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Couple Relationship Education at the Transition to Parenthood: A Window of Opportunity to Reach High-Risk Couples

JEMIMA PETCH*
W. KIM HALFORD*
DEBRA K. CREEDY†
JENNY GAMBLE‡

This study evaluated if the transition to parenthood is a window of opportunity to provide couple relationship education (CRE) to new parents at high risk for future relationship problems. Fifty-three percent of eligible couples approached agreed to participate in CRE and of these 80% had not previously accessed CRE. Couples were a broad representative of Australian couples having their first child, but minority couples were underrepresented. A third of couples had three or more risk factors for future relationship distress (e.g., cohabiting, interpartner violence, elevated psychological distress, unplanned pregnancy). Low education was the only risk factor that predicted drop out. The transition to parenthood is a window of opportunity to recruit certain types of high-risk couples to CRE.

Keywords: Transition to Parenthood; Couple; High-risk; Uptake; Withdrawal

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Couple relationship education (CRE) is a promising approach to enhancing couple relationships (Hawkins, Blanchard, Baldwin, & Fawcett, 2008), but its impact is limited by its modest reach to couples at high risk of future relationship distress (Doss, Rhoades, Stanley, & Markman, 2009; Wood, McConnell, Moore, Clarkwest, & Hsueh, 2010). There is growing evidence that couples with risk factors for future relationship distress are those most likely to benefit from CRE (Halford, 2011). The current study evaluated the uptake and completion rate of CRE at the transition to parenthood, and suggests strategies to increase the success of CRE's reach to high-risk couples.

*Psychology, The University of Queensland, St. Lucia, Queensland, Australia.
†Centre for Mothers and Babies, The University of Queensland, St. Lucia, Queensland Australia.
‡Nursing and Midwifery, Griffith University, Meadowbrook, Queensland, Australia.
Correspondence concerning this article should be addressed to Jemima Petch, Psychology, The University of Queensland, St. Lucia, Queensland 4072, Australia. E-mail: j.petch@uq.edu.au.

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What are the Effects of Couple Relationship Education?

CRE is the provision of structured education to couples about relationship knowledge, attitudes, and skills with the goal of helping them sustain a healthy long-term relationship (Halford, Markman, & Stanley, 2008). In many developed countries (e.g., United States, Australia, and Norway), government and community agencies promote CRE in an attempt to reduce the negative personal, social, and economic effects of couple relationship distress (Halford & Van Acker, in press).

CRE has positive effects on couple relationships. Meta-analyses show that CRE produces a moderate-to-large effect size improvement in couple communication (Blanchard, Hawkins, Baldwin, & Fawcett, 2009), and a small-to-moderate immediate increase in relationship satisfaction (Carroll & Doherty, 2003; Hawkins et al., 2008). The small immediate effects of CRE likely reflect a ceiling effect, with currently satisfied couples having little scope for an increase in satisfaction. Importantly, CRE enhances maintenance of high relationship satisfaction for periods of 4–5 years (Halford et al., 2008).

Couple Relationship Education at the Transition to Parenthood

CRE evolved from brief premarital counseling offered by religious marriage celebrants (Hunt, Hof, & DeMaria, 1998), and religious organizations continue to be the most common means of accessing CRE (Halford & Simons, 2005; Stanley, Amato, Johnson, & Markman, 2006). Despite the positive effects of premarital CRE, only about 30% of marrying couples attend premarital CRE (Halford, O'Donnell, Lizzio, & Wilson, 2006; Stanley et al., 2006). Examining other opportunities to provide CRE is therefore important to expanding the reach of CRE.

The transition to parenthood is a potentially important window of opportunity for couples to access CRE. First, it is a high-risk time for deterioration of couple relationship adjustment (Doss, Rhoades, Stanley, & Markman, 2009). Declining relationship adjustment across the transition to parenthood is likely attributable, at least in part, to the numerous challenges of becoming a parent, such as the demands of infant care, sleep deprivation, increased household chores, gender role changes, and lack of time for couple relationship needs (Petch & Halford, 2008).

