Participant characteristics and outcomes of relationship education in the transition to parenthood

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In our study, we found no positive effect of relationship education for Norwegian couples after they had had their first child, write Øystein Mortensen and colleagues.

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The substantial increase in divorce rates over the past decades constitutes a significant social change in the western world (Amato, 2000) and suggests that couple relationships are increasingly fragile. Most research shows that both adults and children are exposed to increased risk of developing psycho-social and health problems after relationship breakdowns (Amato, 2000), while living in a satisfying relationship is related to positive mental health and well-being (Whisman, Uebelacker, & Weinstock, 2004), physical health (Burman & Margolin, 1992), good parenting (Cox, Paley, Burchinal, & Payne, 1999), and work productivity (Forthofer, Markman, Cox, Stanley, & Kessler, 1996). In an effort to meet the challenges related to the increased instability of marriages, preventive relationship education (RE) measures have been developed to provide couples with information and tools aimed at enhancing the quality of the relationship and preventing destructive communication and interaction. Typical relationship education workshops consist of a structured series of meetings with lectures, pair exercises, group or pair discussions, and skills training (Halford, Markman, Kline, & Stanley, 2003). The goals are to teach couples skills that are believed to be relevant for maintaining a good relationship and to prepare couples for probable future problems and challenges in their relationship. Reviews of RE studies that have been published in the last two decades indicate that under certain conditions RE can change couples' interaction patterns and produce moderate improvements in the adaptation and stability of relationships (Carroll & Doherty, 2003; Christensen & Heavey, 1999; Guerney & Maxson, 1990; Hahlweg & Markman, 1988; Halford, Petch, & Creedy, 2010; Hawkins, Blanchard, Baldwin, & Fawcett, 2008; Markman & Hahlweg, 1993; Pinquart & Teubert, 2010; Schulz, Cowan, & Cowan, 2006; Stanley, Amato, Johnson, & Markman, 2006), but there has been some controversy as to the strength and duration of these effects.

In a review of RE interventions, Halford et al. (2003) found RE implemented at an early stage in a relationship, and/or in connection with large changes in couple's lives, such as when they become parents for the first time, to be the most successful. In keeping with this discovery, a number of RE programs have been developed and implemented targeting in particular expectant and new parents. Focusing attention on this group makes good sense due to the quality of couple relationships, on average, tending to deteriorate when parents have their first child

(Doss, Rhoades, Stanley, & Markman, 2009; Lawrence, Rothman, Cobb, Rothman, & Bradbury, 2008; Mitnick, Heyman, & Smith Slep, 2009; Mortensen, Torsheim, Melkevik, & Thuen, 2012; Shapiro, Gottman, & Carrère, 2000). Moreover, the quality of a couple's relationship following a baby's birth has critical implications for numerous aspects of that baby's early development, including physiological arousal (Gottman, Driver, & Tabares, 2002), attachment (Wolff & Ijzendoorn, 1997), language development (Horowitz et al., 2003), and later psychological, social, and school functioning (Amato, 2001). However, a recent meta-analysis of 23 couple interventions during the transition to parenthood found smaller effect sizes than what has been reported in the general literature on RE (Pinquart & Teubert, 2010). This tendency may suggest that couples attending RE in the transition to parenthood are somewhat different from couples attending such programs in other periods of life.

While experimental efficacy studies of RE usually have high internal validity and ability to isolate causal elements, the controlled conditions do not allow investigation of couples' typical experiences of RE when disseminated in a natural setting (Stanley et al., 2006). For example, less is known about what characterizes couples who choose to attend RE and which effects they may have from participation. Existent research focuses mainly on premarital RE, where attenders have been characterized by having higher education, higher income, higher relationship satisfaction, and lower levels of husband neuroticism and aggression as compared to non-attenders (Sullivan & Bradbury, 1997). Such participants also tend to be less likely to cohabit before marriage and more religious (Halford, O'Donnell, Lizzio, & Wilson, 2006). The way these variables have been linked to couples' relationship distress and instability (Doss, Rhoades, Stanley, Markman, & Johnson, 2009; Holman, 2001) suggests that attenders are at less risk for future relationship distress compared to non-attenders. This indicates that the association between relationship risk factors and RE attendance takes the form of augmentation, where low-risk couples are overrepresented in participation. However a meta-study by Hawkins et al. (2008) found attenders in RE programs to score lower on relationship quality and communication skills than non-attenders, indicating a compensation effect in which high-risk couples are overrepresented in attendance. Thus, the extent to which various risk factors are related to RE participation remains unclear. This lack of clarity applies particularly to RE programs in the transition to parenthood.

