

JULIANNE MCGILL AND FRANCESCA ADLER-BAEDER Auburn University ANGELA B. BRADFORD Brigham Young University

JENNIFER KERPELMAN, SCOTT A. KETRING, AND DONNA SOLLIE Auburn University

The Role of Relational Instability on Individual and Partner Outcomes Following Couple Relationship Education Participation

Some scholars have suggested that distressed populations may benefit more from couple and relationship education (CRE) than do their nondistressed counterparts. We examined this hypothesis using actor-partner interdependence models to explore the relationship between baseline relational instability and change for individuals and their partners (379 couples; 758 individuals) who participated in a CRE program for 6 to 8 weeks. Findings indicated that a higher level of relational instability on the part of women was associated with greater positive change in depressive symptoms. Furthermore, respondents' and partners' baseline relational instability moderated the change in women's couple quality, such that women reported greater positive change in relationship quality when reporting higher instability and higher relationship quality before CRE participation, and when their partners reported higher instability and lower quality before CRE participation. Men appear to benefit from CRE

participation regardless of baseline relational instability. Suggestions for researchers and facilitators are discussed.

BACKGROUND

Some scholars have suggested that relationally unstable couples (i.e., couples considering divorce or separation) are better served by therapy than by educational forums (e.g., Doherty, 1995). However, a recent model for family life education and family therapy suggests that these types of services overlap and that individuals' needs are best met when the two services work in conjunction rather than in competition with each other (Myers-Walls, Ballard, Darling, & Myers-Bowman, 2011). Regardless, evidence suggests that couples reporting some level of instability are attending couple relationship education (CRE) programs (Blanchard, Hawkins, Baldwin, & Fawcett, 2009; DeMaria, 2005; Halford, O'Donnell, Lizzio, & Wilson, 2006), which indicates a need to assess outcomes based on varying levels of relational instability.

Some initial research has emerged finding benefits for CRE participants in less stable relationships (Bradford et al., 2014; Lucier-Greer, Adler-Baeder, Harcourt, & Gregson, 2014; Quirk, Strokoff, Owen, France, & Bergen, 2014). An important next step is to investigate

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Department of Human Development and Family Studies, Auburn University, 203 Spidle Hall, Auburn, AL 36849 (mclanjm@auburn.edu).

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the comparative benefits of CRE according to varying levels of relational instability. In addition, CRE program evaluation research benefits from exploring changes following CRE participation in multiple domains (e.g., individual, family) using an ecological systems approach. Further, a dearth of CRE evaluation studies has assessed dyadic influences. Thus, our study contributes to the CRE program evaluation research by examining dyadic influences (i.e., effects of each partner the other) on multiple program outcomes for a large, diverse group of CRE participant couples experiencing different levels of relational instability.

Theoretical Framework

Most studies of CRE have been atheoretical, with a few exceptions (e.g., Bradford et al., 2014; Rauer et al., 2014). To advance the use of theory in CRE, we utilized a combination of assumptions from complementary theories. Our study is framed by the process-person-context-time assumptions developed from an ecological systems perspective of human development (Bronfenbrenner & Morris, 1998; Tudge, Mokrova, Hatfield, & Karnik, 2009). We expect that the current and historical environment is an influence on individual development and assume interactions and linkages among elements of the individual's environment. Along with the contextual influences emphasized in the ecological systems perspective is the expectation for the role individuals play in their own development by responding to and interacting with their environment through processes stimulated by elements of the context over time (Tudge et al., 2009). In line with this evolved bioecological approach are assumptions from the calamity theory of growth (Anthis, 2002; Farson, 1974), which more specifically theorizes that processes during stressful life experiences-including family-related stressors (e.g., frequent family conflict, infidelity, separation from spouse)-can lead to positive growth over time.

The calamity theory of growth has been utilized predominantly in studies of identity development (e.g., Dalla, Bailey, Cunningham, Green, & Vyhlidal, 2013; Kunnen, 2006); however, its use is more recently evident in family studies as well (e.g., Soulsby & Bennett, 2015). The theory posits that during stressful life experiences, such as feeling unsure about the

stability of a committed relationship, a person becomes focused on the distressful situation cognitively and emotionally. This attention may facilitate more help-seeking behaviors and receptivity to learning and implementing new skills, thus resulting in positive growth. In other words, individuals may be more receptive to initiating positive changes during trying times. For example, Anthis (2002) found that stressful life experiences (e.g., death of a loved one, family financial concerns) lead to more exploration and change over time. A recent study (Soulsby & Bennett, 2015) more specifically focused on stress in relationships (e.g., transition to marriage, cohabitation, and divorce) and found that these transitional periods, whether viewed as positive or negative, positively affected each individual's personal growth and self-concept. This phenomenon has been documented over a 5-month time frame without intervention (Anthis, 2002). Thus, we expect that experiencing a brief intervention in the context of a stressful event such as recent or historical relational instability will result in incremental but measurable positive changes. Further, these changes may be comparatively greater than those experienced by less relationally distressed participants in CRE.

Also relevant to our study, a bioecological systems framework assumes that couple functioning is linked to individual functioning, as well as overall family functioning. In addition, it is assumed that microsystems or subsystems (e.g., the family as a whole, the couple relationship) create a shared context within which an individual's, as well as his or her partner's, outcomes are influenced over time (Halford & Wilson, 2009; Whitchurch & Constantine, 1993), thereby prescribing the empirical consideration and assessment of cross-dyad effects. This theoretical framework guides the present study of changes following CRE participation.

Couple and Relationship Education

Extensive research has been conducted over several decades on the impact of couple and relationship education programs that target the promotion of healthy relationship skills (Administration for Children and Families, 2007; Blanchard et al., 2009; Carroll & Doherty, 2003; Hawkins, Blanchard, Baldwin, & Fawcett, 2008). Several meta-analyses have focused on couple relationship outcomes such as interpersonal skills, communication skills, and relationship quality, and results indicate that CRE has small (d = .25; Hawkins et al., 2008) to large (d = .86; Carroll & Doherty, 2003) effects. This broad range suggests varying experiences in CRE and validates efforts to identify factors that influence program outcomes. Before 2006, CRE evaluation studies primarily utilized samples of higher-functioning, higher-resource, premarital or married European American couples (e.g., Emmelkamp et al., 1988; Kaiser, Hahlweg, Fehm-Wolfsdorf, & Groth, 1998). An influx of federal funding has broadened the outreach of CRE to more diverse populations. A 2010 meta-analysis (Hawkins & Fackrell, 2010) was the first to assess the effects of CRE on low-income individuals, and it found small effect sizes of d = .25 - .29.

Another consideration in CRE research is that CRE outcome and impact studies have most often focused on outcomes related to couple functioning (e.g., communication skills, conflict management skills, couple quality) and have less commonly assessed CRE effects on individual or family functioning, although an ecological perspective would assume related changes. In the few CRE studies that have focused on individual functioning, results indicate positive changes in depressive symptoms, anxiety, and individual empowerment following CRE participation among diverse samples of CRE participants (e.g., Adler-Baeder et al., 2010; Bradford et al., 2014; Braithwaite & Fincham, 2011; Lucier-Greer, Adler-Baeder, Ketring, Harcourt, & Smith, 2012). Several studies also have explored changes in the family domain following CRE participation, finding enhanced adjustment to parenthood (Dion & Hershey, 2010; Halford, Petch, & Creedy, 2010), less coparenting conflict (Adler-Baeder, Calligas, et al., 2013; Garneau & Adler-Baeder, 2015), greater parenting efficacy (Lucier-Greer et al., 2012), and higher levels of parental involvement (Adler-Baeder, Calligas, et al., 2013; Cowan, Cowan, Pruett, Pruett, & Gillette, 2014; Dion & Hershey, 2010).