Second, there is a strong association between the couple relationship, parenting, and child well-being (Carlson, Pilkauskas, McLanahan, & Brooks-Gunn, 2011; Cox, Paley, Burchinal, & Payne, 1999; Krishnakumar & Buehler, 2000). Specifically, mutually satisfying, low-conflict couple relationships covary with positive parent–child relationships (Carlson et al., 2011) and positive child outcomes. Thus, enhancing the couple relationship with CRE holds out the promise of enhancing parenting (Halford & Petch, 2010).

Third, CRE enhances maintenance of couple relationship satisfaction at the transition to parenthood (Petch & Halford, 2008). A recent meta-analysis of CRE at the transition to parenthood found that interventions of at least 5 sessions, which teach couples relationship skills and mutual support around parenting, enhance couples' communication and reduces the erosion of relationship satisfaction otherwise evident in new parent couples (Pinquart & Teubert, 2010a). While postintervention effects sizes were small, follow-up effects were larger, supporting the preventative effects of transition to parenthood CRE. For example, in the longest follow-up of transition to parenthood CRE, Schulz, Cowan, and Cowan (2006) found group antenatal and postnatal meetings involving discussion on the effects of parenthood helped prevent divorce and sustained relationship adjustment for up to 5 years after birth.

Which Couples are at High Risk for Future Relationship Problems?

A recent review of 12 CRE studies with long-term follow-up noted a consistent pattern of greater benefit from CRE for high-risk than low-risk couples (Halford, Petch, & Bate, in

press) in the general population and during the transition to parenthood CRE (Petch, Halford, Creedy, & Gamble, in press). Although more research is needed on moderators of effects, current findings underscore the importance of ensuring CRE is accessible to high-risk couples.

Previous reviews identified numerous risk factors for future relationship distress (Bodenmann, Pihet, Shantinath, Cina, & Widmer, 2006). The vulnerability-stress-adaptation (VSA) model usefully organizes risk factors into one of three interrelated constructs: enduring vulnerabilities, stressful events, and adaptive processes (Bodenmann et al., 2006). Couples becoming parents share some stressful events (pregnancy and the birth of their first baby), however, variations in how these events occur influence how couples adjust. For example, stressful events including an unplanned pregnancy (Cox et al., 1999), financial stress (Amato, 1996; Conger, Rueter, & Elder, 1999), and low male income predict decline in relationship adjustment across the transition to parenthood (Doss, Rhoades, Stanley, & Markman, 2009).

Enduring vulnerabilities (e.g., low education) increase the likelihood of the couple adapting poorly to parenthood. Low education predicts marital instability (Cherlin, 2010; Larson & Holman, 1994) and these couples are underrepresented in premarital CRE (Doss, Rhoades, Stanley, Markman, & Johnson, 2009; Stanley et al., 2006; Sullivan & Bradbury, 1997). Cohabiting couples (relative to married couples) experience higher rates of negative communication (Hsueh, Morrison, & Doss, 2009; Kline et al., 2004), relationship aggression (Brownridge & Halli, 2000), and relationship distress (Mitnick et al., 2009). However, cohabiting couples have limited opportunity to access premarital CRE (Halford, 2011). With 35% of first born children born to cohabiting couples (Australian Bureau of Statistics, 2006a), offering CRE at the transition to parenthood could extend the reach of CRE to this high-risk group.

There are high rates of depression (between 10% and 30%) and psychological distress in perinatal women and men (Lee & Chung, 2007). Male and female antenatal depression are interrelated; each predicts future couple relationship distress (Cowan & Cowan, 2000) and insensitive parenting (Pihet, Bodenmann, Cina, Widmer, & Shantinath, 2007). There is some evidence that women with high psychological distress are less likely to attend and engage in antenatal group interventions. Scheduling fewer group sessions and inviting male partners along may assist with uptake (Matthey et al., 2004).

