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Father's Involvement When Bringing Baby Home: Efficacy Testing of a Couple- Focused Transition to Parenthood Intervention for Promoting Father Involvement

Alyson F. Shapiro,

Department of Child and Family Development, San Diego State University, San Diego, CA, USA

John M. Gottman,

Relationship Research Institute, The Gottman Institute and the Department of Psychology at the University of Washington, Seattle, WA, USA

Brandi C. Fink

Department Psychiatry and Behavioral Sciences, University of New Mexico, Albuquerque, NM, USA

Abstract

The goal of the present research was to test the efficacy of the Bringing Baby Home couple-focused psychoeducational program for promoting father involvement and related satisfaction. A randomized clinical trial design was used to randomly assign 136 pregnant couples to either an intervention or control group. Father involvement postintervention was assessed through self-report of engagement in parenting tasks. Intent-to-treat analysis of covariance analyses indicated that fathers who participated in the Bringing Baby Home program reported significantly more involvement in parenting tasks, satisfaction with the division of parenting labor, and feeling appreciated by their wives. Both husbands and wives were also more satisfied with the division of labor when fathers were more involved in parenting. Results suggest that couple-focused psychoeducational programs can be successful for promoting father involvement.

Keywords

Fathers; father involvement; father responsibility; transition to parenthood; division of labor; father satisfaction

Introduction

The transition to parenthood is a challenging period of adjustment. The majority of couples experience a decline in marital satisfaction and increased conflict (e.g., Cowan & Cowan, 2000; Howard & Brooks-Gunn, 2009; Lawrence, Cobb, Rothman, Rothman, & Bradbury,

Corresponding Author: Alyson F. Shapiro, Department of Child and Family Development, San Diego State University, 5550 Campanile Drive, San Diego, CA 92182-4502, USA., Ashapiro@sdsu.edu.

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2008; Shapiro, Gottman, & Carrè re, 2000). Despite mothers being more likely than fathers to experience declining marital satisfaction (e.g., Shapiro et al., 2000) and postpartum depression (e.g., Epifanio, Genna, De Luca, Rocella, & La Grutta, 2015), this transition period is also a time of great challenge and vulnerability for new fathers. Fathers can find navigating their new role to be challenging and often experience high levels of parenting stress (Koester & Petts, 2017), despite fathers overall wanting to be involved with their children (see Pleck & Masciadrelli, 2004). The difficulties of the transition to fatherhood are compounded by men often being viewed as helpmates and breadwinners more than as parents (see Silverstein, 2002) and by their feeling less confident about infant care than mothers (Hudson, Elek, & Fleck, 2001). This is problematic given that positive father involvement has consistently been associated with improved child cognitive, academic, social, and mental health outcomes (e.g., Cabrera & Tamis-LeMonda, 2013; Jeynes, 2015; Lewis & Lamb, 2003). The goal of the present research was to test the efficacy of the couple-focused Bringing Baby Home (BBH) psychoeducational transition to parenthood intervention for promoting father involvement.

Father involvement

Definitions of father involvement vary across studies. However, the fathering literature typically focuses on the following three dimensions of father involvement: engagement, accessibility, and responsibility (Lamb, Pleck, Charnov, & Levine, 1987; Marsiglio, Amato, Day, & Lamb, 2000). Engagement refers to the quality of father–child interactions. Accessibility refers to fathers being available to their children, such as when cohabiting with children. Responsibility refers to engaging in caretaking activities, such as bathing, diaper, and feeding. The current research focuses on the father responsibility dimension of father involvement, reflected by parenting tasks participated in by the father.

Previously published research on the sample examined in the current study observed father engagement with their new babies in the context of family-level interactions and found that fathers in the control group exhibited more competitive coparenting and less positive interactions with their babies compared to father who received the BBH intervention (Shapiro, Nahm, Gottman, & Content, 2011). This suggests that the intervention promoted positive father engagement in the coparenting context. It is also noteworthy that all the fathers in the current study were living with their children and thus were accessible to them.

