p = .058).

*p < .050. **p < .010. ***p < .001.
Table 2. Combined Premarital Couple Factors as Predictors of Marital Relationship Quality and Instability by Moderator Variables

<table>
<thead>
<tr>
<th>Aggregated Predictor</th>
<th>Predictor Components</th>
<th>Moderator</th>
<th>Marital Relationship Quality</th>
<th>Marital Relationship Instability</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td>k</td>
<td>r</td>
</tr>
<tr>
<td>Combined Premarital Variables</td>
<td>Coupled Components</td>
<td>Total</td>
<td>33</td>
<td>.203***</td>
</tr>
<tr>
<td></td>
<td>Gender</td>
<td>Female</td>
<td>15</td>
<td>.237***</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Male</td>
<td>14</td>
<td>.247***</td>
</tr>
<tr>
<td></td>
<td>Ethnic Diversity</td>
<td>More than 33%</td>
<td>5</td>
<td>.248***</td>
</tr>
<tr>
<td></td>
<td>Similarity Factors</td>
<td>10% to 33%</td>
<td>8</td>
<td>.214***</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Less than 10%</td>
<td>11</td>
<td>.153***</td>
</tr>
<tr>
<td></td>
<td>Length of marriage</td>
<td>1 year</td>
<td>6</td>
<td>.214***</td>
</tr>
<tr>
<td></td>
<td></td>
<td>2 years</td>
<td>3</td>
<td>.272***</td>
</tr>
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Note. Effect size absolute values were utilized to more precisely aggregate negative and positive effect sizes; therefore the aggregated results indicate effect size magnitude but not effect size direction. All effect estimates are derived from random effect estimate models to control for heterogeneity between aggregated variables. The k is the number of studies included in the analysis, r is the zero-order correlation effect size, and Q significance level is the level of significance from the test for significant differences between moderator categories, with Q significance level < .05 indicating statistically-significant differences. Significant Q test levels are in bold. Lower and upper lower limits are based on a 95% confidence level. Ethnic diversity is reported as the percentage of non-White participants.

*p < .050. **p < .010. ***p < .001.
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*Note: Significance levels are indicated as follows: *p < .05, **p < .01, ***p < .001.
Table 3. Couple Interaction Factors as Predictors of Marital Relationship Quality and Instability by Moderator Variables

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Table 3. *Couple Interaction Factors as Predictors of Marital Relationship Quality and Instability by Moderator Variables*

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*Note. All effect estimates are derived from random effect estimate models to control for heterogeneity between aggregated variables. The (-) indicates a predictor variable that was recoded by changing the direction of the associated effect sizes, k is the number of studies included in the analysis, r is the zero-order correlation effect size, and Q significance level is the level of significance from the test for significant differences between moderator categories, with Q significance level < .05 indicating statistically-significant differences. Significant Q test levels are in bold. Lower and upper lower limits are based on a 95% confidence level. Ethnic diversity is reported as the percentage of non-White participants.

*Effect size absolute values were utilized to more precisely aggregate negative and positive effect sizes; therefore the aggregated results indicate effect size magnitude but not effect size direction.

*p < .050. **p < .010. ***p < .001.
Table 4. Premarital Relationship Factors as Predictors of Marital Relationship Quality and Instability by Moderator Variables

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Table 4. Premarital Relationship Factors as Predictors of Marital Relationship Quality and Instability by Moderator Variables