An important *non*adaptive couple process is low-level interpartner violence (IPV; defined as pushing, showing, slapping). Low-level IPV is common, occurring in 25–30% of young couples, and is perpetrated at approximately equal prevalence by men and women (Archer, 2000; Halford, Farrugia, Lizzio, & Wilson, 2010). In contrast, high-severity IPV (e.g., punching, hitting with an object, using a weapon) has a low prevalence of 1–2% of couples (Alhabib, Nur, & Jones, 2010), is predominantly male-to-female directed (Taillieu & Brownridge, 2010), includes psychological domination and intimidation, often leads to female injury (Holtzworth-Munroe, Meehan, Herron, Rehman, & Stuart, 2000), and is therefore inappropriate to address in CRE.

Couples typically do not report low-level IPV as a problem in their relationship, but are high risk for future relationship dissatisfaction and instability (Rogge & Bradbury, 1999; Testa & Leonard, 2001). There is mixed evidence as to whether such couples attend CRE. In one study low-level IPV showed a trend for predicting nonattendance at CRE (Sullivan & Bradbury, 1997), but another study found couple IPV had no effect on CRE attendance (Halford et al., 2006).

A frequently examined predictor of postpartum relationship satisfaction is antenatal relationship satisfaction (Cowan & Cowan, 2000; Knauth, 2000). Low antenatal relationship satisfaction predicts even lower postnatal relationship satisfaction and parenting

adjustment (Cowan & Cowan, 2000; O'Brien & Peyton, 2002). Couples with low-level relationship satisfaction are therefore important to attract to CRE.

Numerous factors contribute to future relationship distress, and high-risk couples would seem likely to benefit more from CRE than low-risk couples. However, little is known about which types of couples are attracted to transition to parenthood CRE. Table 1 presents 10 published studies evaluating CRE at the transition to parenthood, of which 6 reported acceptance rates. A mean of 65% of couples (range 40–80%) accepted. Rates of program completion were not reported. However, 8 of the 10 studies reported follow-up data and a mean of 75% of participants provided that data, which likely suggests 75% of couples completed the programs. Thus, it is known that couples differ in their willingness to undertake CRE, and that approximately 25% of couples withdraw, but it is unclear if CRE at the transition to parenthood attracts high-risk couples and how risk factors for future relationship distress relate to CRE withdrawal.

Study Aims

The first aim of the current study was to describe the risk profile of couples agreeing to CRE. We assessed the risk factors of low income, low education (defined as either partner completing less than 12 years of schooling), cohabitation, psychological distress (defined as either partner reporting elevated scores on the National Comorbidity Scale—Distress Index), low relationship satisfaction, unplanned pregnancy, and low-level IPV. Second, we examined if transition to parenthood CRE reached couples who had not previously accessed CRE. Couples were participating in a large randomized controlled trial comparing a CRE program entitled Couple CARE for Parents (CCP) with a mother-focused perinatal care program (Becoming a Parent program; BAP). BAP was a mother-focused parenting program and is different from the similarly titled "Becoming Parents Program" (Jordan, Stanley, & Markman, 2001), which is based on PREP and includes pre- and postbirth couple relation-

TABLE 1

Participant Characteristics and Acceptance Rate for Couple Randomized Controlled Transition to Parenthood Studies

Author(s)/Year	Participants (Number)	Uptake Rate	Attrition
Coffman, Levitt, and Brown (1994)	141 married, predominantly white, well-educated, middle-class	70%	28%, 3 months postpartum
Cowan and Cowan (2000)	72 predominantly white, married, middle-class couples	Unreported	Unreported
Doherty, Erickson, and LaRossa (2006)	132 predominantly white, well-educated, married couples	Unreported	15%, 12 months follow-up
Feinberg and Kan (2008)	169 predominantly white, married, well-educated, couples	80%	15% from program
Hawkins, Fawcett, Carroll, and Gilliland (2006)	155 predominantly young, white, well-educated couples	66%	24%, 9 months follow-up
Kermeen (1995)	139 married, middle-class, half with high formal education	Unreported	17%, 2 months postpartum
Matthey, Barnett, Ungerer, and Waters (2000)	268 couples. No demographic data presented	78%	27%, 6 months follow-up
Midmer, Wilson, and Cummings (1995)	70 couples. No demographic data presented	54%	26%, 6 months follow-up
Halford, Petch, and Creedy (2010)	71 predominantly white, married, well-educated couples	40%	35%, 12 months follow-up
Shapiro and Gottman (2005)	38 predominantly white, married, well-educated couples	Unreported	~10%, 12 months follow-up

ship education. All participants agreed to undertake CRE if assigned to that condition, and BAP served as a comparison condition to examine the benefits of CRE beyond best-practice perinatal support. Results of that controlled trial are reported in Petch et al. (in press). Third, we tested whether risk was associated with attrition from CRE.