A New Generation of Research

Previous studies, particularly meta-analyses, provide measures of central tendency concerning the experiences of participants as a uniform



whole. An important next step for the next generation of CRE research is to examine variations in outcomes and to determine which factors predict those variations (Bradbury & Lavner, 2012; Carroll & Doherty, 2003; Wadsworth & Markman, 2012). These more nuanced studies that explore, rather than control for, diversity will better inform program design and the development of models of best practice for the growing number of ethnically, economically, and relationally diverse CRE participants (e.g., Adler-Baeder, Calligas, et al., 2013; Hawkins, Stanley, Blanchard, & Albright, 2012; Rauer et al., 2014).

Influences on Program Success. A characteristic of the new generation of CRE research is the consideration of moderators of and influences on the degree or magnitude of program effectiveness (Wadsworth & Markman, 2012). Because of the increasing diversity of CRE participants (Hawkins & Fackrell, 2010) and some assertions that low-income populations may not desire or benefit from CRE (Karney & Bradbury, 2005), exploration of the experiences of demographically and relationally vulnerable populations in CRE has been emphasized in a small but growing number of studies.

Demographic Vulnerability. Demographic factors have been investigated as possible influences on or moderators of program success. For example, one study (Adler-Baeder et al., 2010) examined several demographic influences on initial levels of and changes in individual functioning, couple functioning, and confidence in the relationship. A more recent study (Amato, 2014) assessed a demographic "disadvantage index" (e.g., mother and father's ages and education levels, father's employment status, mother's public assistance) as a moderator of program effect. Both studies suggest that demographic characteristics linked to vulnerability can affect or moderate the change associated with relational outcomes; in these studies more vulnerable individuals experienced more gains after program participation. An important next step in this area of inquiry is the assessment of other measures of vulnerability.

Relationally Distressed and/or Unstable CRE Participants. Several early studies of CRE (e.g., Emmelkamp et al., 1988; Kaiser et al., 1998) considered relational vulnerabilities and reported relationally distressed couples (defined as those referred by a mental health center for marital problems, or determined by the number of problems reported) can benefit from CRE attendance. For example, distressed participants in CRE training showed greater improvements in negative verbal communication and relationship beliefs than participants in cognitive relationship therapy (Emmelkamp et al., 1988). Since these early studies, CRE evaluation research has largely failed to highlight the experiences

of individuals who report relational instabil-

ity; however, a growing number of studies are

renewing the focus on these individuals. Two more recent studies found benefits for a sample of relationally unstable CRE participants (Bradford et al., 2014; Quirk et al., 2014). Bradford et al. (2014) found that relationally unstable participants-defined by recency of thoughts related to divorce or separation-reported improvements in depressed affect and relationship quality. Although a direct comparison by relational instability level was not conducted, the reported effect sizes (d = .69 for men and .64 for women) suggest that less stable relationships may benefit more from CRE given that a meta-analysis of studies that more broadly served a diverse group of couples found a mean effect size of d = .29 (Hawkins & Fackrell, 2010). Similarly, Quirk et al. (2014) compared distressed and nondistressed couples, as defined by the clinical cutoffs of the Dyadic Adjustment Scale, and found that relationally distressed couples improved more than relationally nondistressed couples following CRE participation. To date, however, no published study has assessed whether the baseline level of relational instability (e.g., recency of thoughts of divorce or separation) influences or moderates the amount of change for self and partner in multiple domains of functioning (individual, couple, and family), nor considered dyadic influences.

Couple Dynamics. Shared experiences or interdependence within couple relationships has often been neglected in CRE evaluation (Wadsworth & Markman, 2012). Only a few CRE researchers have focused on the interdependence of couples in the context of CRE evaluation. In two studies, researchers utilized actorpartner interdependence models and explored whether there were partner effects within the dyad. They found that men and women affect



partners' changes associated with CRE participation (Braithwaite & Fincham, 2011; Halford & Wilson, 2009). Specifically, women's relationship self-regulation was positively related to sustained relationship satisfaction for men 4 years after participation (Halford & Wilson, 2009). Others have found evidence that greater risk predicted greater benefits. For example, one study found that women's initial level of anxiety was positively associated with the amount of decrease in their partner's anxiety after program participation (Braithwaite & Fincham, 2011). Partner effects were also discovered for both men and women that favored high-functioning couples: higher levels of an individual's communication before program participation predicted greater improvements in his or her partner's communication (Braithwaite & Fincham, 2011). Additional research that considers dyadic influences within couples is needed to better understand the role of contextual influences on outcomes following CRE program participation.

The Present Study

Our guiding theoretical framework and previous research suggest that baseline levels of relational instability may be associated with moderate change after CRE participation, such that higher levels of relational instability are related to a higher degree of change. We also expect that both the individual and his or her partner's reports of relational instability will influence the individual's own and his or her partner's baseline levels of depressive symptoms, couple quality, and family harmony, as well as reported changes in these domains.

We sought to explore the experiences of a group of CRE participants to better understand variations in outcomes and to explore dyadic processes of change and the influence of baseline relational stability on these changes. In a separate study using a comparison group, we found positive treatment effects for participants in CRE on levels of depressive symptoms, general negative feelings, couple quality, negative interactions, and positive interactions (Adler-Baeder, Garneau, et al., 2013). We build on these findings as well as initial indications that subsamples of relationally unstable participants have experienced benefits from CRE (Bradford et al., 2014; Quirk et al., 2014) by evaluating variation in multiple CRE outcomes for a diverse sample of couples. We assessed both the linear influence and the moderating effect of baseline relational instability on the magnitude of change after CRE participation. We chose to test and present both linear and moderating effects to understand the nature of the relationship among variables, as we presume the level of baseline relational instability predicts a corresponding amount of change in outcomes. Moderation assumes differing amounts of change (or no change) based on the combination of baseline instability and the starting point of each outcome tested. Moreover, we tested actor–partner interdependence models to determine whether dyadic influences exist.

Our study advances the CRE evaluation literature and builds on the studies assessing outcomes for diverse participants in CRE and the two studies that have considered relational instability when assessing program effects by (a) using explicit theory, (b) assessing outcomes in multiple domains (i.e., individual, couple, and family), and (c) examining the role of baseline relational instability on changes following program participation for the individual and his or her partner. On the basis of theory and some early evidence, we expect that greater baseline instability results in greater change; however, because this is a newer area of inquiry and because of some assertions that more relationally unstable couples may not be suited to CRE, we utilized research questions and a more exploratory approach rather than stated hypotheses. We tested whether participants' baseline level of relational instability predicted baseline levels of targeted areas (i.e., depressive symptoms, relationship quality, and family harmony) and the amount of improvement in targeted areas for themselves and for their partners (RQ1). We also tested whether participants' baseline level of relational instability predicts baseline levels of targeted areas and moderates the change in targeted areas for themselves and for their partners (RQ2). We note that results of the study will provide information on whether more relationally unstable CRE participants benefit more, less, or similarly to less relationally unstable participants.

Method

Participants

We utilized selection criteria and included in the analytic sample CRE participants who attended



a program as a couple and who each completed a pre- and post-program survey approximately 6 to 8 weeks later. This resulted in 379 heterosexual couples. The majority (75%) of participants were married, 10% were engaged, and 15% were dating. Slightly more than half (54%) of the sample comprised European Americans, 43% were African American, and 3% reported other ethnicities (e.g., Hispanic, Asian American). The mean age was 38.1 years (SD = 13.9; range = 18-84) for men and 35.7 years (SD = 13.0; range = 18-73) for women. The highest level of formal education attained by participants was diverse: 11% had not completed high school, 25% had a high school diploma, 24% had completed some college, 15% had a two-year or technical degree, 15% had a four-year degree, and 8% had a postcollegiate degree. Reported annual household income was less than \$40,000 for 52% of the sample; 29%

Procedure

reported income between \$40,000 and \$74,999;

and 19% indicated \$75,000 or more.