| Aggregated Predictor | Predictor Components | Moderator | Marital Relationship Quality | | | Marital Relationship Instability | | |
|---------------------|----------------------|-----------|------------------------------|--------------|------------|------------------------------|--------------|
| Study Design        |                      |           | k   r  Lower  Upper Q Sig. Level | k   r  Lower  Upper Q Sig. Level |           |               |               |               |
| Cross-sectional     |                      |           | 3   .318*** .230 .401 .007      | 2   -  .234 .401 .007      |           |               |               |               |
| Longitudinal        |                      |           | 3   .144** .051 .234            | 2   -  .234 .401 .007      |           |               |               |               |
| Publication Status  |                      |           | 4   .296*** .219 .368 .003      | 2   -  .234 .401 .007      |           |               |               |               |
| Published           |                      |           | 4   .296*** .219 .368 .003      | 2   -  .234 .401 .007      |           |               |               |               |
| Unpublished         |                      |           | 1   .165** .061 .266            | 2   -  .234 .401 .007      |           |               |               |               |
| Mixed               |                      |           | 1   .058  -.064 .178            | 2   -  .234 .401 .007      |           |               |               |               |
| Combined Relationship History Variables: | | | | | | | | |
| All Relationship History Variables: | | | | | | | | |
| Cohabitation        |                      |           | 5   .178*** .069 .283 .987      | 6   .176** .060 .288       |           |               |               |               |
| Courtship duration  |                      |           | 4   -.177** .078 .273           | 4   .106* .018 .192       |           |               |               |               |
| Pre-marital pregnancy |                  |           | More than 33% | 1   .105** .034 .176 .249      | 2   .070*** .042 .098      |           |               |               |               |
| Pre-marital sex     |                      |           | 4   .207*** .109 .301           | 2   .241*** .203 .279      |           |               |               |               |
| Ethnic Diversity    |                      |           | 4   .148*** .092 .203           | 4   .147* .024 .266       |           |               |               |               |
| More than 10%       |                      |           | .213*** .057 .337               | 3   .154  -.009 .309       |           |               |               |               |
| Less than 10%       |                      |           | .213*** .057 .337               | 3   .154  -.009 .309       |           |               |               |               |
| Length of marriage  |                      |           | 6-10 years | 3   .103*** .059 .146              | 1   .200*** .088 .307      |           |               |               |               |
| 21-30 years        |                      |           | 2   .254** .077 .416            | 2   .283*** .223 .340      |           |               |               |               |
| Study Design        |                      |           | 7   .166*** .106 .224           | 8   .188*** .106 .268      |           |               |               |               |
| Cross-sectional     |                      |           | 3   .201** .057 .337            | 3   .154  -.009 .309       |           |               |               |               |
| Longitudinal        |                      |           | 3   .201** .057 .337            | 3   .154  -.009 .309       |           |               |               |               |
| Publication Status  |                      |           | 8   .171*** .115 .225           | 9   .188*** .107 .266      |           |               |               |               |
| Published           |                      |           | 2   .189  -.015 .377            | 2   .153  -.033 .329       |           |               |               |               |
| Unpublished         |                      |           | 2   .189  -.015 .377            | 2   .153  -.033 .329       |           |               |               |               |
Table 4. Premarital Relationship Factors as Predictors of Marital Relationship Quality and Instability by Moderator Variables

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<tr>
<th>Aggregated Predictor</th>
<th>Predictor Components</th>
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<th>Marital Relationship Instability</th>
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Note: *p < .05, **p < .01, ***p < .001.
Table 4. Premarital Relationship Factors as Predictors of Marital Relationship Quality and Instability by Moderator Variables

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<tr>
<th>Aggregated Predictor</th>
<th>Predictor Components</th>
<th>Marital Relationship Quality</th>
<th>Marital Relationship Instability</th>
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Table 4. Premarital Relationship Factors as Predictors of Marital Relationship Quality and Instability by Moderator Variables

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Note. All effect estimates are derived from random effect estimate models to control for heterogeneity between aggregated variables. The (-) indicates a predictor variable that was recoded by changing the direction of the associated effect sizes, $k$ is the number of studies included in the analysis, $r$ is the zero-order correlation effect size, and $Q$ significance level is the level of significance from the test for significant differences between moderator categories, with $Q$ significance level < .05 indicating statistically-significant differences. Significant $Q$ test levels are in bold. Lower and upper lower limits are based on a 95% confidence level. Ethnic diversity is reported as the percentage of non-White participants.

*Effect size absolute values were utilized to more precisely aggregate negative and positive effect sizes; therefore the aggregated results indicate effect size magnitude but not effect size direction.

* $p < .050$. ** $p < .010$. *** $p < .001$. 

*88*
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<tr>
<th><strong>Aggregated Predictor</strong></th>
<th><strong>Predictor Components</strong></th>
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<th><strong>Marital Relationship Quality</strong></th>
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Table 5. Premarital Similarity Factors as Predictors of Marital Relationship Quality and Instability by Moderator Variables

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Table 5. Premarital Similarity Factors as Predictors of Marital Relationship Quality and Instability by Moderator Variables

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<th>Marital Relationship Instability</th>
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Note. All effect estimates are derived from random effect estimate models to control for heterogeneity between aggregated variables. The (-) indicates a predictor variable that was recoded by changing the direction of the associated effect sizes, k is the number of studies included in the analysis, r is the zero-order correlation effect size, and Q significance level is the level of significance from the test for significant differences between moderator categories, with Q significance level < .05 indicating statistically-significant differences. Significant Q test levels are in bold. Lower and upper lower limits are based on a 95% confidence level. Ethnic diversity is reported as the percentage of non-White participants.