The present study

Stimulating relationship education initiatives is part of the public policy in many western countries (Stahmann, 2000). This applies to Norway as well, where the national authorities have been funding various RE measures over the last two decades. Such funding reflects a tradition within the Scandinavian countries to regard family welfare as a public responsibility rather than placing emphasis on private providers, as is often the case in the USA and the UK (Esping-Andersen, 1990; Kamerman, 1991; Kamerman & Kahn, 2001). One of the initiatives undertaken by the Norwegian authorities has been to develop an RE program that is offered nationwide, for free, for parents having their first child (Thuen & Lærum,

2005). The program, called Good Couple Relationship ("Godt Samliv" in Norwegian), is based on the Prevention and Relationship Enhancement Program (PREP) (Renick, Blumberg, & Markman, 1992), which is considered to be the best documented RE program (Baucom, Hahlweg, Atkins, Engl, & Thurmaier, 2006; Renick et al., 1992; Schilling, Baucom, Burnett, Allen, & Ragland, 2003; Stanley, 2001). Good Couple Relationship involves an eight-hour workshop that normally is delivered in two sessions after the birth of a couple's baby. The sessions are led by trained staff at health care centers, most usually nurses or midwives. As in PREP, Good Couple Relationship gives attention to the role of communication, especially when dealing with conflict. Across a range of studies, conflict has proven a reliable predictor of relationship satisfaction and stability (Fincham & Beach, 1999; Gottman, 1994; Kluwer & Johnson, 2007), and RE that addresses conflict has been found more effective than RE not incorporating conflict resolution (Carroll & Doherty, 2003). Also the strengthening of commitment to the relationship is targeted in Good Couple Relationship. Commitment is characterized by a strong sense of couple identity ("we-ness") and strong desires for a long-term future together (Stanley, Markman, & Whitton, 2002).

Methods

Procedures

This study is based on a collaboration with the Norwegian Mother and Child Cohort Study (MoBa) conducted by the Norwegian Institute of Public Health (Magnus et al., 2006). In brief, MoBa is a cohort consisting of more than 100,000 pregnancies recruited from 1999 to 2009. The majority of all pregnant mothers in Norway were invited to participate through a postal invitation in connection with a routine ultrasound examination offered to all pregnant women in Norway at 17–18 weeks of gestation (www.fhi.no/morogbarn). The participation rate was 38.5%. Nilsen et al. (2009) found differences mostly related to medically relevant variables between participants and all women who gave birth during the same time period in Norway. The researchers concluded that prevalence estimates of exposures and outcomes, but not estimates of exposure-outcome associations, are biased due to self-selection in the MoBa sample.

For the purpose of the current study, additional data to what the MoBa contained was necessary. Therefore, a subgroup of MoBa participants who agreed to receive additional questionnaires that specifically targeted aspects of the couple relationship not covered in the MoBa was recruited. These data were subsequently merged with data from the MoBa database. Only couples having their first baby and who were married or cohabiters at MoBa baseline assessment (six months prebirth) were invited to take part in the subsample. Successively over a period of five months, 1,417 couples already taking part in the MoBa study were also invited to participate in the current study, and 1,185 couples agreed to do so. Of these, 398 confirmed having been offered participation in the RE measure Good Couple Relationship, which was the final criterion to be included in the sample for the current study. At the last data collection, 121 of the 398 couples confirmed that they had attended Good Couple Relationship. The data was collected by means of self-

administered questionnaires that the couples received within two timeframes between two to four months post-birth and 14 to 16 months post-birth. These data points roughly correspond in time with the MoBa data collection points at six months post-birth and 18 months post-birth. A preferred simultaneous assessment was not possible due to a MoBa policy to protect participants from questionnaire overload. Informed consent was obtained from each participant. The study was approved by the Regional Committee for Medical Research Ethics and the Norwegian Data Inspectorate.