Father involvement in parenting and family tasks

A survey of public perceptions about father involvement indicated that most respondents indicated that fathers have responsibilities in the following areas: caregiving, protection, financial support, and coordinating with the child’s mother (Andrews, Luckey, Bolden, Whiting-Fickling, & Lind, 2004). However, respondents also indicated that the fathers in their homes did not have provisions for paternal leave or flextime at their place of work, highlighting the challenges these fathers face. Satisfaction regarding the division of labor has been associated with marital quality for both husbands and wives (Galovan, Holmes, Schramm, & Lee, 2014), with the wives’ report of father participation in family tasks being associated with marital satisfaction for both partners. Cowan and Cowan (2000) reported that a great deal of marital conflict during the transition to parenthood focuses on the

inequities in father's versus mother's involvement in family tasks, including parenting duties. Specifically, there was dissatisfaction around women doing more parenting and household work. However, the Cowans also noted that there were a portion of men who were taking a significantly more active role in parenting and household tasks. Indeed, research examining changes in father involvement indicates that contemporary fathers are more involved in parenting than those of previous generations (Pleck & Masciadrelli, 2004).

Curiously, mothers and fathers appear to not always agree about the division of labor regarding parenting and family tasks. Research by Milkie, Bianchi, Mattingly, and Robinson (2002) indicated that fathers often reported higher levels of involvement in family tasks than their partners did. Analyses from the Fragile Families and Wellbeing data of nonmarried couples indicated significant differences in fathers and mothers report or involvement, again with fathers reporting being more involved than their partners indicated they were (Mikelson, 2008). This is not surprising when considering that there is discrepancy between father and mother report even regarding things as basic the father's occupation (see Schnitzer, Olshan, Savitz, & Erikson, 1995), leading researchers to advocate for research assessing father report in father involvement studies (see Shapiro & Krysik, 2010).

Father involvement and couple relations

There is evidence that the quality of couple relations is associated with father involvement and also that father involvement buffers cohabiting couples from a decline in relationship satisfaction (McClain & Brown, 2017). Indeed, it has been proposed that when men in unhappy marriages withdraw from the marriage, they also withdraw from their children (Gottman, 1994). This premise is consistent with research indicating that father involvement and marital quality are interrelated. For example, research by Dickstein and Parke (1988) indicated that infants failed to social reference their fathers in novel situations where they would otherwise social reference with a parent if their fathers were in unhappily married relationships. Research also indicates that fathers with insecure adult attachments had more negative family-level interactions at 24 months postbirth, but only in the context of marital discord (Blair et al., 2005). Indexes of prenatal marital quality have also been found to predict later father sensitivity (Shapiro, 2005) and coparenting (McHale et al., 2004).

Associations between maternal gatekeeping, father involvement, and father confidence and competence

There is evidence that mothers play a gatekeeping role, moderating father involvement in families with both resident and nonresident fathers (McBride et al., 2005). This gatekeeping role may precipitate, or act in accordance with, the father's withdrawal. Researchers examining the roles and responsibilities of mothers and fathers in the family tend to report that mothers play a role in either supporting or thwarting their partner's involvement with the baby (see Lamb, 2004). Practices that undermine fathers' parenting contributions appear to be detrimental to fathers' perception of parenting competence (Van Egeren & Hawkins, 2004). Indeed, these less supportive coparenting relationships are associated with decreased father involvement and increased father parenting stress and aggravation (Bronte-Tinkew, Horowitz, & Carrano, 2010). Father competence in turn has been found to indirectly predict father involvement through maternal gatekeeping (Fagan & Barnett, 2003). This appears to

be a negative cycle associated with mothers' lack of fathering support, or at least a lack of ability of mothers and fathers to work together harmoniously regarding coparenting.

Maternal support of father involvement appears particularly important for promoting father involvement and ameliorating fathering stress. Although new fathers appear to often experience high levels of parenting stress shortly after the birth of a baby (Epifanio et al., 2015), maternal support is associated with decreased fathering stress (Koester & Petts, 2017). Research identifying links between mother attitudes and fathering indicated that fathers' perceptions of mother confidence in their parenting predicted feeling of father competence, which in turn was associated with father involvement and satisfaction with fathering (Bouchard, Lee, Asgary, & Pelletier, 2007). Indeed, research by Beitel and Parke (1998) found that mothers' attitudes about their partner's competence were even more important in predicting father involvement than fathers' attitudes. Specifically, fathers were more involved when their wives viewed them as being more competent, whereas fathers were less involved with their babies if their wives viewed themselves as innately superior caregivers.