Effect size absolute values were utilized to more precisely aggregate negative and positive effect sizes; therefore the aggregated results indicate effect size magnitude but not effect size direction.

*p < .050. **p < .010. ***p < .001.
APPENDIX A

STUDY INCLUSIONARY CRITERIA

Article Title: ________________________________________________________________

Year of Publication: __________________________

Author(s): ________________________________________________________________

Predictor Variable: ______________________________________________________

Outcome Variable: ______________________________________________________

Line Identification # for CMA: __________________________________

☐ The participants in the extant study must have been married after 1969 (the sexual revolution changed relationships in the 70s; so pre-1970 relationships may vary significantly from post-1970 relationships)

☐ The outcome variable(s) of interest must measure some kind of marital relationship outcome (e.g., quality: adjustment, affection, attachment, communication, conflict, discord, disagreements, dissatisfaction, intimacy, love, satisfaction, support, and warmth; instability: commitment, divorce, regret, separation, success, thoughts of leaving)

☐ The predictor variable(s) of interest must be premarital in nature (postmarital data collection of retrospective factors [e.g., family of origin] or prospective factors that have been shown to be stable over time [e.g., race, personality characteristics] are permissible)

☐ The data included may either be obtained through self-report or third-party observation

☐ The results must be codeable. The authors must report at least one of the following:
  o $r$ (plus direction) and $n$
  o $r$ (plus direction) and $SE$
  o $r$ (plus direction) and variance
  o Fisher’s $Z$ (plus direction) and $n$
  o Fisher’s $Z$ (plus direction) and $SE$
  o Fisher’s $Z$ (plus direction) and variance
  o $r$ (plus direction) and $t$-value
  o $t$-value, $n$, and direction of correlation
  o $p$-value, tails (the # of tails – 1 or 2), and $n$
  o Log odds ratio and $SE$
  o Odds ratio, lower limit, upper limit, and confidence level
  o $\beta$ (plus direction) and $n$ ($\beta$ must be between +0.50 and -0.50)
  o $\beta$ (plus direction) and $SE$ ($\beta$ must be between +0.50 and -0.50)
  o $\beta$ (plus direction) and variance ($\beta$ must be between +0.50 and -0.50)
APPENDIX B
PREMARITAL PREDICTORS OF MARITAL QUALITY AND STABILITY
META-ANALYSIS CODEBOOK

STUDY IDENTIFICATION & DESCRIPTIVE INFORMATION

1) Study Name: 1st Author’s last name, Year (e.g., “Anderson, 2003”)
   1. Use lowercase letters to distinguish cases (e.g., “Anderson, 2003a,” “Anderson, 2003b”) (i.e., all first study within a report has an “a” after the number; all subsequent studies from a given report share the same number and are lettered in alphabetical order)

2) Gender
   1. Couple (If data is collected on both members of a couple; generally these results will be aggregated)
   2. Individual (only 1 member of the couple is in the sample)
   3. Female (including situations in which females share perceptions about their spouses, but no data obtained directly from the spouses were analyzed; if the IV is male and the DV is female)
   4. Male (same as female for opposite gender)

3) Comparison = IV
   1. Gender: If the results are not reported by gender and there is a coefficient for gender, add a line for gender as the comparison variable (male = 0 & female = 1; if female = 0 & male = 1, change the sign on the coefficient)

4) Outcome = DV

5) Data Format (select one of the following in the tabs across the bottom of the spreadsheet)
   1. $r$ (plus direction) and $n$
   2. $r$ (plus direction) and SE
   3. $r$ (plus direction) and variance (variance = standard deviation squared)
   4. Fisher’s $Z$ (plus direction) and $n$
   5. Fisher’s $Z$ (plus direction) and SE
   6. Fisher’s $Z$ (plus direction) and variance
   7. $r$ (plus direction) and $t$-value
   8. $t$-value, $n$, and direction of correlation
   9. $p$-value, tails (the # of tails – 1 or 2), and $n$
   10. Log odds ratio and SE
   11. Odds ratio, lower limit, upper limit, and confidence level

6) Enter the requested statistical information
7) The yellow columns are calculation columns only