METHOD

Participants

Figure 1 presents the flow of participants through the study. Between July 2005 and September 2006, 560 couples were approached to participate in the study while attending antenatal services at one of five metropolitan hospitals, with the majority of couples (n = 149, 59.84%) recruited from the Royal Brisbane and Women's Hospital (RBWH). Inclusion criteria were as follow: (1) the woman was between 20 and 35 weeks gestation with her first child and not expecting a multiple birth; (2) the couple was in a relationship for at least 6 months; (3) both partners reported a Dyadic Adjustment Scale score of 90 or more (described later); (4) neither partner had children from a previous relationship; (5) the couple lived within 50 km of the recruitment hospital; (6) neither partner was currently receiving psychological therapy for individual or couple problems; and (7) both partners could read and write English. Mean age of participants was 28.7 years (SD = 4.9) for women and 30.6 years (SD = 5.8) for men, and mean relationship duration was 5 years 5 months (SD = 3 years 3 months).

Of the 467 eligible potential participants 249 (53%) began the study. The stated reasons for declining to participate (n = 198) were lack of interest (n = 110), too busy (n = 45),

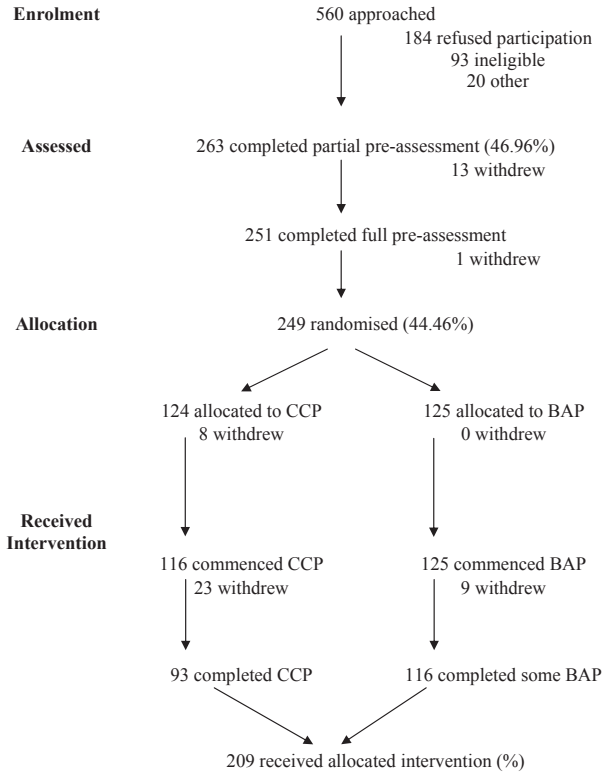

FIGURE 1. Participant Flow through the Study

declined to give a reason (n = 30), or other (n = 13). Aside from recording the reason why these couples declined participation our ethics board did not permit further data collection.

Of the 249 study couples, 209 completed all intervention units and the postassessment and 40 withdrew (31 from CCP and 9 from BAP). A total of 18 of the 40 couples who withdrew (12 in CCP, 6 in BAP) completed less than 50% of the intervention, the remaining 22 couples withdrew after completing more than 50% (but not 100% of the intervention). Thus, 92% of couples assigned to CCP completed at least half of the program, and 75% completed all six units. For the CRE progam (CCP) withdrawal reasons included: too busy (n = 8), couple uncontactable (n = 4), couple not interested after all (n = 6), did not give a reason (n = 5), and 8 couples gave other reasons. BAP withdrawal reasons included: couple uncontactable (n = 4), couple not interested after all (n = 2), infant poor health, personal reasons, and unhappy with program.