Interventions involving new fathers

Interventions aiming to promote father involvement in low-income families with fathers who are estranged from both mothers and children have been largely unsuccessful (see Knox, Cowan, Cowan, & Bildner, 2011). However, couple-focused programs have been particularly successful in promoting father involvement in both high- and low-risk families (see Pruett, Pruett, Cowan, & Cowan, 2017), suggesting that a couple-focused approach is critical for promoting positive father involvement. Cowan, Cowan, Pruett, Pruett, and Wong (2009) were successful in promoting quality father engagement and child outcomes in their research examining a series of father and couple group meetings for high-risk families.

A growing body intervention studies have included a focus on fathers across the transition to parenthood. Although Cowan and Cowan's (1992, 2000) transition to parenthood research was primarily focused on the couple, they also included something of a focus on fathers, demonstrating how father involvement was interrelated with mother expectations and the couple relationship. Transition to fatherhood intervention researched by Doherty, Erikson, and LaRossa (2006) was successful at promoting father involvement and quality father–baby interactions on workdays, but not on home days. Hawkins, Lovejoy, Holmes, Blanchard, and Fawcett's (2008) couple-focused transition to parenthood psychoeducation was successful in promoting mother report of father involvement, but not father report of his own involvement. An intervention focused on infant sleep patterns found that father involvement in the educational program was related to better infant sleep (Wolfson, Lacks, & Furtman, 1992). Finally, Feinberg and Kan (2008) implemented a coparenting-focused intervention resulting in positive coparenting support and closeness, which are likely to have implications for father involvement. This growing body of research suggests that couple-focused transition to parenthood interventions can have a positive impact on father involvement and related child outcomes.

The BBH intervention

The current research examines the efficacy of the BBH couple-focused psychoeducational intervention for promoting father involvement over the transition to parenthood. The BBH couple-focused intervention was designed to address multiple aspects of positive family formation, including positive couple relations over the transition to parenthood, quality parenting and coparenting, and father involvement. This multilevel approach to intervening with couples becoming parents was considered particularly relevant for promoting quality father involvement because both level of father involvement and quality of fathering appear intrinsically related to couple relations (e.g., Blair et al., 2005), and couple-level programs appear most efficacious in promoting father involvement (see Pruett et al., 2017). Previously reported results regarding the BBH intervention indicated that the program was successful at promoting positive couple relations over the transition to parenthood and positive parent mental health (Shapiro & Gottman, 2005), and decreasing observed coparenting competition and both mother and father overstimulation (Shapiro et al., 2011) in the sample currently examined. The current investigation focuses specifically the goal of promoting father involvement as reflected by participation in parenting tasks. The BBH intervention was empirically based, being developed using findings from our past research predicting couple satisfaction from their relationship as newlyweds (Shapiro et al., 2000), as well as findings from other longitudinal transition to parenthood research and fathering research (e.g., Cowan & Cowan, 2000).

Methods

Participants

One hundred and thirty-six expectant parents were recruited from the Puget Sound area in Washington. Couples were recruited through birth preparation classes at the Swedish Medical Center in Seattle and through interest in the study generated by articles in the local newspapers. Couples were eligible for the study if they were expecting a baby, in a committed relationship, and both partners were over 18 years old. Although couples were not required to be married to enroll in the present study, all but 5 couples were married, and this handful of unmarried couples were distributed across experimental groups. Eligible couples were invited to participate in a longitudinal study examining the efficacy of a preventative transition to parenthood intervention developed for couples having a new baby. The current study reports on our first postintervention follow-up with families when babies were approximately 3 months old.

The sample approximated the demographics of Seattle in that it was predominantly a Caucasian middle-class sample with some racial and ethnic diversity, consistent with the City of Seattle’s Planning Report (Office for Long Range Planning, 1990) demographic study. In an attempt to ensure adequate diversity in our sample, we made efforts to over sample couples in racial and ethnic minority groups. Specifically, the racial and ethnic distribution of the sample included 11% Asian-American couples, 11% Latino couples, 9% African American couples, 2% Native American couples, and 3% couples of other non-Euro-American background (Cuban, Middle Eastern, or Hawaiian Islander). Because research indicates that the difficulties couples experience when having a first and later child

are similar overall (Kreig, 2007), with some differences in process (Katz-Wise, Priess, & Hyde, 2010), the study was open to parents expecting both first and later children. Eighty-two percent of the sample was expecting their first baby, while 18% was expecting a second or later baby.