8) Coder Team: ____________________________

9) Date coded: _____________________________ (MM/YYYY)

10) Bibliographic reference in APA format

11) Study Title

12) Authors

13) First author’s email address or telephone number

14) Year Published (year completed for unpublished studies)

15) Year data were collected (if data were collected for more than one year, enter the midpoint)
   1. Report year #
   2. 99—Not reported

16) Decade (the year of data collection is preferred over the year of publication and/or completion)
   1. 1970s
   2. 1980s
   3. 1990s
   4. 2000s
   5. Not reported

17) Was data collected more than 10 years prior to publication date?
   1. Yes
   2. No
   3. Unknown

18) Type of Publication
   1. Journal Article
   2. Book or Chapter
   3. Doctoral Dissertation – reference #: 
   4. Master’s Thesis – reference #: 
   5. Raw Data
   6. Other

19) Publication
   1. Published
   2. Unpublished
20) Study Design
   1. Longitudinal
   2. Cross-Sectional

21) Total Number of units of analysis (individuals or couples) who started the study and completed the study (i.e., the sample size).
   1. Enter #

22) Rate of Attrition (%) for entire sample __________
   1. Enter #
   2. NA – not longitudinal = 99

SUBJECTS

23) Unit of Analysis
   1. Couple (data from both spouses were analyzed together)
   2. Individual (only 1 member of the couple is in the sample)
   3. Female
   4. Male
   5. Parent-child dyad (data from parents and children were analyzed together)

24) Did the study report results for men and women separately?
   1. Yes
   2. No
   3. Unknown

25) Participant Gender
   1. Female Majority (over 67%)
   2. Male Majority (over 67%)
   3. Female = Male (roughly equal numbers)
   4. Female Only
   5. Male Only
   6. Unknown

26) (Premarital/Time 1) Participant’s premarital relationship status (only code #4 if more than 20% of the participants are from a second group)
   1. Dating
   2. Cohabitation
   3. Engaged
   4. Sample included more than one of these groups
   5. N/A (e.g., premarital data was collected retrospectively)
   6. Married, IV stable over time
   7. Unknown
27) (Premarital/Time 1) Average time into relationship at premarital data collection in months (i.e., on average, how long the participants had been in their relationship at the time of data collection)
   1. Enter 
   2. Not applicable (e.g., cross-sectional) = 98
   3. Not reported = 99

28) (Postmarital/Time 2) Participants’ Marital Status (only code #3 or #4 if more than 20% of the participants are from a second group)
   1. Married (first marriage)
   2. Remarried (second and/or more marriage)
   3. Married and Remarried
   4. Married (number of marriage unknown)
   5. Mixed (married, divorced, or separated)
   6. Unknown

29) (Postmarital/Time 2) Average length of marriage at data collection in months
   1. Enter 
   2. Not applicable = 98
   3. Not reported = 99

30) Condensed length of marriage in years
   1. 1 year
   2. 2 years
   3. 3 years
   4. 4 – 5 years
   5. 6 – 10 years
   6. 11 – 20 years
   7. 21 – 30 years
   8. 31 – 40 years
   9. Not reported

31) Average length of time that elapsed between premarital and postmarital data collection in months
   1. Enter 
   2. Not applicable (e.g., cross-sectional) = 98
   3. Not reported = 99

32) Average Age of Male Participants in years at postmarital
   1. Enter 
   2. Not applicable = 98
   3. Not reported = 99
33) Average Age of Female Participants in years at postmarital
   1. Enter #
   2. Not applicable = 98
   3. Not reported = 99

34) Was this an American sample?
   1. Yes
   2. No (indicate nationality)
   3. Unknown

35) Was the Ethnicity of Participants explicitly reported?
   1. Yes
   2. No

36) Ethnicity of Participants (“diversity” = the reported or inferred % of sample participants of non-White/non-European ancestry)
   1. Virtually no diversity (less than 10% of sample)
   2. Some diversity (10-25% of sample)
   3. Sufficient diversity (26-33% of sample) – representative of national population
   4. Significant diversity (more than 33% of sample)
   5. Predominant group non-European
   6. Not reported

37) Ethnicity Condensed
   1. Virtually no diversity (less than 10%)
   2. Some diversity (10-33%)
   3. Significantly or Predominantly Non-European
   4. Not reported

38) SES of Participants
   1. Primarily Lower Class
   2. Primarily Middle Class
   3. Primarily Upper Class
   4. Mixed Middle and Lower Class
   5. Mixed Upper and Middle Class
   6. Not Reported