Measures

A preassessment interview collected demographic information, length of relationship, pregnancy planning, and reasons for participation. Couple relationship satisfaction was assessed with the 32-item Dyadic Adjustment Scale (DAS) (Spanier, 1976), with high reliability (Carey, Spector, Lantiga, & Krauss, 1993). Higher scores reflect higher relationship satisfaction (population mean in intact couples is M = 114.8, SD = 17.8), and a score of 90–98 was used to categorize couples as 'distressed' (Spanier, 1976). Couple conflict was assessed via the 78-item Conflict Tactics Scale (CTS) (Straus, Hamby, Boney McCoy, & Sugarman, 1996), a widely used measure of aggression in intimate relationships, with adequate reliability, test–retest reliability, and validity (Straus et al., 1996; Vega & O'Leary, 2007). Couples were categorized as 'IPV present' if either partner endorsed an act of low-level physical aggression in the last 12 months. Couples who endorsed high-level aggression (severe IPV) were referred to therapy. Adult mental health was measured with the 14-item National Comorbidity Survey—Distress Index (NCSDI) (Kessler et al., 1994), a measure of psychological distress with high internal consistency and construct validity (Kessler et al., 1994). Couples who scored 31 (1 SD above the population mean) or above were categorized as "psychologically distressed" (population M = 22.44, SD = 8.09) (Kessler et al., 1994).

Procedure

Couples were invited to participate in a study of a couple-based program to assist with the transition to parenthood. About 1 week after recruitment a home visit was conducted to gain informed consent, complete the intake interview, and distribute individual questionnaires to each partner along with a prepaid return addressed envelope. Once both partners' questionnaires were returned couples were randomly assigned to either CCP or BAP, which were free programs. Recruitment and delivery of BAP and CCP were by female midwives. Each had considerable maternity care experience, postgraduate qualifications, and one was a New Zealand Maori.

CCP was a six session (10 hours) flexible-delivery CRE program providing both couple relationship and infant care education. (Refer to Table 2 for more detail on session content, timing, and format.) CCP was designed to be easily accessible to couples becoming parents and combined an antenatal face-to-face couple workshop with postnatal sessions completed by couples at home. An antenatal workshop for unit 1 was chosen because of the familiarity most couples have with this educational format and reported effectiveness of previous face-to-face antenatal CRE workshops (Halford, Farrugia, Lizzio, & Wilson, 2010). In contrast, given that regular face-to-face sessions are a barrier to attendance at parent training programs (Petch & Halford, 2008) and seemed likely to be a particular

TABLE 2
Content and Format of Delivery of the Transition to Parenthood Assessment and Program Units

	Becoming a Parent		Couple Care for Parents	
Unit	**Weeks from Birth**	**Unit Content**	**Weeks from Birth**	**Unit Content**
Preintervention assessment (third trimester pregnancy)				
1.	−4, home visit	Birth expectations, breast feeding	−6, group workshop	Parenting expectations, couple communication
2.	−2, telephone	Postpartum mother and infant needs	−4, home visit	Couple communication, conflict management
Postworkshop assessment (during pregnancy, after CCP unit 2 communication training)				
3.	+3, telephone	Infant care, time management	+3, home visit	Infant care, stress management
4.	+6, telephone	Infant care, growth, development	+6, self-directed	Couple caring, affection, sexuality
5.	+9, telephone	Infant care, growth, development, support networks	+9, self-directed	Mutual partner support, social support, couple activities
6.	+12, telephone	Infant care, growth, development,	+12, self-directed	Managing stressful change, prevent problems, sustain relationship focus
Postintervention assessment (4 months postpartum)				

problem for couples with a new baby, all CCP postnatal sessions were self-directed using a DVD and parent workbook complemented with telephone calls from a CCP therapist. CCP addressed issues salient to expectant and new parent couples. CCP included content traditionally included in CRE; added information and education on parenting practices, parenting expectations, and baby care; and adapted content typical of CRE (e.g., the more general overview of relationship expectations highlighted gender role expectations for the division of labor as a potential source of conflict for many new parents and encouraged couples to identify these expectations and negotiate shared expectations in cases of difference).