The average age of husbands was 34 years (*SD*=5.63), and the mean age of wives was 32 years (*SD*=4.83). Although both the average husband and wife had completed a college degree, 2% of husbands and wives had not completed high school, 2% of husbands and wives had only completed high school, 19% of husbands and 12% of wives had some college of vocational training, and 32% of husbands and 40% of wives had advanced degrees. The average family income was between $60,000 and $80,000 a year (*SD*= $25,000) and ranged from less than $10,000 a year to more than $90,000 a year. Both the average husband (91.5%) and wife (68.9%) worked outside the home at baseline. Although all mothers took some leave at the time of the baby's birth, 53% of mothers had returned to working at least part time by 3 months postbirth. Depression symptoms were low overall for both husbands and wives across time points. The average total depression scores for husbands on the Symptom Checklist 90-item (SCL-90) scale was 4.4 (*SD*=5.02) at baseline and 3.33 at 3 months postbirth (*SD*=4.55), with less than 2% exceeding the cutoff of 23 for men recommended by Aben, Verhey, Lousberg, Lodder, and Honig (2002). The average total depression score for wives was 6.4 (*SD*=6.61) at baseline and 6.26 at 3 months postbirth (*SD*=7.55), with less than 3% exceeding the recommended cutoff of 28 for women at either time point. The average marital satisfaction for wives at baseline on the Locke and Wallace (1959) Marital Adjustment Test (MAT) was 122.73 (*SD*=17.30), and the mean marital quality for husbands was 116.93 (*SD*=20.51). These scores reflect the relatively high marital quality expected in a sample of pregnant couples expecting their first baby based on previous research (e.g., Shapiro et al., 2000). There were no significant differences across the BBH and control group in any of the demographic variables examined.

There was some attrition in the sample and problems regarding the data that resulted in 13% of cases being excluded from all analyses. Seven families were excluded from analyses due to having twins (*N*=5) or premature births (*N*=2) and thus being considered qualitatively different from other families in the sample. Four families who moved out of the greater Seattle area and one couple who separated declined further participation in the study. Finally, four families were lost to follow-up (moved without giving forwarding contact information or did not respond to phone calls), with no time two or later follow-up data being available. Questionnaire data were missing for specific questionnaires for an additional 4 to 14 cases depending on the questionnaire, and multiple imputations were used to replace this data considered missing at random. This method is considered highly reliable and acceptable and has been recommended over other methods of missing data replacement (Shrive, Stuart, Quan, & Ghali, 2006). No significant baseline demographic differences were found for families with missing data compared to families with complete follow-up data.

Procedures

Experimental design.—The present study utilized a randomized clinical trial experimental design in which couples were randomly assigned to one of three groups: (a) a

workshop-only group (n=33), (b) a workshop plus support group (n=52), or (c) a control group (n=34). More research participants were assigned to the workshop plus support group because we expected the most attrition in that group. Although random assignment took place upon enrollment using a random number table, both couples and interviewers were kept blind regarding group assignment until the end of the baseline assessment when a sealed envelope was opened.

At the time of the first postbirth follow-up visit when babies were 3 months old, which is the focus of the current investigation, support groups were in the process of beginning and in some cases had not yet begun. Because of the support group series beginning around at the time of the initial follow-up, the workshop and workshop plus support samples were combined to reflect one BBH intervention group. The end result was two groups, a BBH intervention group comprised of 85 couples, and a wait list control group comprised of 34 couples who were given a workshop at the end of the time they were followed. Due to ethical considerations, participating couples were not asked to refrain from engaging in outside interventions. However, support groups, therapy, or other interventions couples participated in were tracked, and no significant differences across groups were found at the time of the first follow-up. Institutional review board approval was received for all study procedures from a review process involving both a university and a hospital.

The BBH workshop.—A psychoeducational weekend workshop was designed due to the advantage of being able to reach many people with less investment of resources than therapy. This workshop was designed to help expectant and new parents make a smooth, positive transition to becoming a family. One aim of developing the curriculum was to fill what we feel is a gap in the current hospital-based birth preparation system, which currently focuses primarily, if not exclusively, on the delivery of the baby itself. The BBH program is a universal prevention program in that it was designed to be made available to all expectant couples rather than just those considered at risk because up to two thirds of otherwise low-risk couples experience a decline in marital satisfaction after the birth of the first baby (Shapiro et al., 2000). The workshop focused on three goals: (a) strengthening the couple's relationship and preparing them for the marital difficulties typically associated with the transition to parenthood, (b) facilitating father involvement, and (c) promoting quality parenting and coparenting. The focus of the current investigation is on the second of these primary goals, promoting father involvement.