39) Males’ Average Education
   1. Less than High School
   2. Some High School
   3. High School Degree
   4. Some College
   5. College Graduate
   6. Post-Graduate Education
   7. Not Reported
   8. Not Applicable
40) Females’ Average Education
   1. Less than High School
   2. Some High School
   3. High School Degree
   4. Some College
   5. College Graduates
   6. Post Graduate Education
   7. Not reported
   8. Not applicable

41) Sample Recruitment
   1. Church
   2. Therapy Clinic
   3. Health-Care
   4. High School
   5. College Class
   6. Community (YMCA, library, mother’s group, shelter)
   7. Military
   8. National Database
   9. Other
   10. None

42) Sample/Data Source: ______________________

43) Is this a unique sample (i.e., is this a unique subsample from a national data set?)

________________________________________________________________________

METHODS

44) Timing of coded data (by study level)
   1. Premarital and Postmarital
   2. Premarital and Multiple Postmarital
   3. Multiple Premarital and Postmarital
   4. Multiple Premarital and Multiple Postmarital
   5. Postmarital only with Retrospective Premarital (e.g., cross-sectional)
   6. Postmarital only w/ IV shown to be stable over time
   7. Not Reported

45) Independent/Predictor Variable (IV)

46) With which of the four contexts is the IV associated?
   1. Couple
   2. Cultural/Contextual
   3. Familial
   4. Individual
47) IV Measure/Instrument

48) Does the IV measure/instrument have sound psychometric properties?
   1. Yes (circle all which apply: alpha coefficient of at least 0.7, standard measure, face/content validity)
   2. No
   3. Unknown

49) Alpha for IV Measure (e.g., Cronbach’s Alpha)
   1. Enter alpha
   2. Not reported = 99

50) Was the IV measured by a participant self-report measure(s)?
   1. Yes
   2. No
   3. Unknown

51) If the IV was measured through self-report, was it
   1. Both female and male reporting on themselves (and not on their partner)
   2. Female reporting on herself only
   3. Male reporting on himself only
   4. Both female and male reporting on their partner (and not on themselves)
   5. Female reporting on her partner only (and not on herself)
   6. Male reporting on his partner only (and not on himself)
   7. Female perspective reporting on both herself and her partner
   8. Male perspective reporting on both himself and his partner
   9. Both female and male reporting on themselves as well as on their partner
   10. Parents reporting on themselves
   11. Parents and Children reporting on themselves and each other
   12. Unknown
   13. Not Applicable

52) IV Data Collection
   1. Prospective (current) self-report
   2. Retrospective (past) self-report
   3. Both prospective and retrospective
   4. Third-party observation

53) Construction of the IV
   1. Single-item measure (one question)
   2. Multiple-item measure
   3. Unknown
   4. Not Applicable
54) Was the IV controlled for in the contexts of other IVs
   1. Yes
   2. No
   3. Unknown

55) Dependent/Outcome Variable (DV)

56) DV Measure/Instrument

57) Does the DV measure/instrument have sound psychometric properties (reliability and validity)?
   1. Yes (standard measure, alpha coefficient of at least 0.7, or face/content validity reported)
   2. No
   3. Unknown

58) Alpha for DV Measure (e.g., Cronbach’s Alpha)
   1. Enter alpha
   2. Not reported = 99

59) Was the DV measured by a participant self-report measure(s)?
   1. Yes
   2. No
   3. Both participant self-report and other report
   4. Unknown

60) If the DV was measured through self-report, was it
   1. Both female and male reporting on themselves (and not on their partner)
   2. Female reporting on herself only
   3. Male reporting on himself only
   4. Both female and male reporting on their partner (and not on themselves)
   5. Female reporting on her partner only (and not on herself)
   6. Male reporting on his partner only (and not on himself)
   7. Female perspective reporting on both herself and her partner
   8. Male perspective reporting on both himself and his partner
   9. Both female and male reporting on themselves as well as on their partner
   10. Unknown
   11. Not Applicable

61) DV Data Collection
   1. Prospective (current) self-report
   2. Retrospective (past) self-report
   3. Third-party observation
62) Construction of DVs
   1. Single-item measure (one question)
   2. Multiple-item measure
   3. Unknown
   4. Not Applicable

63) The higher the score on the DV measure, the “better”
   1. Yes
   2. No
   3. Unknown