Community agencies recruited participants to attend CRE classes that were facilitated by trained mixed-gender teams of two educators each. The CRE classes lasted 6 to 8 weeks, and each weekly session lasted for approximately 2 hours. Participants selected one of four curricula offered. Approximately 45% of couples participated in Basic Training for Black Marriages (an 8-week couples program), 30% of couples participated in *Mastering the Mysteries of Love* (an 8-week couples program), 17% participated in Together We Can (an 8-week couples or coparenting program that can be offered for singles or couples), and the remaining 8% participated in Smart Steps: Embrace the Journey (a 6-week couples program). These curricula were chosen because they include aspects of all seven core components of research-based CRE curricula (see the National Extension Relationship and Marriage Education Model; Futris & Adler-Baeder, 2014). The seven core elements include the following: choose (skills for demonstrating intentionality in relationships), know (skills that promote intimate knowledge of partner), care (skills for demonstrating love and support for partner), care for self (skills for individual's maintenance of health), share (skills that promote a sense of interconnectedness), connect (skills for engaging social support), and

manage (skills for effectively managing stress and conflict).

Before couples participated in the program, they completed surveys that included demographic questions and information about their knowledge of, attitudes toward, and behaviors related to individual, couple, and family functioning. During the last session of the program, participants completed a post-program survey. Mean program participation was approximately 10 hours and did not differ by curriculum.

Measures

Depressive Symptoms. Reports of depressive symptoms were measured before and after the program using three items from the Center for Epidemiological Studies-Depression Scale (CES-D; Radloff, 1977). Example items include "In the past week, I felt sad" and "In the past week, I felt depressed." Response options ranged from *none* (0) to 3 + times (3); mean scores were computed, and higher scores indicate higher levels of depressive symptomology. Alpha coefficients for internal consistency were $\alpha = .88$ and .87 at pretest and $\alpha = .86$ and .88 at posttest for men and women, respectively.

Relationship Quality. Five items from the Quality of Marriage Index (QMI; Norton, 1983) were used to assess participants' reports of relationship quality. Example items include "We have a good marriage/relationship" and "I feel like part of a team with my spouse/significant other." Response options formed a seven-point Likert scale ranging from *very strongly disagree* (1) to *very strongly agree* (7); mean scores were computed, and higher scores indicate higher relationship quality. Alpha coefficients for internal consistency were $\alpha = .96$ and .96 at pretest and $\alpha = .96$ and .97 at posttest for men and women, respectively.

Family Harmony. Reports of harmony in the household (Halberstadt, Cassidy, Stifter, Parke, & Fox, 1995) were measured using three statements: "Generally there is a feeling of contentment and happiness in my house," "Overall, there are more happy feelings than unhappy feelings in my home," and "There are many disagreements in my house" (the final item was reverse coded). Response options formed a five-point Likert scale ranging from *strongly disagree* (1) to *strongly agree* (5); mean scores were



computed, and higher scores indicate a more harmonious household. Alpha coefficients for internal validity were $\alpha = .78$ and .83 at pretest and $\alpha = .73$ and .81 at posttest for men and women, respectively.

Relational Instability. The measure of baseline relational instability was assessed using two items from the Likelihood of Stability Scale (Booth, Johnson, & Edwards, 1983). Respondents answered the following questions: "Have you or your partner ever seriously suggested the idea of divorce or separation," and "Have you ever thought your marriage/relationship might be in trouble?" Response options were never (1); yes, in the past but not recently (2); and yes, recently (3); mean scores were computed, and higher scores indicate higher levels of relational instability as indicated by existence and recency of thoughts about separation. Recently was defined by the respondents; it was not defined in the survey. The alpha coefficients for internal validity were $\alpha = .82$ and .79 at pretest for men and women, respectively.

Control Variables. Control variables were included for age, ethnicity, education, income, marital status, and curriculum. Age in years, as reported by participants at baseline, was used as a continuous variable. Ethnicity was dichotomously coded as non-European Americans (which included, for example, African American, Asian American, Hispanic or Latino) and European Americans. Education was dummy coded by grouping those with less than a high school diploma or its equivalent, high school graduates, and those with more than a high school diploma. Income was assessed as a continuous variable using the respondents' reported annual household income. Preprogram reports of marital status were dichotomously coded as unmarried and married. Curriculum was dummy coded using Together We Can as the reference group for each of the other three curricula. Although the majority of previous studies found no meaningful differences by curriculum, one study found that, at least for men, curriculum may influence changes in reported outcomes (Gregson et al., 2012). Specifically, men participating in Together We Can reported enhancements in individual and parenting outcomes, whereas men participating in *Mastering* the Mysteries of Love reported enhancements in individual and relationship outcomes, and

men participating in *Basic Training for Black Marriage* reported enhancements in individual, parenting, and relationship outcomes. These variables were entered as covariates in each of the initial models. In the current study, none of the covariates was found to be statistically significant and therefore excluded from the final models.

Analytic Strategy

Structural Equation *Modeling*. The software system Mplus 6 (Muthén & Muthén, 1998-2010) was used to test the linear influence (RQ1) and moderating effect (RQ2) of individuals' baseline relational instability on residual change in depressive symptoms, couple quality, and family harmony for respondents and their partner. Structural equation modeling (SEM) allows researchers to draw inferences by determining how the variables are related, and by accounting for random measurement error (Francis, 1988). Also, the SEM framework utilizes full information maximum likelihood (FIML), which enables the use of all available information from the data to limit the deletion of cases due to missing values. There was 9% or less of missing values for each variable in the current study. Therefore, using SEM allows for more accurate parameter estimates based on the available data.

Actor–Partner Interdependence Model. To test the linear and moderating relationships of relational instability and outcomes for respondents and partners, Actor–Partner Interdependence Models (APIMs) were used. An APIM utilizes SEM to assess variables that vary between and within the dyad (i.e., actor effects [effects on self] and partner effects [effects on others]). APIMs are utilized to understand the dynamics within the couple context on each individual in the dyad (Kenny, Kashy, & Cook, 2006), as was the goal of our study.

Goodness of Fit. Goodness-of-fit indices are used for statistical hypothesis testing to assess the consistencies and differences between the data and the model (Kenny, 2014). For the purposes of our study, multiple indices were used. The chi-square test of model fit is most commonly utilized but can be misleading for large sample sizes; therefore, other goodness-of-fit statistics were utilized. The root mean square



error of approximation (RMSEA) is a more general goodness-of-fit index, with values of .01, .05, and .08 indicating excellent, good, and acceptable fit, respectively, and a nonsignificant p value (i.e., p > .05) for the RMSEA value suggests the model fits the data well (MacCallum, Browne, & Sugawara, 1996). The Tucker-Lewis Index was also used. A value close to 1.00 indicates a good fit (Kenny, 2014). Finally, the Akaike information criteria (AIC) and the Bayesian information criteria (BIC) are presented. Both indices are used as comparative or relative fit indices and can be used to compare nested models to assess which model fits the data best, with lower values indicating a better fit. The moderation models for RQ2 are latent variable moderation models, which estimate only the random effect; therefore, the output provides only the AIC and BIC goodness-of-fit statistics. For the purposes of this study, the interaction terms and the associations among other variables are included in both the linear and moderation models, but in the linear models those pathways are constrained to be zero. Therefore, we are able to compare the AIC and BIC of the main effects models to the moderation models. The fit of the moderation model is indicated relative to the fit statistics (e.g., RMSEA, TLI) presented for the linear model.