Sample

Average age for fathers was 30.9 years (SD = 5.2) and 28.5 (SD = 4.3) for mothers, and mean duration of the couple's relationship was 4.8 years (SD = 3.2). Most couples (84%) had planned their pregnancy, while 16% reported it unplanned. 37% of the couples were married, while 63% were cohabiters. To compare the education level of the sample with the Norwegian population as a whole, statistics for a representative age span were obtained from Statistics Norway (2009). A chisquare goodness-of-fit test indicated a significant difference between the samples' and the populations' education level, $\chi 2$ (3, n = 376) = 188.323, p < .001. This discrepancy seemed mainly explained by the samples' underrepresentation in the lowest education group (elementary school) and overrepresentation in the highest education group (more than four years of university). Besides this, the distribution of education level in the sample was comparable to the population as a whole.

Measurement

Relationship satisfaction was measured by the Relationship Satisfaction Scale (Røysamb, Vittersø, & Tambs, 2014), which was developed for the MoBa study based on the Marital Satisfaction Scale (Blum & Mehrabian, 1999). The scale has shown good psychometric properties, correlating .91 with the Quality Marriage Index (Norton, 1983), which demonstrates high convergent validity (Røysamb, Vittersø, & Tambs, 2014). Participants responded to five items scored on a Likert agreement scale ranging from 1 "don't agree at all" to 6 "totally agree." The items refer to "partner" rather than being limited to marital spouses. (See appendix 1 for all item formulations.) The scale had satisfactory internal consistency, Cronbach's alpha = .89. Frequency of conflict was measured by participants indicating how often they had a conflict: daily (4), weekly (3), monthly (2), and more seldom (1). Destructive conflict behavior was measured by participants responding on a Likert agreement scale ranging from 1 "don't agree at all" to 5 "totally agree" to five items in the communication danger signs scale (Stanley & Markman, 1997). This scale previously demonstrated satisfactory reliability, which was also the case in the current data (Cronbach's alpha = .73). Constructive conflict behavior was measured by the subscale positive problem solving from Saiz & Jenkins' (1996) Communication Skills Test. Participants responded on a Likert agreement scale ranging from 1 "don't agree at all" to 5 "totally agree" to four items. The scale demonstrated satisfactory internal reliability, Cronbach's alpha = .82. The validity of conceptualizing constructive and destructive conflict behavior as two independent variables, and not just opposite poles on a common conflict continuum, has previously been supported by confirmatory factor analysis (Mortensen, Torsheim, &

Thuen, unpublished material). The four item "dedication subscale" of Stanley's commitment scale measured commitment (Stanley & Markman, 1992). Participants responded on a Likert agreement scale ranging from 1 "don't agree at all" to 5 "totally agree," with Cronbach's alpha = .67.

For both fathers and mothers, questions on basic demographics at six months prebirth included relationship status (married = 1/cohabiter = 0), income (the year before pregnancy), highest completed education level, age, and whether their own parents were divorced (1 = divorced, 0 = intact). The duration of the relationship was measured by the women's report of how long her sexual relation with the current partner had endured in years before pregnancy. In this way, the present study defined the onset of a relationship based on the establishment of a sexual relation with the partner. Pregnancy planning was measured by the following question: "Was your pregnancy planned?" with "yes" and "no" as response categories (yes = 1, no = 0).

Analysis

The present study design included relationship satisfaction, conflict, and commitment measured pre- and post-intervention. Of the 398 couples who had been offered Good Couple Relationship, 121 couples took part. The variable "Took part RE" was coded 1 for participants and 0 for non-participants. T-tests for all included variables were performed to assess possible pre-intervention differences between participants and non-participants.