64) Did the study use a Standardized Relationship Satisfaction Scale (RDAS, LMAT)?
   1. Yes
   2. No
   3. Unknown
   4. Not Applicable

RESULTS

65) Type of Coefficient
   1. Correlation Coefficient (i.e., zero-order or standardized)
   2. Partial Correlation Coefficient
   3. Beta Coefficient
   4. Log odds ratio
   5. Odds ratio

66) Coefficient original configuration in the study
   1. Standardized (FYI: correlation coefficients or \( r \)’s are standardized)
   2. Unstandardized
   3. Unknown

67) Coefficient Standardization Transformation: \( \beta_{xy} = B_{xy} \left( \frac{sd_x}{sd_y} \right) \), where \( \beta_{xy} \) is the standardized beta coefficient, \( B \) is the unstandardized coefficient, \( sd_x \) is the standard deviation of the IV, and \( sd_y \) is the standard deviation of the DV—the true standard deviations for both IV & DV, not from multiple regression table.
   1. Yes
   2. No

68) Beta Coefficient Transformation to \( r \) (\( r = \beta + 0.05\lambda \), where \( \lambda = 1 \) when \( \beta \) is positive and = 0 when \( \beta \) is negative; \( \beta \) must be standardized and between +0.50 & -0.50)
   1. Yes
   2. No
69) Was the correlation coefficient in the interval -0.50 – +0.50?
   1. Yes
   2. No

70) Effect Size Calculation
   1. $r \& n$
   2. $r \& SE$
   3. $r \&$ variance
   4. Fisher’s $Z \& n$
   5. Fisher’s $Z \& SE$
   6. Fisher’s $Z \&$ variance
   7. $r \& t$-value
   8. $t$-value $\& n$
   9. $p$-value, tails $\& n$
   10. Log odds ratio $\& SE$
   11. Odds ratio, lower limit, upper limit, & confidence level

71) Was the correlation statistically significant?
   1. Yes
   2. No
   3. Unknown

72) Indicate level of significance used (even for non-statistically significant results)
   1. 0.1
   2. 0.05
   3. 0.01
   4. 0.001

73) If a partial correlation, number of variables in the analysis (including IV of interest and excluding the DV/constant)
   1. #
   2. Not applicable = 98 (e.g., correlation matrix used)
   3. Unknown = 99

74) Page # where this effect size is found

75) Suppressor Effects: did the study analyses involving the included correlation control for known suppressors (i.e., mediating variables and associated variables)?
   1. Yes
   2. No
   3. Unknown

76) Data Rehabilitation: Have any rehabilitation efforts been used to include this data? (Do not include contacting authors for information)
   1. Yes
   2. No
77) Confidence rating in effect size computation
   1. No estimation (all data necessary was present in the study)
   2. Slight estimation (e.g., multiple transformations)
   3. Some estimation
   4. Moderate estimation
   5. High estimation