RESULTS

Preliminary Analyses

Results of independent-samples t tests to detect differences between men and women's reports indicated no differences in the reports of instability at baseline or in the pre- and post-program outcome measures. Descriptive statistics are presented in Table 1. Although statistical changes in the target outcomes have been previously reported for this sample using a comparison group (Adler-Baeder, Garneau, et al., 2013), we also tested and present in Table 1 results of paired-samples t tests that indicate statistical change for men and women in a desirable direction for depressive symptoms, couple quality, and family harmony. The depressive symptoms variable was log transformed to adjust for skewness and kurtosis; the statistics presented in Table 2 are for the transformed variable. Three latent covariance structure analysis models were fit to address RO1 and to test the linear relationship between baseline relational instability

		Pretest			Posttest					
Variable	n	М	SD	n	М	SD	t	р	95% CI	d
Depressive symptoms										
Women	374	1.13	1.02	375	0.94	0.92	-3.91	< .001	[28,09]	20
Men	375	1.02	0.98	373	0.77	0.85	-5.17	< .001	[36,16]	26
Couple quality										
Women	378	5.06	1.41	378	5.54	1.25	8.41	< .001	[.36, .59]	.44
Men	375	5.22	1.35	375	5.70	1.16	8.60	< .001	[.37, .59]	.45
Family harmony										
Women	327	3.43	0.98	329	3.71	0.85	6.82	< .001	[.21, .38]	.37
Men	330	3.55	0.90	328	3.79	0.79	6.08	< .001	[.17, .34]	.32

Table 1. Descriptive Statistics and Paired-Samples t Tests for Outcome Variables for Women and Men

Note. CI = confidence interval for the mean pre- and posttest outcome variable difference.

Table 2. Standardized and Unstandardized Estimates, Standard Errors, and Statistical Significance Levels for RQ1

	Depressive Symptoms				Re	elationsl	nip Qu	ality	Family Harmony			
	β	b	SE	р	β	b	SE	р	β	b	SE	р
Actor effects												
$M RI \rightarrow T1 M$ outcome	.32	0.52	0.12	.009	65	-1.24	0.10	< .001	48	-0.69	0.12	< .001
W RI \rightarrow T1 W outcome	.48	0.80	0.12	< .001	54	-1.28	0.09	< .001	68	-0.96	0.12	< .001
$M RI \rightarrow T2 M$ outcome	.11	0.16	0.12	.345	05	-0.08	0.11	.661	14	-0.16	0.13	.307
W RI \rightarrow T2 W outcome	.23	0.35	0.11	.051	10	-0.21	0.10	.311	.02	0.03	0.14	.871
T1 M outcome \rightarrow T2 M outcome	.43	0.38	0.06	< .001	.46	0.39	0.06	< .001	.47	0.39	0.09	< .001
T1 W outcome \rightarrow T2 W outcome	.54	0.18	0.06	< .001	.57	0.49	0.06	< .001	.71	0.61	0.09	< .001
Partner effects												
$M RI \rightarrow T1 W$ outcome	.01	0.02	0.20	.922	16	-0.33	0.10	.090	.00	0.01	0.12	.975
W RI \rightarrow T1 M outcome	.04	0.06	0.20	.777	01	-0.03	0.10	.913	17	-0.22	0.12	.164
$M RI \rightarrow T2 W$ outcome	13	-0.20	0.17	.229	.03	0.05	0.10	.797	07	-0.09	0.12	.592
W RI \rightarrow T2 M outcome	.05	0.08	0.12	.663	06	-0.11	0.11	.585	.09	0.09	0.15	.553
T1 M outcome \rightarrow T2 W outcome	03	-0.03	0.05	.592	.11	0.10	0.06	.069	01	-0.01	0.08	.880
T1 W outcome \rightarrow T2 M outcome	04	-0.03	0.05	.575	.21	0.18	0.06	.001	.22	0.17	0.10	.023
Correlate												
$M RI \rightarrow W RI$.81	0.30	0.03	< .001	.81	0.36	0.03	< .001	.82	0.34	0.03	< .001
T1 M outcome \rightarrow T1 W outcome	.25	0.21	0.06	< .001	.40	0.44	0.05	< .001	.42	0.20	0.07	< .001
T2 M outcome \rightarrow T2 W outcome	.19	0.11	0.06	.003	.42	0.33	0.05	< .001	.49	0.15	0.07	< .001
R^2												
M outcome Time 1			0.04	.001	.44		0.05	< .001	.39		0.05	< .001
W outcome Time 1			0.05	< .001	.46		0.04	< .001	.46		0.06	< .001
M outcome Time 2			0.05	< .001	.47		0.04	< .001	.44		0.05	< .001
W outcome Time 2			0.05	< .001	.49		0.04	< .001	.54		0.05	< .001

Note. RI = relational instability; M = men, W = women, \rightarrow = predicts, \rightarrow = correlated with.

and residual change in depressive symptoms, relationship quality, and family harmony. Three other latent covariance structure analysis models were fit to address RQ2, which stipulated that relational instability moderates the change for self and partner in depressive symptoms, relationship quality, and family harmony. The error terms for each indicator were correlated for the same reporter and across time in all models (Kenny et al., 2006). Time 2 (T2) scores in the models are the posttest scores controlling for pretest scores, and thus they are representative of residual change in those scores (Singer & Willett, 2003).

Research Question 1: Linear Relationship Between Instability and Outcomes

Parameter estimates for the model assessing the linear relationship between actor and partner relational instability and changes in actor and partner depressive symptoms, relationship quality, and family harmony are presented in Table 2. Goodness-of-fit statistics are reported with their corresponding models in text.

Depressive Symptoms. The goodness-of-fit indices for the model indicated an excellent fit $(\chi^2 = 84.91, df = 83, p = .421; RMSEA = .01,$ p = .999; TLI = .99; AIC = 13134.58; BIC = 13,406.27). The model for depressive symptoms respectively predicted 12% and 24% of the variance in men and women's depressive symptoms before program participation, then 24% and 36% of the variance in men and women's depressive symptoms after program participation. Much of the variance in T2 depressive symptoms was accounted for by T1 levels of depressive symptoms; however, relational instability reported by self and partner statistically accounted for variance in T2 depressive symptoms not explained by T1 levels alone.

Accounting for all other variables in the model, actor's report of baseline relational instability statistically predicted the amount of residual change in depressive symptoms for women ($\beta = .23$, p = .049); higher levels of relational instability were related to greater improvements in depressive symptoms. There was no statistical association for men ($\beta = .11$, p = .117), indicating that men's depressive symptoms did not improve distinctly more or less according to their baseline relational instability. Partner's report of baseline relational instability did not statistically predict change in depressive symptoms after CRE participation for men ($\beta = .05$, p = .109) or women ($\beta = -.13$, p = .123). We also noted that actor's higher level of relational instability was statistically and positively related to both men's ($\beta = .32, p = .008$) and women's ($\beta = .48$, p = .001) depressive symptoms at preassessment. Figure 1 depicts the statistical results of this model.

Relationship Quality. The goodness-of-fit indices indicated a good fit ($\chi^2 = 466.05$, df = 227, p = .001; RMSEA = .05, p = .250; TLI = .97; AIC = 19334.12; BIC = 19716.06). The model for relationship quality respectively explained 44% and 46% of the variance in men and

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women's relationship quality before program participation, then 47% and 49% of the variance in men and women's relationship quality after program participation. Much of the variance in T2 relationship quality was accounted for by T1 levels; however, actor's relational instability and partner's relational instability statistically account for variance in T2 relationship quality not explained by T1 levels alone.