BAP was a five session (5 hours) mother-focused telephone support program covering topics women find useful in perinatal education. More detail about the CCP and BAP programs is provided in Halford, Petch, and Creedy (2010). Couples commenced either program within 2 weeks of randomization (during pregnancy), and completed the program and a postintervention assessment by 4 months postpartum.

RESULTS

Couples agreeing to participate in CRE were representative of the childbearing population in age, income, education, relationship status, and indigenous Australian origin, but underrepresented women from Non-English Speaking Backgrounds (NESB) (see Table 3). Study couples were comparable with Australian couples on all assessed demographics, except highly educated couples were overrepresented, couples with a NESB background were underrepresented, and study couples reported fewer unplanned pregnancies.

Mean relationship satisfaction scores were in the satisfied range, female DAS $M = 120.51$ ($SD = 9.84$) and male DAS $M = 118.16$ ($SD = 10.29$). Of the seven assessed risk variables, the most common were elevated psychological distress in at least one partner, cohabiting rather than being married, low education, and less severe IPV, each of which occurred in about one-third of couples. Low income was rare in the sample. Correlations between the seven risk variables and DAS scores were small and predominantly nonsignificant, with the exception of a moderate correlation between high psychological

TABLE 3

Characteristics of Couples Agreeing to CRE Compared with all Women at a Major Maternity Hospital and the Australian Population of New Parents

Characteristics	Study Couples	RBWH Mothers	Australian Population
Demographics			
Mean age of mothers	28.7 (*SD* = 4.9)	27.1	28.0
Mean age of fathers	30.6 (*SD* = 5.6)	No data available	33.1
Income AUD $,000	$86 (*SD* = $42)	No data available	$88
Mother has degree	43%	33%	21%
Father has degree	33%	No data available	21%
NESB mothers	9% (female)	16%	33%
NESB fathers	14% (male)	No data available	33%
Prior CRE	21%	No data available	25–30%
Risk factors			
Women <grade 12	16%	33%	21%
Men <grade 12	21%	13%	19%
Cohabiting	35%	No data available	33%
Unplanned pregnancy	34%	No data available	51%
IPV	32%	No data available	25–50%
Psych. distress mothers	26%	No data available	10–30%
Psych. distress fathers	19%	No data available	5–24%
Annual income <$35K	7%	No data available	13%

Note. CRE = couple relationship education; NESB = Non-English Speaking Background; RBWH = Royal Brisbane and Women's Hospital; RBWH women's education (Webster et al., 2006). Australian income, education, and male age (Australian Bureau of Statistics, 2006b); Women's age, ethnicity, and relationship status (Laws, Abeywardana, Walker, & Sullivan, 2007). Psychological distress (Lee & Chung, 2007). IPV (Halford, Farrugia, Lizzio, & Wilson, 2010).

distress and low DAS scores (for both females and males $r = .36$, $p < .01$) and a moderate-to-high correlation between cohabitation and unplanned pregnancy, $r = .48$, $p < .01$. Of the seven assessed risk variables, 20% ($n = 49$) of couples had zero factors, 28% ($n = 70$) had one risk factor, 21% ($n = 52$) had two risk factors, and 31% ($n = 78$) had three or more risk factors. We categorized couples with three or more risk factors as high-risk couples. Only 52 couples (21%) have previously attended any CRE. Prior attendance of CRE was less common in cohabiting couples, 6/86 (7%), than married couples, 46/163 (28%), $\chi^2(df = 1, N = 249) = 15.38$, $p < .01$. There was a trend for high-risk couples, 12/82 (15%), to be less likely to have attended CRE than low-risk couples, 40/167 (24%), $\chi^2(df = 1, N = 249) = 2.89$, $p = .09$.