We used latent change modeling (Duncan, Duncan & Strycker, 2006) as the framework for analyzing the development in the dependent variables (relationship satisfaction, conflict variables, and commitment). Latent change modeling (LCM) has several valuable properties in the present research context. It enables using all available data and represents a flexible environment for including predictors of change and for modeling the effects of latent change on other outcomes. LCM provides estimates of the average level (mean intercept) and the average change per time unit (mean slope) as well as individual variation in level and change. To assess baseline level and change from baseline to post-intervention, a latent intercept and slope factor was estimated for all dependent variables. To investigate possible differences between RE participants and non-participants, the latent intercept and slope factor for all dependent variables was regressed on "Took part in RE." In a subsequent model, all covariates (mean centered) were also included in the regression. To achieve model identification, the error variances of the observed scores at t1 and t2 were fixed to zero in both models. Under this parameterization, the slope factor can be interpreted as a change score.

Results

Table 1 shows a correlation matrix with mean and standard deviation for all dependent variables measured at baseline (mothers under the diagonal, fathers above the diagonal). Relationship satisfaction had positive associations with constructive conflict behavior and commitment and negative associations with conflict frequency and destructive conflict behavior. The correlations were similar for

men and women. Each variable had strong associations between the adjacent time points (not reported in table 1). Investigation of change in mean from time 1 to 2 (not reported in table 1) showed that both fathers and mothers had a tendency for increases in destructive conflict behavior and conflict frequency and decreases in relationship satisfaction, constructive conflict behavior, and commitment.

TABLE 1: Correlation matrix (Pearson's *r*) for relationship dynamics preintervention, with Mean and SD.

	1	2	3	4	5	mothers		fathers	
						Mean	SD	Mean	SD
1. Relationship satisfaction	1	.23	40	30	.42	4.67	.38	4.72	.36
2. Constructive conflict	.31	1	33	26	.27	3.67	.71	3.66	.74
3. Destructive conflict	32	36	1	.57	28	1.98	.74	2.11	.80
4. Conflict frequency	20	26	.44	1	26	1.53	.71	1.54	.73
5. Commitment	.40	.18	25	18	1	4.72	.38	4.69	.45

Note: Mothers beneath diagonal, fathers above; n = 398 mothers, 398 fathers; all correlations are significant at the p < .01 level (two-tailed)

Table 2 shows results from t-tests of the mean difference between participants and non-participants for all included variables (measured pre-intervention). None of the situational or personal characteristics of couples (e.g., married/cohabiter, planned/unplanned pregnancy) was significantly different between participants and non-participants. However, participating mothers reported significantly higher conflict frequency and destructive conflict behavior compared to non-participating mothers, and participating fathers had higher conflict frequency than non-participating fathers.

TABLE 2: T-tests of mean difference between participants and non-participants pre-intervention.

Table 3 shows the results from latent intercept and slope factors for relationship dynamics regressed on "Took part in RE." Compared to non-participating couples, participant couples were characterized by mothers' high initial destructive conflict behavior and fathers' and mothers' high initial conflict frequency. There was no significant change difference between participants and non-participants in any of the dependent variables (at the p < .01 level). The only exception was a decrease in participating mothers' constructive conflict behavior (at the p < .05 level). When adjusting for covariates, the negative change in constructive conflict behavior for participants in RE became significant for fathers but not mothers.

Because there might be reasons to expect couples with higher education to benefit more from participation in RE, a possible interaction effect between education and participation was tested but not found significant (not reported in the table).

TABLE 3: Baseline (pre-intervention) and change scores for relationship dynamics regressed on participant status.

Discussion

The first goal of the study was to investigate characteristics of couples who, in their