Accounting for all other variables in the model, actor's report of baseline relational instability was not statistically related to either men's ($\beta = -.05$, p = .660) or women's ($\beta = -.10$, p = .311) change in relationship quality scores, indicating that men and women experienced improvements in relationship quality following participation in CRE regardless of baseline relational instability. The actor's level of baseline relational instability was statistically related to both men's ($\beta = -.65$, p = .001) and women's ($\beta = -.54$, p = .001) relationship quality scores at preassessment; higher levels of relational instability were associated with lower levels of baseline relational instability.

Family Harmony. The goodness-of-fit indices indicated an acceptable fit ($\chi^2 = 204.93$, df = 98, p < .001; RMSEA = .06, p = .226; TLI = .95; AIC = 11523.64; BIC = 11796.82). The model for family harmony respectively predicted 39% and 46% of the variance in men and women's family harmony before program participation, then predicted 44% and 54% of the variance in men and women's family harmony is family harmony after program participation. Much of the variance in T2 family harmony is accounted for by T1 levels; however, partner and actor reports of relational instability statistically account for variance in T2 family harmony not explained by T1 levels alone.

Accounting for all other variables in the model, actor's level of relational instability was not statistically related to men's ($\beta = -.14$, p = .309) or women's ($\beta = .02$, p = .871) amount of residual change in family harmony, which suggests that men and women experience change in family harmony regardless of level of baseline relational instability. Partner's baseline level of relational instability did not statistically predict change in family harmony for men ($\beta = -.07$, p = .593) or women ($\beta = .09$, p = .554). We also noted that for both men and women, higher baseline levels of actor's relational instability were associated with lower



FIGURE 1. STRUCTURAL EQUATION MODEL FOR THE LINEAR RELATIONSHIP (RQ1) OF DEPRESSIVE SYMPTOMS INCLUDING STATISTICALLY SIGNIFICANT STANDARDIZED (AND UNSTANDARDIZED) ESTIMATES.

baseline levels of family harmony ($\beta = -.48$, p = .001 and $\beta = -.68$, p = .001, respectively).

Research Question 2: Moderation

Parameter estimates for the model assessing the moderating role of relational instability on depressive symptoms, relationship quality, and family harmony are presented in Table 3. The goodness-of-fit statistics of the depressive symptoms moderation model (AIC = 13,138.54; BIC = 13,425.98) were higher than those of the linear relationship model (AIC = 13,134.58; BIC = 13,406.27), indicating that the linear relationship fit the data best. The goodness-of-fit statistics for the relationship quality moderation model (AIC = 19,326.1; BIC = 19,723.8) were lower than those of the linear relationship model (AIC = 13,324.12; BIC = 19,716.06), indicating that the moderation model fit the data best. The goodness-of-fit statistics of the family harmony moderation model (AIC = 11,529.5; BIC = 11,818.3) were higher than those of the linear relationship model (AIC = 11,523.64; AIC = 11,796.82), indicating that the moderation model fit the data best.

Accounting for all other variables in the model, actor's report of baseline relational

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instability did not statistically moderate men's $(\beta = -.17, p = .119; \beta = -.04, p = .793)$ or women's ($\beta = .01$, p = .948; $\beta = .12$, p = .469) change in depressive symptoms or family harmony, respectively. Further, partner's report of baseline relational instability did not statistically moderate change in depressive symptoms or family harmony for men ($\beta = .10$, p = .264; $\beta = .07, p = .521$) or women ($\beta = -.02, p = .816$; $\beta = -.15$, p = .249), respectively. These results indicate that men and women experience change in depressive symptoms and family harmony regardless of baseline level of relational instability. Similarly, accounting for all other variables in the model, for men, neither their reports of baseline relational instability nor their partners' reports of instability statistically moderated their reported change in relationship quality $(\beta = -.02, p = .780 \text{ and } \beta = .04, p = .705, \text{ respec-}$ tively), which suggests that men experience change in relationship quality regardless of baseline level of relational instability.

For women, their reports as well as their partner's reports of baseline relational instability statistically moderated change in their relationship quality ($\beta = .29$, p = .008 and $\beta = -.19$, p = .007, respectively). Further investigation, using prototypical plots, of the actor's

Table 3. Unstandardized Estimates, Standard Errors, and Statistical Significance Levels for RQ2

	Depressive Symptoms			Rela	tionship	Quality	Family Harmony		
	b	SE	р	b	SE	р	b	SE	р
Actor effects									
$M RI \rightarrow T1 M outcome$	0.52	0.22	.021	-1.22	0.20	<.001	-0.69	0.17	<.001
W RI \rightarrow T1 W outcome	0.82	0.23	<.001	-1.29	0.30	<.001	-0.95	0.18	<.001
$M RI \rightarrow T2 M outcome$	0.15	0.18	.409	-0.02	0.18	.907	-0.13	0.17	.432
W RI \rightarrow T2 W outcome	0.35	0.20	.085	-0.30	0.25	.225	-0.04	0.20	.843
M RI \times T1 M outcome \rightarrow T2 M outcome	-0.17	0.11	.119	-0.02	0.09	.780	-0.04	0.14	.793
W RI \times T1 W outcome \rightarrow T2 W outcome	0.01	0.10	.948	0.29	0.11	.008	0.12	0.16	.469
T1 M outcome \rightarrow T2 M outcome	0.40	0.06	<.001	0.40	0.07	<.001	0.40	0.08	<.001
T1 W outcome \rightarrow T2 W outcome	0.48	0.06	<.001	0.45	0.07	<.001	0.58	0.09	<.001
Partner Effects									
$M RI \rightarrow T1 W$ outcome	0.02	0.23	.941	-0.31	0.24	.183	0.01	0.18	.970
W RI \rightarrow T1 M outcome	0.06	0.22	.795	-0.04	0.22	.848	-0.23	0.14	.109
M RI \rightarrow T2 W outcome	-0.21	0.19	.274	0.04	0.19	.821	-0.02	0.20	.915
W RI \rightarrow T2 M outcome	0.07	0.19	.690	-0.20	0.25	.437	0.05	0.17	.790
M RI \times T1 M outcome \rightarrow T2 W outcome	-0.02	0.10	.816	-0.20	0.07	.007	-0.15	0.13	.249
W RI \times T1 W outcome \rightarrow T2 M outcome	0.10	0.09	.264	0.04	0.10	.705	0.07	0.11	.512
T1 M outcome \rightarrow T2 W outcome	-0.03	0.06	.637	0.12	0.06	.063	0.03	0.07	.696
T1 W outcome \rightarrow T2 M outcome	-0.04	0.05	.428	0.16	0.07	.026	0.15	0.08	.062
Correlate									
$M RI \rightarrow W RI$	0.30	0.03	<.001	0.36	0.02	<.001	0.34	0.03	<.001
T1 M outcome \rightarrow T1 W outcome	0.21	0.06	<.001	0.44	0.08	<.001	0.20	0.04	<.001
T2 M outcome \rightarrow T2 W outcome	0.11	0.04	<.001	0.32	0.05	<.001	0.14	0.03	<.001

Note. RI = relational instability; M = men, W = women, \rightarrow = predicts, \rightarrow = correlated with.

moderating effect indicated that women with high baseline relational instability and high baseline relationship quality experienced greater changes in relationship quality compared to women with low baseline relational instability and low baseline reports of relationship quality. Further investigation, again using prototypical plots, of the moderating effect of the partner indicated that women experienced greater change when their partners reported high baseline relational instability and low baseline relationship quality. Figure 2 depicts the statistical results this model.