A hierarchical logistic regression was conducted to determine whether the risk factors predicted failing to complete CCP ($n = 31$). As there were few distressed couples or couples with low income we did not include these risk factors. Five risk factors were entered as dummy variables in four blocks: (1) relationship status (married = 0, cohabiting = 1) and pregnancy planning (0 = planned, 1 = unplanned); (2) educational attainment (0 = Grade 12 or higher, 1 = less than grade 12); (3) couple psychological distress (0 = neither partner reported psychological distress, 1 = psychological distress reported); and (4) IPV (0 = no IPV, 1 = IPV). Table 3 shows that only low education predicted failure to complete CRE. Thus, apart from low educated couples, high-risk couples were as likely as other couples to complete CRE (Table 4).

DISCUSSION

Over half of eligible couples agreed to participate in a trial of transition to parenthood CRE, and the majority of couples completed the program. The rate of agreeing to

TABLE 4

Logistic Regression Predicting Couple Care for Parents Withdrawal from Couple Relationship Education at the Transition to Parenthood

Variables	*Adj. R^2*	χ^2	*df*	*B*	*SE (B)*	*β*
Block 1						
Relationship status	139.49	.54	2	.27	.5	1.32
Pregnancy planning				−.33	.49	.72
Block 2						
Relationship status	135.13	4.36	1	.50	.52	1.65
Pregnancy planning				−.39	.50	.67
Low education				−.95*	.45	.39
Block 3						
Relationship status	133.28	1.86	1	.40	.53	1.48
Pregnancy planning				−.34	.51	.72
Low education				−.86	.50	.42
Psychological distress				.60	.43	1.81
Block 4						
Relationship status	132.76	.52	1	.38	.53	1.46
Pregnancy planning				−.41	.52	.66
Low education				−.90	.47	.41
Psychological distress				.63	.44	1.89
Physical aggression				.33	.46	1.39

Note. *$p < .05$.

participate in CRE was comparable to the uptake rates of previous CRE studies. In contrast to studies showing that high-risk couples are underrepresented in premarital CRE, this study found that four of the seven risk factors were equally represented in participants. Recruiting a representative sample of couples with high risk characteristics is a challenge for universal intervention studies which typically find that cohabiting couples, those with IPV, psychological distress, or low education, are underrepresented and less engaged in antenatal education and premarital CRE (Halford, 2011; Sullivan & Bradbury, 1997). In contrast, CCP, which was offered to both partners in a flexible format that allowed for much of the program to be completed at home, attracted a strong representation of high-risk couples, very few of whom had previously attended CRE. Furthermore, most high-risk couples completed CRE. At the same time, there was an underrepresentation of less educated and minority couples, and low education predicted withdrawal from CRE.

The greater uptake of CRE by high-risk couples at the transition to parenthood relative to premarital CRE partially reflects that cohabiting couples are not offered premarital CRE, and that the time of becoming parents might be the first time they have been offered CRE. In addition, expectant couples report great interest in childbirth and parenting education, and see attention to the couple relationship as an important element of that education (Gagnon & Sandall, 2007). Finally, most premarital CRE is offered by religious organizations and less religious couples typically perceive CRE as too conservative and religious (Halford & Simons, 2005). CRE offered by nurse–midwives to expectant parents was secular. For these three reasons offering CRE at the transition to parenthood provides an important window of opportunity for couples to access CRE that complements the reach of premarital CRE.

Low education predicted drop-out from CRE. The number of assessment forms and the reading required in the program may have made participation less attractive to low education couples. Anecdotally we found some less educated couples struggled with the reading and writing activities involved in the CRE. We wrote the materials to a grade 9 reading

level, but further attempts to use plain language and audio-visual materials might enhance accessibility of the program.

Study Limitations

The current study was conducted as part of a randomized controlled trial. As participation in research typically involves more onerous demands on couples than participation in a service, our reported rates of couple uptake and retention likely reflect the lower limit to what is achievable when CRE is offered as a service. Future effectiveness trials are needed to further assess the attraction and retention of high-risk couples to CRE.

The results of the uptake and retention of CRE by high-risk couples should not be generalized beyond the current sample of English-speaking couples with moderate-to-high levels of formal education. Future research needs to attract minority couples, and retain couples with low formal education. Furthermore, future studies need to evaluate how CRE at the transition to parenthood can assist couples with low relationship satisfaction, who are not yet severely distressed or considering separation.