transition to parenthood, chose to take part in relationship education. It is

		Mean		tailed	
	participants	non-participants	z	p-value	
Mother relationship satisfaction t1	4.63	4.69	-1.32	0.19	
Mother constructive conflict behavior t1	1.82	1.91	-1.16	0.25	
Mother destructive conflict behavior t1	3.92	3.69	2.63	0.01	
Mother conflict frequency t1	1.67	1.45	2.72	0.01	
Mother commitment t1	4.68	4.74	-1.24	0.21	
Father relationship satisfaction t1	4.70	4.72	-0.33	0.74	
Father constructive conflict behavior t1	2.04	2.08	-0.48	0.63	
Father destructive conflict behavior t1	3.79	3.66	1.44	0.15	
Father conflict frequency t1	1.68	1.48	2.42	0.02	
Father commitment t1	4.67	4.69	-0.23	0.82	
Mother education	3.08	2.96	1.40	0.16	
Father education	2.84	2.75	0.86	0.39	
Mother age	28.66	28.49	0.40	0.69	
Father age	30.66	31.14	-0.92	0.36	
Mother income	4.44	4.31	0.92	0.36	
Father income	5.17	5.18	-0.03	0.98	
Relationship duration	4.82	5.16	-0.98	0.33	
Planned pregnancy (1 = Yes)	85.6%	84.6%	0.25	0.80	
Married (1 = Yes)	43.3%	35.0%	1.56	0.12	
Mother's parents divorced (1 = Yes)	30.4%	29.6%	0.17	0.87	
Father's parents divorced (1 = Yes)	25.0%	29.4%	-0.84	0.40	

Note: n = 394 couples

Base	eline	Change			
Mother	Father	Mother	Father		
Relationship satisfaction					
4.685	4.729	-0.055	-0.091		
4.629	4.721	-0.033	-0.099		
4.688	4.731	-0.055	-0.086		
4.624	4.712	-0.025	-0.101		
	Mother Relationship 4.685 4.629	A.685 4.729 4.629 4.721 4.688 4.731	Mother Father Mother Relationship satisfaction 4.685 4.729 -0.055 4.629 4.721 -0.033 4.688 4.731 -0.055		

Constructive conflict behavior

Intercept non-participants	3.685	3.667	-0.022	-0.033			
Intercept participants	3.587	3.812	-0.177*	-0.168			
Adjusted for covariates							
Intercept non-participants	3.691	3.661	-0.026	-0.02			
Intercept participants	3.571	3.644	-0.163	-0.189*			
	Destructive cor	nflict behavior					
Crude							
Intercept non-participants							
moroopt non participanto	1.91	2.044	0.184	0.182			
Intercept participants	2.144**	2.012	0.247	0.244			
Adjusted for covariates							
Intercept non-participants	1.907	2.046	0.185	0.18			
Intercept participants	2.152**	2.190	0.244	0.256			
Conflict frequency							
Crude							
Intercept non-participants							
	1.45	1.458	0.196	0.268			
Intercept participants	1.677**	1.669*	0.258	0.292			
Adjusted for covariates							
Intercent non participante							
Intercept non-participants	1.452	1.462	0.198	0.263			
Intercept participants	1.673**	1.667*	0.257	0.290			
Commitment							
Crude							
Intercept non-participants	4.74	4.698	-0.117	-0.108			
Intercept participants	4.687	4.688	-0.177	-0.117			

Intercept non-participants	4.741	4.703	-0.114	-0.104
Intercept participants	4.682	4.672	-0.185	-0.123

Note: Difference between participants and non-participants, statistically significant at **p < .01 and *p < .05; n = 398 couples

noteworthy that among the 398 couples who confirmed having been offered RE, 121 couples actually attended the program. This turnout is similar to the findings in the study by Halford et al. (2006) in which 29% attended a premarital relationship education workshop, thereby suggesting that approximately one-third of couples offered RE in connection with having a child may be expected to take part. Regarding attendees in the program, none of the demographic or situational characteristics of the couples was related to attendance. This finding may seem to be in contrast to previous studies in which RE attendance has been related to education and income (Sullivan & Bradbury, 1997), cohabitation before marriage, and level of religiosity (Halford et al., 2006). However, these associations have generally been inconsistent and weak in strength. Thus, the lack of any demographic or situational differences between participants and non-participants in the present study may support the notion that these kinds of variables have limited, if any, influence on the decision to participate in RE.