DISCUSSION

The results of this study provide several novel contributions to the body of research focused on the evaluation and refinement of CRE programming. We employed explicit theory and dyadic data analyses and considered the baseline stability of a couple's relationship in predicting or moderating change after program participation. Previous studies and theory suggest that more vulnerable participants may experience

enhanced benefits from CRE participation. In our sample we found evidence of this for women on several key outcomes. Of note, greater self-reported baseline relational instability was associated with greater reduction in depressive symptoms for women. In addition, the relationship between change in relationship quality and baseline relational instability was influenced by the level of reported quality at baseline, such that the greatest change in relationship quality occurred for women who reported higher levels of instability when they also reported higher relationship quality before participation in CRE. Moderation analyses also revealed that greater change in relationship quality occurred for women whose partner reported higher relational instability and also reported lower relationship quality before participation in CRE in comparison to women whose partners reported lower levels of baseline instability and quality. Men in our sample appeared to benefit from participation in CRE, regardless of baseline reports of relational instability by themselves or



FIGURE 2. STRUCTURAL EQUATION MODEL FOR THE MODERATING RELATIONSHIP (RQ2) OF RELATIONSHIP QUALITY, INCLUDING STATISTICALLY SIGNIFICANT UNSTANDARDIZED ESTIMATES.

by their partners. We situate these findings in the context of recent CRE research and practice.

The Influence of Relational Instability on Program Changes

Because some concern has been expressed regarding the involvement of relationally unstable couples in educational programs, and evidence, inclusive of the present study, suggests that couples with varying degrees of relational instability are choosing to participate in CRE, it is important to explore this factor when studying CRE program effects. Prior to this study, there was some assurance that CRE programs "do no harm" (Coie et al., 1993), and in fact, it appears that groups of relationally unstable participants benefited from CRE (Bradford et al., 2014; Quirk et al., 2014), and more demographically vulnerable CRE participants showed comparatively better outcomes than those considered less vulnerable (Amato, 2014).

In our study exploring the influence of varying levels of reported relational instability, we invoked assumptions from the calamity theory of growth (Anthis, 2002), which suggests that experiencing stressful life experiences can provide a catalyst for positive growth and change

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over time because of enhanced openness to exploration and development of skills for managing the stressful life event. This expectation is borrowed from studies of identity development and we suggest its usefulness to researchers as they assess benefits of CRE and other family life education programs for individuals experiencing other types of stressful life experiences.

We examined both the linear relationship and the moderating effect of baseline levels of relational instability on outcomes of interest, expecting that those more relationally unstable may demonstrate some added gains. Utilizing both methods of analysis allowed us to determine whether there was a more straightforward, linear relationship between level of instability and amount of change or whether there was an interaction between level of baseline instability and the starting point of the outcome in predicting the amount of change in the outcome. This approach built on previous findings from a recent study of a group of relationally unstable men and women (measured similarly as recency of thoughts of divorce) who experienced positive changes in depressed affect after CRE participation (Bradford et al., 2014).

For men in the present study, relational instability reported by self or partner did not

influence the degree of change in targeted outcomes. For both men and women, the degree of change in family harmony also was not influenced by reports of baseline instability. Because we know that, on the whole, there were statistical improvements for the men and women in the study in all outcome areas, we can interpret results to mean that men experienced benefits from participation in CRE, regardless of level of reported instability. In addition, family harmony was enhanced for all participants.

For women in the study, there were some nuanced influences of reported relational instability. Those reporting more instability reported greater improvements in their own depressive symptoms. In general, couple functioning is a stronger predictor of depression in women than in men (Leach, Butterworth, Olesen, & Mackinnon, 2013). This may explain why women's reports of relational instability were more closely aligned than men's with positive shifts in depressive symptoms after CRE participation. Also, there was limited variability in the depressive symptoms measure for men (M = 0.90;SD = 0.67 on a scale of 0–3), thereby limiting the likelihood of a large downward shift in relation to the variability in the instability measure.

We also found that actors' and partners' relational instability can moderate the change in relationship quality for women. Women reported greater positive change in relationship quality in relation to the interaction of higher relational instability and higher relationship quality at baseline. Specifically, women report greater positive change in relationship quality when they report higher instability and higher relationship quality before participation in CRE, but also when their partners report higher instability and lower quality before participation in CRE. We expected the latter; that is, that higher instability and lower quality at start would be associated with more positive program effects on relationship quality. The unexpected effects of women's own reports are challenging to understand; however, the measure of relational instability (Booth, et al., 1983) should be considered. One of the questions is "Have you or your partner ever seriously considered divorce or separation?" (emphasis added). Although still a valid indicator that the relationship is less stable if the partner is the one who has considered divorce or separation, it does allow for an individual to report that her partner has considered dissolving the relationship while still reporting



high relationship quality. In our sample, women who followed this scenario seemed to benefit more, perhaps encouraged that a partner considering divorce or separation would attend CRE. It is unclear why this would not be the case for men, and we encourage further investigation. Because we can only speculate about the finding for women, it would be valuable to alter the item or develop a new measure that more specifically assesses which partner has considered separation or divorce. This would also allow for examination of dyadic (in)congruence and its effects.

Previous research found variation in outcomes based on relationship distress for both men and women (Quirk et al., 2014); those with high relationship distress experienced greater improvements in dedication to the relationship and communication after CRE participation. That research utilized a measure with clinical cutoffs for distinguishing groups. Perhaps, clear distinctions between groups enhance the chance of finding moderation for the full sample. Our assessment of recency of consideration of divorce or separation serves as an indicator of relationship distress, but does not directly tap intensity of relationship distress in the same way, even though the moderation test does serve to compare the extreme ends of the spectrum. We recommend that future research incorporate methods for measuring latent constructs that tap multiple dimensions of relational health. Further, developing profiles of participants based on their relationship characteristics could be a worthwhile endeavor that may allow us to better delineate the characteristics of participants for whom CRE is more or less effective.

Practical Implications

Couple and relationship education can affect multiple domains in the family system and may fill gaps between other services, especially services that may be perceived as more intimidating or that have stigma associated with them. Educational services, such as CRE, provide an arena for individuals and couples to learn and practice skills in an environment that may be perceived as more comfortable or inviting than therapy or counseling (Burr, Hubler, Gardner, Roberts, & Patterson, 2014; DeMaria, 2005). It appears worthwhile for practitioners to continue to offer CRE programs for any interested individual or couple, regardless of relationship issues. In our study, men experienced similar benefits from program participation regardless of whether they initially reported any recent or past relationship instability. Further, women in more unstable relationships benefited slightly more than did those in more stable relationships. This is not to suggest that CRE is a panacea for vulnerable couples, only that there is no evidence to suggest that CRE should not be offered to distressed couples. Typically, CRE programs are offered as open classes to all members of the community and any individual or couple can self-select into CRE, therapy, or both. Findings indicate that couples who participate in a CRE program benefit from participation. However, we encourage the use of a more systemic approach to prevention and intervention research than has generally been undertaken thus far by collecting baseline data before CRE participation and utilizing information that participants share about themselves and their families during the class to suggest other potentially complementary family support services (e.g., therapeutic services, parenting programs). We encourage exploration of the effects of CRE in combination with other programs and services for couples with varying levels of relational instability. Finally, findings regarding different effects of both actor and partner reports may indicate that partners are not always congruent in their assessment of their relational health. Thus, educators are encouraged to emphasize open communication within participating dyads to create shared meaning about current and future relational health.

Limitations

Although we present information on changes from pre-program to immediate post-program 6 to 8 weeks later, we are limited in our ability to assess whether and how relational instability at baseline influenced changes in depressive symptoms and relationship quality over time. Therefore, follow-up data is vital for assessing these patterns of association in the program group over time. In addition, the outcome data from our study were self-report measures that may under- or overestimate true effect sizes. Thus, observational methods would enhance the validity of these and future findings.