Implications for Clinical Practice

First, the reach of CRE is enhanced by offering it to couples at the transition to parenthood. Making CRE accessible through hospitals, antenatal clinics, maternity and child health care is highly desirable. Two projects evaluating CCP programs in the United States are currently under way that test its reach in the context of the U.S. health care system.

The content of CRE for couples needs to be salient to their needs. For example, in the current study couples at the time of recruitment identified gaining knowledge of infant care as their primary goal from program participation, and so marketing of CRE for new parents should mention this content. At the same time, CRE needs to provide content that couples might not initially see as salient, but that research suggests is of value. After completing CCP couples reported that in addition to infant care information they highly valued the couple communication component of CCP.

Second, we need to enhance the reach of CRE to high-risk couples. Our modifications of traditional CRE content and delivery process successfully attracted and retained high proportions of couples (including a representative sample of cohabiting couples, those with unplanned pregnancy, psychological distress, and low-level IPV). The CCP completion rate of 92% contrasts with the 9% completion rate reported from all but the Oklahoma site of the Building Strong Families (BSF) project (Wood et al., 2010). CCP involved 12 hours of education, which is associated with maximum benefits (Hawkins, Stanley, Blanchard, & Albright, 2012; Pinquart & Teubert, 2010b). This amount of contact is substantially less than the 30–42 hours of education offered in the BSF project (Wood et al., 2010). Sometimes less is more; providing only the minimum necessary program duration needed to achieve the desired outcomes likely makes the program more attractive to participants, and maximizes cost-effectiveness. The flexible delivery of CCP allowed couples to complete 50%+ of the intervention in their own home, reducing the need for travel, child care, or arranging attendance around their infant's sleeping and feeding schedule.

We observed that the following factors enhanced the intervention acceptability and retention of couples. (1) The invitation to participate was made by hospital midwifery staff who have credibility to couples as a source of information on parenting; (2) The group antenatal workshop provided peer support and validated the need for education about this life event, but only required face-to-face attendance before the child was born; (3) We had the same midwife support the couple throughout the program, and this continuity of care allowed development of an ongoing relationship with that midwife.

In focusing on recruitment of high-risk couples we are not arguing that low-risk couples should be denied CRE. The evidence on moderators of CRE benefits is insufficiently conclusive to warrant such a policy position (Halford et al., in press). However, monitoring the risk profile of couples attending CRE to ensure equitable access by high-risk couples is important. In addition, continued research on moderators of CRE benefits might allow more effective CRE targeting.

Although we made attempts to reach low income, low education, and minority couples by recruiting from two maternity hospitals servicing a high proportion of lower socioeconomic status (SES) couples, and including a New Zealand Maori midwife CCP educator, more needs to be done to successfully attract low-SES and minority couples. Recruiting through community groups and services, media and internet sites relevant to minority groups might extend reach. Relying solely on recruiting those attending antenatal care is unlikely to recruit low-SES women, as they are underrepresented in antenatal clinics and classes (only coming into hospital for birth) (Lu et al., 2003). Recruitment at the time of birth or through postnatal clinics also provides opportunities to invite women to CRE. Having both recruiters and educators from similar cultural and SES backgrounds to those of the couples who we are seeking to recruit may increase uptake and completion of psychological interventions by culturally diverse and low-SES couples. Similarity of educator and couple culture and SES status may increase the educator's credibility and the couple's comfort with the educator (Owen, Tao, Leach, & Rodolfa, 2011).

Third, professionals should address IPV in CRE for new parents. It is noteworthy that more than 30% of couples in the current study engaged in at least one incident of IPV. More research is needed for evaluating the effects of CRE on IPV, and modifying CRE content to include psychoeducation and skill training in IPV reduction.

This study highlights the value of the transition to parenthood as an opportunity to disseminate CRE, and describes important strategies that resulted in high uptake and completion of CRE by high-risk couples who had not previously attended CRE. Future challenges for the dissemination of CRE include the provision of multiple entry pathways into CRE, refinement of strategies to attract low education and minority couples, and adapting program content to retain couples with low education.

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