This study also included comprehensive measures of the quality of the couple relationship in terms of satisfaction, conflicts, and commitment, which have been scarcely studied previously. The findings that conflict frequency and level of destructive conflict behavior differentiated between participants and nonparticipants may, therefore, add valuable knowledge to our understanding of the motives for taking part in RE. Still, the observed differences were small and inconsistent, while relationship satisfaction and commitment were not related to participation in RE at all. In the meta-study by Hawkins et al. (2008), however, relationship satisfaction was related to RE attendance, but the effects size was not more than d = .16. Thus, the quality of the couple relationship may not seem to influence the decision to participate in RE to any great extent. Future studies should therefore also include other types of variables. Relevant candidates could be outcome expectations and attitudes toward RE since studies of help-seeking for mental health problems indicate the strong effects of such variables (Demyan & Anderson, 2012), particularly for interpersonal problems (Vogel, Wester, Wei, & Boysen, 2005).

The second goal of the study was to investigate whether relationship satisfaction, conflicts, and commitment changed differently between attenders and non-attenders. While the baseline level of couple dynamics showed a tendency for more distressed couples to select themselves into the program, attenders did not differ from non-attenders regarding changes in the included outcome variables. The only exception was a tendency for a reduced level of constructive conflict behavior among participating mothers. This inclination could reflect a selection effect in which couples who were high in destructive conflict behavior were more

likely to attend the program. The presence of high destructive conflict behavior has previously been linked to negative change in couples' conflict interaction during the transition to parenthood (Mortensen et al., unpublished material) and may account for the observed decrease in constructive conflict behavior among RE attenders. However, it cannot be ruled out that participation in the program may have caused a tendency for reduced constructive conflict behavior. At least one other study has found similar negative effects of RE (Moss, Bolland, Foxman, & Owen, 1986). Alternatively, participation in the program may have caused somewhat altered perceptions of conflicts, influencing their responses on the constructive conflict behavior items.

Pinguart & Teubert (2010) performed a meta-analysis of 21 experimental or quasiexperimental studies of couple interventions in the transition to parenthood. Therein, small effect sizes were observed for couple communication (d = .28), psychological well-being (d = .21), and couple adjustment (d = .09). However, stronger effects were observed for interventions that included more than five sessions and had a pre-birth and post-birth component. The Good Couple Relationship program merely involved an eight-hour workshop that normally was provided in two sessions after the baby's birth. One may therefore question if the dosage of intervention was sufficient to create sustainable change and if the postbirth-only intervention enabled a preventive effect. Regarding the dosage, Hawkins et al. (2008) also found moderate-dosage programs (9 to 21 hours) to create substantially larger effect sizes than low-dosage programs (1 to 8 hours). The low dosage of the Good Couple Relationship program may therefore partially explain the lack of any effects. Also the post-birth-only intervention may have accounted for the findings. There are reasons to expect greater preventive effect from RE with a pre-birth component since previous research indicates that the most important predictor of post-birth relationship adjustment is pre-birth relationship adjustment (Cowan & Cowan, 1995). Furthermore, a number of studies have shown that relationship distress is accounted for by problems that already existed during pregnancy, rather than from the emergence of distress due to the birth of the child (Huston, Caughlin, Houts, Smith, & George, 2001; Kluwer & Johnson, 2007). For example, Cox et al. (1999) found that the interaction style prenatally of both partners was associated with the level of marital satisfaction initially and the degree to which marital satisfaction declined after birth. This finding may suggest that the transition to parenthood intensifies relationship problems that already existed during pregnancy, while couples with greater initial conflict skills are somewhat protected from deterioration. Thus, intervention efforts may need to be introduced before the child arrives in order to prevent negative interaction patterns from emerging and settling.

When it comes to clinical implications, the results may inform the practice and implementation of RE. Short interventions are cheaper to implement than more comprehensive interventions, but in a cost-effective perspective it may prove more sensible to target at-risk parents with a more extensive program. This approach is in keeping with a meta-analysis of general RE programs in which selective programs were more effective than universally distributed programs (Giblin,

Sprenkle, & Sheehan, 1985). In the present study, high-risk couples, in terms of conflict level, may seem to be particularly likely to self-select themselves into the RE program. Still, more knowledge is needed to identify not only other risk characteristics that influence the willingness to attend such programs but also feasible strategies to target couples who are at risk. However, focusing on risk groups and selective approaches may indicate that RE becomes more similar to couple's therapy. Therefore, we may also need to establish a more conscious conceptual demarcation between prevention and therapy within couple interventions. It may also be necessary to gain more empirical knowledge about when to apply preventive or therapeutic approaches.