Conclusions and Future Directions

Exploring variations in CRE outcomes based on relational characteristics and context serves



to enhance our understanding of influences on the program experience and for whom the program works best, but there is still much to be done. Our study joins the few others that consider individual CRE participants in the context of their couple relationships. A focus on the influences within dyads in CRE research is in the beginning stages (Braithwaite & Fincham, 2011; Halford & Wilson, 2009; Laurenceau, Stanley, Olmos-Gallo, Baucom, & Markman, 2004; Owen et al., 2012), yet is consistent with an ecological approach. We encourage the continued use of dyadic data analyses in the study of CRE programs' influence on individuals' experiences and growth. In addition, an ecological family systems approach suggests the continued consideration of CRE outcomes related to couple functioning, such as indicators of individual well-being and family harmony, and the assessment of spillover among individual, relationship, and family change over time.

We examined the influence of the existence and recency of thoughts of divorce or separation on amount of change in several targeted CRE outcomes and found some enhanced benefits for women reporting less stable relationships at baseline. We acknowledge, however, that our measure is only one aspect of relational vulnerability. Our hope is that this investigation stimulates exploration of other possible couple-level influences on change (e.g., amount of couple conflict, commitment and dedication to the relationship), as well as exploration of the influence of combinations of couple-level variables and demographics on outcomes. Overall, CRE research and practice are best served when we move from evaluation methods that seek the typical, or average, individual experience to methods that recognize the diversity in our samples and that endeavor to uncover unique pathways of change within the couple context. This approach can provide information on factors that provide an enhanced CRE program experience and assurances that subpopulations of participants are not negatively affected by CRE participation.

References

Adler-Baeder, F., Bradford, A. B., Skuban, E. M., Lucier-Greer, M. J., Ketring, S. A., & Smith, T. A. (2010). Demographic predictors of relationship and marriage education participants pre- and post-program relational and individual functioning. *Journal of Couple and Relationship Therapy*, 9, 113–132. doi: 10.1080/15332691003694885

- Adler-Baeder, F., Calligas, A., Skuban, E., Keiley, M., Ketring, S. A., & Smith, T. (2013). Linking changes in couple functioning and parenting among couple relationship education participants. *Family Relations*, 62, 284–297. doi: 10.1111/fare.12006
- Adler-Baeder, F., Garneau, C., Ketring, S., Smith, T., Skuban, E., McGill, J., & Harcourt, K. T. (2013, November). *Treatment effects of couple relationship education for diverse participants*. Paper presented at the annual conference of the National Council of Family Relations, San Antonio, TX.
- Administration for Children and Families. (2007). Healthy marriage initiative: Activities and accomplishments 2006. Washington, DC: Author.
- Amato, P. R. (2014). Does social and economic disadvantage moderate the effects of relationship education on unwed couples? An analysis of data from the 15-month Building Strong Families Evaluation. *Family Relations*, 63, 343–355. doi: 10.1111/fare.12069
- Anthis, K. S. (2002). On the calamity theory of growth: The relationship between stressful life events and changes in identity over time. *Identity*, 2, 229–240. doi: 10.1207/S1532706XID0203_03
- Blanchard, V. L., Hawkins, A. J., Baldwin, S. A., & Fawcett, E. B. (2009). Investigating the effects of marriage and relationship education on couples' communication skills. *Journal of Family Psychol*ogy, 23, 203–214. doi: 10.1037/a0015211
- Booth, A., Johnson, D., & Edwards, J. N. (1983). Measuring marital instability. *Journal of Marriage* and the Family, 45, 387–394. doi: 10.2307/351516
- Bradbury, T. N., & Lavner, J. A. (2012). How can we improve preventive and educational interventions for intimate relationships? *Behavior Therapy*, 43, 113–122. doi: 10.1016/j.beth.2011.02.008
- Bradford, A. B., Adler-Baeder, F., Ketring, S. A., Bub, K. L., Pittman, J. F, & Smith, T. A. (2014). Relationship quality and depressed affect among a diverse sample of relationally unstable relationship education participants. *Family Relations*, 63, 219–231. doi: 10.1111/fare.12064
- Braithwaite, S. R., & Fincham, F. D. (2011). Computer-based dissemination: A randomized clinical trial of ePREP using the actor partner interdependence model. *Behavior Research and Therapy*, 49, 126–131. doi: 10.1016/j.brat.2010.11.002
- Bronfenbrenner, U., & Morris, P. (1998). The ecology of developmental processes. In R. Lerner (Ed.), *Handbook of child psychology: Vol. 1. Theoretical models of human development* (5th ed., pp. 993–1028). New York: Wiley.



- Burr, B. K., Hubler, D. S., Gardner, B. C., Roberts, K. M., & Patterson, J. (2014). What are couples saying about relationship education? A content analysis. *Journal of Couple & Relationship Therapy*, 13, 177–197. doi: 10.1080/15332691.2013.852493
- Carroll, J. S., & Doherty, W. J. (2003). Evaluating the effectiveness of premarital prevention programs: A meta-analytic review of outcome research. *Family Relations*, 52, 105–118. doi: 10.1111/j.1741-3729.2003.00105.x
- Coie, J. D., Watt, N. F., West, S. G., Hawkins, J. D., Asarnow, J. R., Markman, H. J., . . . Long, B. (1993). The science of prevention: A conceptual framework and some directions for a national research program. *American Psychologist*, 48, 1013–1022. doi: 10.1037/0003-066X.48.10.1013
- Cowan, P. A., Cowan, C. P., Pruett, M. K., Pruett, K., & Gillette, P. (2014). Evaluating a couples group to enhance father involvement in low-income families using a benchmark comparison. *Family Relations*, 63, 356–370. doi: 10.1111/fare.12072
- Dalla, R. L., Bailey, K., Cunningham, A., Green, N., & Vyhlidal, J. L. (2013). "Tve devoted my entire life to my daughter—and she knows it": Exploration of identity development among now-adult Navajo Native American adolescent mothers. *Identity*, 13, 159–186. doi: 10.1080/15283488.2013.776963
- DeMaria, R. M. (2005). Distressed couples and marriage education. *Family Relations*, 54, 242–253. doi: 10.1111/j.0197-6664.2005.00019.x
- Dion, M. R., & Hershey, A. M. (2010). Relationship education for unmarried couples with children: Parental responses to the Building Strong Families Project. *Journal of Couple* & *Relationship Therapy*, 9, 161–180. doi: 10.1080/15332691003694919
- Doherty, W. J. (1995). Boundaries between parent and family education and family therapy: The levels of family involvement model. *Family Relations*, 44, 353–358. doi: 10.2307/584990
- Emmelkamp, P. M. G., van Linden van den Heuvel, C., Ruphan, M., Sanderman, R., Scholing, A., & Storink, F. (1988). Cognitive and behavioral interventions: A comparative evaluation with clinically distressed couples. *Journal of Family Psychology*, *1*, 365–377. doi: 10.1037/h0080472
- Farson, R. (1974). Birthrights. New York: Macmillan.
- Francis, D. J. (1988). An introduction to structural equation models. *Journal of Clinical and Experimental Neuropsychology*, 10, 623–639. doi: 10.1080/01688638808402800
- Futris, T. G., & Adler-Baeder, F. (2014). The National Extension Relationship and Marriage Education Model: Core teaching concepts for relationship and marriage enrichment programming (Paper No. HDFS-E-157). Athens, GA: University of Georgia Cooperative Extension.