78) Notes

79) Questions
## APPENDIX C

### VARIABLE REFERENCE LIST

<table>
<thead>
<tr>
<th>Aggregated Variable</th>
<th>Component Variables</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Premarital Couple Factors</strong></td>
<td>All premarital couple variables</td>
</tr>
<tr>
<td><strong>Couple Interaction Factors</strong></td>
<td>All couple interaction variables</td>
</tr>
<tr>
<td><strong>Negative Interaction Factors</strong></td>
<td>Communication (-), conflict, contempt/defensiveness, criticism, demand-withdraw, destructive process, disengagement, flooding, negativity, negative interactions, post-conflict distress, stonewalling, verbal aggression</td>
</tr>
<tr>
<td><strong>Positive Interaction Factors</strong></td>
<td>Assertiveness, clear sending, communication, couple conflict style, empathy, openness, positivity, positive interactions, self-disclosure, soothing</td>
</tr>
<tr>
<td><strong>Violence Factors</strong></td>
<td>Physical aggression, sexual coercion, violence</td>
</tr>
<tr>
<td><strong>Relationship Factors</strong></td>
<td>Not calculated due to conceptual aggregation issues</td>
</tr>
<tr>
<td><strong>Marriage Readiness Factors</strong></td>
<td>Couple readiness and partner readiness</td>
</tr>
<tr>
<td><strong>Quality Factors</strong></td>
<td>Dissatisfaction (-), love, problems (-), satisfaction, support</td>
</tr>
<tr>
<td><strong>Stability Factors</strong></td>
<td>Break-up survival, commitment, instability (-), stability</td>
</tr>
<tr>
<td><strong>Relationship History Factors</strong></td>
<td>All relationship history variables</td>
</tr>
<tr>
<td><strong>Premarital Cohabitation</strong></td>
<td>Duration, prior to engagement, serial cohabitation with spouse, single-instance cohabitation with spouse</td>
</tr>
<tr>
<td><strong>Courtship Duration</strong></td>
<td>Duration of dating and duration of engagement</td>
</tr>
<tr>
<td><strong>Premarital Pregnancy</strong></td>
<td>Premarital births, premarital parental status, premarital pregnancy</td>
</tr>
<tr>
<td><strong>Premarital Sex</strong></td>
<td>Premarital sex</td>
</tr>
<tr>
<td><strong>Similarity Factors</strong></td>
<td>All similarity variables</td>
</tr>
<tr>
<td><strong>Attitude/Value Factors</strong></td>
<td>Affair attitudes/beliefs, attitudes/values/beliefs, autonomy, cleanliness, family planning, friendship, health, important issues, intellectuality, lifestyle, marriage/family, mature love, money/material things, moral behavior, politeness, realistic expectations, role expectations, sexual permissiveness, traditional world views dissimilarity (-), value differences (-), women's career</td>
</tr>
<tr>
<td><strong>Context Factors</strong></td>
<td>Background characteristics and previous divorce</td>
</tr>
<tr>
<td><strong>Family-of-Origin Experience Factors</strong></td>
<td>Attachment, experience dissimilarity (-), father-child relationship, impact, mother-child relationship, parents' marriage, parental alcohol use, physical violence, satisfaction, stress</td>
</tr>
<tr>
<td><strong>Personality Factors</strong></td>
<td>Negative traits and positive traits</td>
</tr>
<tr>
<td><strong>Negative Traits</strong></td>
<td>Anxiety, depression, immaturity, neuroticism, possessiveness</td>
</tr>
<tr>
<td><strong>Positive Traits</strong></td>
<td>Agreeableness, autonomy/independency, conscientiousness, emotional maturity, extraversion, flexibility, kindness, openness, organization, self-esteem</td>
</tr>
<tr>
<td><strong>Religiosity Factors</strong></td>
<td>Religion importance, religiosity, religious beliefs, religious commitment, religious denominational affiliation, religious orientation, religious problem solving styles</td>
</tr>
</tbody>
</table>

*Note.* The (-) indicates a predictor variable that was recoded by changing the direction of the associated effect sizes.
### Significant Protective and Risk Factors for Marital Distress and Instability

**Protective Factors against Marital Distress:**
- Premarital relationship quality
  \( (r = .257, p < .001, k = 6) \)
- Family-of-origin experience similarity
  \( (r = .227, p = .058, k = 3) \)
- Premarital relationship stability
  \( (r = .207, p < .001, k = 6) \)
- Attitude and value similarity
  \( (r = .186, p < .001, k = 9) \)
- Positive premarital interaction
  \( (r = .176, p < .001, k = 8) \)
- Religiosity similarity
  \( (r = .126, p < .001, k = 13) \)

**Protective Factors against Marital Instability:**
- Premarital relationship stability
  \( (r = -.162, p < .001, k = 2) \)
- Religiosity similarity
  \( (r = -.148, p < .001, k = 7) \)
- Premarital relationship quality
  \( (r = -.133, p < .001, k = 2) \)
- Positive premarital interactions
  \( (r = -.115, p < .001, k = 2) \)

**Risk Factors for Marital Distress:**
- Negative premarital interactions
  \( (r = -.304, p < .001, k = 8) \)
- Premarital violence
  \( (r = -.188, p < .050, k = 3) \)

**Risk Factors for Marital Instability:**
- Negative premarital interactions
  \( (r = .192, p < .001, k = 2) \)
- Premarital cohabitation
  \( (r = .178, p < .001, k = 7) \)

*Note.* The above premarital predictors of marital outcomes were designated as significant findings based on statistically-significant \((p < .060)\) medium effect sizes \((.101 \leq r \geq .399)\) derived from at least two studies \((k \geq 2)\). The significant premarital predictor findings are categorized as protective or risk factors for marital distress and/or dissolution and presented in order of the absolute-value ranking from Table 1 (see Appendix C for detailed descriptions of aggregated variables).