Limitations

The study design did not allow any strict evaluation of the Good Couple Relationship program since there was no direct pre- and post-assessment of the program. We knew only whether the couples had attended the program at any point in time in between the two assessment points. Moreover, although communication style was somehow captured in the positive and negative conflict behavior items, there was no explicit measure of communication. And finally, the study relied solely on self-reports, whereas previous studies have yielded stronger effects of RE programs when using observational data as compared to self-report (Hawkins et al., 2008). Thus, the relatively long duration between the two assessment points might have concealed any effects of the program. And there might have been effects on other domains than the ones measured in the study, or our way of measuring relationship satisfaction, conflicts, and commitment may have failed to detect any effects. But it is unlikely the program had substantial effects on the quality of the couple relationship, which may support the notion that more comprehensive couple interventions as well as more sophisticated study designs are needed to achieve and document any effects, particularly in the transition to parenthood. Still, the study may add valuable knowledge to our understanding of characteristics related to attendance in RE programs during this particular period of life.

Conclusion

This prospective longitudinal study did not find any strong predictors of which couples are more likely than others to participate in relationship education, and it was not possible to detect any positive effect of RE attendance. It is suggested that the dosage of intervention may have been insufficient to create sustainable change and that the post-birth-only intervention may not have enabled a preventive effect. From a cost-effectiveness perspective, it is suggested that it may prove more sensible to target at-risk parents with a more extensive program.

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Appendix 1

Relationship satisfaction:

- 1. My partner and I have problems in our relationship (reversed scored).
- 2. I am very happy in my relationship.
- 3. My partner is generally sympathetic.
- 4. I am satisfied with the relationship to my partner.
- 5. We agree on how children should be raised.

Constructive conflict behavior:

- 1. Before trying to solve a problem, we come up with as many possible solutions as we can.
- 2. If a solution to a problem does not work, we go back and discuss why.

- 3. We try to define exactly what the problem is before trying to solve it.
- 4. We discuss the pros and cons of different solutions when solving a problem.

Destructive conflict behavior:

- 1. Little arguments escalate into ugly fights with accusations, criticisms, name calling, or bringing up past hurts.
- 2. My spouse criticizes or belittles my opinions, feelings, or desires.
- 3. My spouse seems to view my words or actions more negatively than I mean them to be.
- 4. When we argue, I tend to withdraw, that is, I do not want to talk about it anymore and I leave the scene.
- 5. When we argue, my partner tends to withdraw, that is, does not want to talk about it anymore and leaves the scene.

Commitment:

- 1. My relationship with my partner is more important to me than almost anything else in my life.
- 2. I may not want to be with my partner a few years from now (reversed scored).
- 3. I like to think of my partner and me more in terms of "us" and "we" than "me" and "him/her."
- 4. I want this relationship to stay strong no matter what rough times we may encounter.

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Abstract

Participant characteristics and outcomes of relationship education in the transition to parenthood

The study investigated characteristics of couples who chose to attend a relationship education (RE) program offered nationwide in Norway for couples after having their first child, and how participants in RE developed compared to non-participants. Prospective longitudinal data were collected pre- and post-intervention in a sample of 398 Norwegian couples. While the situational and demographic characteristics of the couples did not appear to affect the likelihood of RE participation, couples who chose to participate (121 couples) were characterized by initial high conflict frequency and high destructive conflict behavior. No positive effect of RE participation was detected, while a tendency for reduced constructive conflict behavior was found for participants compared to non-participants. The results are discussed with regard to whether this may reflect selection effects or

ineffectiveness of the program. Possible consequences for the practice and implementation of RE in connection with the transition to parenthood are suggested. From a cost-effectiveness perspective, it is suggested that it may prove more sensible to target at-risk parents with a more extensive program.

Keywords: relationship education, transition to parenthood.

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