- Garneau, C. L., & Adler-Baeder, F. (2015). Changes in stepparents' coparenting and parenting following participation in community-based relationship education program. *Family Process*, 54, 590–599. doi: 10.1111/famp.12133
- Gregson, K., Parham, R., Adler-Baeder, F., Ketring, S., Smith, T., Bradford, A., . . . Lucier-Greer, M. (2012). Couple and relationship education: Does curriculum matter for men? *Forum for Family and Consumer Issues*, 17(2). Retrieved from http:// ncsu.edu/ffci/publications/2012/v17-n2-2012-sum mer-fall/gregson-adler-parham-ketring-smith.php
- Halberstadt, A. G., Cassidy, J., Stifter, C. A., Parke, R. D., & Fox, N. A. (1995). Self-expressiveness with the family context: Psychometric support for a new measure. *Psychological Assessment*, 7, 93–103.
- Halford, W. K., O'Donnell, C., Lizzio, A., & Wilson, K. L. (2006). Do couples at high risk of relationship problems attend premarriage education? *Journal of Family Psychology*, 20, 160–163. doi: 10.1037/0893-3200.20.1.160
- Halford, W. K., Petch, J., & Creedy, D. K. (2010). Promoting a positive transition to parenthood: A randomized clinical trial of couple relationship education. *Prevention Science*, 11, 89–199. doi: 10.1007/s11121-009-0152-y
- Halford, W. K., & Wilson, K. L. (2009). Predictors of relationship satisfaction four years after completing flexible delivery couple relationship education. *Journal of Couple & Relationship Therapy*, 8, 143–161. doi: 10.1080/15332690902813828
- Hawkins, A. J., Blanchard, V. L., Baldwin, S. A., & Fawcett, E. B. (2008). Does marriage and relationship education work? A meta-analytic study. *Journal of Consulting and Clinical Psychology*, 76, 723–734. doi: 10.1037/a0012584
- Hawkins A. J., & Fackrell, T. A. (2010). Does relationship and marriage education for lower-income couples work? A meta-analytic study of emerging research. *Journal of Couple & Relationship Therapy*, 9, 181–191. doi: 10.1080/15332691003694927
- Hawkins, A. J., Stanley, S. M., Blanchard V. L., & Albright, M. (2012). Exploring programmatic moderators of the effectiveness of marriage and relationship education programs: A meta-analytic study. *Behavior Therapy*, 43, 77–87. doi: 10.1016/j.beth.2010.12.006
- Kaiser, A., Hahlweg, K., Fehm-Wolfsdorf, G., & Groth, T. (1998). The efficacy of a compact psychoeducational group training program for married couples. *Journal of Consulting and Clinical Psychology*, 66, 753–760.
- Karney, B. R., & Bradbury, T. N. (2005). Contextual influence on marriage: Implications for policy and intervention. *Current Directions* in *Psychological Science*, 14, 171–174. doi: 10.1111/j.0963-7214.2005.00358.x

للاستشارات

- Kenny, D. A. (2014, October). *Measuring model fit*. Retrieved from http://www.davidakenny.net/cm/ fit.htm
- Kenny, D. A., Kashy, D. A., & Cook, W. L. (2006). Dyadic data analysis. New York: Guilford Press.
- Kunnen, E. S. (2006). Are conflicts the motor in identity change? *Identity*, 6, 169–186. doi: 10.1207/s1532706xid0602_3
- Laurenceau, J. P., Stanley, S. M., Olmos-Gallo, A., Baucom, B., & Markman, H. J. (2004). Community-based prevention of marital dysfunction: Multilevel modeling of a randomized effectiveness study. *Journal of Consulting* and Clinical Psychology, 72, 933–943. doi: 10.1037/0022-006X.72.6.933
- Leach, L. S., Butterworth, P., Olesen, S. C., & Mackinnon, A. (2013). Relationship quality and levels of depression and anxiety in a large population-based survey. *Social Psychiatry and Psychiatric Epidemiology*, 48, 417–425. doi: 10.1007/s00127-012-0559-9
- Lucier-Greer, M., Adler-Baeder, F., Harcourt, K. T., & Gregson, K. (2014). Relationship education for stepcouples reporting relationship instability—Evaluation of the Smart Steps: Embrace the Journey curriculum. *Journal of Marital & Family Therapy*, 40, 454–469. doi: 10.1111/jmft.12069
- Lucier-Greer, M. J., Adler-Baeder, F., Ketring, S. A., Harcourt, K. T., & Smith, T. A. (2012). Comparing the experiences of couples in first marriages and remarriages in couple and relationship education. *Journal of Divorce & Remarriage*, *53*, 55–75. doi: 10.1080/10502556.2012.635970
- MacCallum, R. C., Browne, M. W., & Sugawara, H. M. (1996). Power analysis and determination of sample size for covariance structure modeling. *Psychological Methods*, *1*, 130–149. doi: 10.1037//1082-989X.1.2.130
- Muthén, L. K., & Muthén, B. O. (1998–2010). *Mplus* user's guide (6th ed.). Los Angeles, CA: Author.
- Myers-Walls, J. A., Ballard, S. M., Darling, C. A., & Myers-Bowman, K. S. (2011). Reconceptualizing the domain and boundaries of family life education. *Family Relations*, 60, 357–372. doi: 10.1111/j.1741-3729.2011.00659.x
- Norton, R. (1983). Measuring marital quality: A critical look at the dependent variable. *Journal of Marriage & the Family*, 45, 141–151. doi: 10.2307/351302
- Owen, J., Chapman, L. K., Quirk, K., Inch, L. J., France, T., & Bergen C. (2012). Processes of change in relationship education for lower-income African American couples. *Journal of Couple & Relationship Therapy*, 11, 51–68. doi: 10.1080/15332691.2012.639704
- Quirk, K., Strokoff, J., Owen, J. J., France, T., & Bergen C. (2014). Relationship education in community settings: Effectiveness with distress and

non-distressed low-income racial minority couples. *Journal of Marital & Family Therapy*, 40, 1–12. doi: 10.1111/jmft.12080

- Radloff, L. S. (1977). The CES-D scale: A self-report depression scale for research in the general population. *Applied Psychological Measurement*, 1, 385–401. doi: 10.1177/014662167700100306
- Rauer, A. J., Adler-Baeder, F., Lucier-Greer, M., Skuban, E., Ketring, S. A., Smith, T. (2014). Exploring processes of change in couple relationship education: Predictors of change in relationship quality. *Journal of Family Psychology*, 28, 65–76. doi: 10.1037/a0035502
- Singer, J. D., & Willett, J. B. (2003). Applied longitudinal data analysis: Modeling change and event occurrence. New York: Oxford University Press.
- Soulsby, L. K., & Bennett, K. M. (2015). When two become one: Exploring identity in marriage and

cohabitation. *Journal of Family Issues*. Advance online publication. doi: 10.1177/0192513X 15598547

- Tudge, J. R. H., Mokrova, I., Hatfield, B. E., & Karnik, R. B. (2009). Uses and misuses of Bronfenbrenner's bioecological theory of human development. *Journal of Family Theory and Review*, 1, 198– 210. doi: 10.1111/j.1756-2589.2009.00026.x
- Wadsworth, M. E., & Markman, H. J. (2012). Where's the action? Understanding what works and why in relationship education. *Behavior Therapy*, 43, 99–112. doi: 10.1016/j.beth.2011.01.006
- Whitchurch, G. G., & Constantine, L. L. (1993). Systems theory. In P. Boss, W. J. Doherty, R. LaRossa, W. R. Schumm, & S. K. Steinmetz (Eds.), Sourcebook of family theories and methods: A contextual approach (pp. 325–352). New York: Springer.



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