The BBH workshop consists of a combination of lectures, demonstrations, role-plays, videotapes, and exercises designed to help couples work on issues they are likely to encounter during the transition to parenthood. A workshop manual was written so that the workshop could be given by nurses, social workers, and other birth preparation teachers. There was one lecture, exercise, and group discussion specifically focused on encouraging father involvement. The lecture on father involvement highlighted information regarding the unique contributions fathers make to their children's lives and encouraged both mothers and fathers to promote father involvement in their families. The father involvement exercise consisted of couples discussing ways that fathers could become and stay involved with their babies and planning specific parenting tasks for fathers to participate in. In the group discussion on honoring fathers, husbands sat in a circle and discussed the role their fathers

played in their lives and the role they wanted to play in the lives of their children. Finally, there was a lecture on parenting and a videotape illustrating infant cues aimed at promoting both sensitive and responsive parenting in both fathers and mothers. The parenting lecture provided basic information on infant development and strategies for interacting with infants and young children. The remaining sections of the workshop focused on promoting positive couple relations and coparenting. Further information regarding the marital-focused sections of the workshop can be found in Shapiro and Gottman (2005).

Couples in the BBH intervention group received the workshop either during the third trimester of pregnancy or shortly after the birth of the baby. Although couples were encouraged to take the workshop during pregnancy, many preferred to take the workshop postbirth due to a number of factors including limited workshop dates, women being put on best rest, and premature deliveries. Specifically, 37% took the workshop during pregnancy, and the remaining 63% received it shortly after their babies' births and before the first follow-up visit. Although less controlled, this variation in time of workshop attendance was considered to likely reflect the natural difficulties and related variation likely to occur in a community-based intervention. Follow-up analyses were conducted to examine differences in timing of workshop administration.

Program administration.—BBH workshops were administered in a hospital setting by hospital personnel. Specifically, three birth preparation teachers from the Swedish Medical Center in Seattle were recruited and trained to give the workshops for the present study. These birth preparation teachers represent different educational backgrounds. One of the program facilitators had a master's in education, one was a registered nurse, and one had a master's in social work. To ensure quality and consistency in the program administration, the primary investigators oversaw facilitation of the workshops. One of the investigators attended all of the workshops and gave feedback during workshop breaks if any key information was missed or incorrectly communicated. In addition, video recordings of the workshops were reviewed, and periodic training sessions were held to prevent drift in the program administration. The hospital setting and administration was considered vital to ensure the feasibility of delivering an intervention of this type to the millions of parents giving birth to new infants each year.

Procedures.—Questionnaire data were administered both at baseline and 3 months postbirth. In addition, home visits were scheduled with families when their infant was between 12 and 17 weeks old to gather observational measures of father–baby interaction. Couples were asked to schedule their visit at a time of day that was good for their baby, and researchers facilitated the play session when the baby was calm and alert whenever possible. These procedures were designed to give each family the best opportunity for having their baby in a quiet alert state and ready to interact. In cases where an infant missed a nap or was fussy or tired before the parent–child play session began, parents were given the opportunity rescheduled for a time that was likely to be a better for the baby.

Measures

The Family Management Questionnaire (FMQ).—Parents filled out the FMQ individually in questionnaire form both at baseline and at each follow-up time point. This questionnaire was used to index both partners' contributions to household labor and their satisfaction with that division of labor. This measure was developed by John Gottman for the purpose of this research based on the Who Does What questionnaire created by Cowan and Cowan (1990). The questionnaire includes subscales for division of labor and satisfaction for parenting, marital maintenance, household tasks, managing finances, and yard work. The subscale examining each partner's contributions to parenting-related tasks was examined in the current investigation to tap into parenting responsibility. Items asked whether tasks such as bathing infants, consoling them when distressed, diapering them, and taking them to the doctor were done more by the father, more by the mother, or equally. Baseline satisfaction and division of labor for tasks overall were used as baseline control variables because the parenting subscale was not valid for the majority of families who were expecting their first baby. The following specific items also reflected overall satisfaction: how appreciated one feels by their spouse, and how one feels the parenting division of labor is handled overall. Satisfaction was rated on a 1 to 5 scale with 1 being very satisfied, 3 being neutral, and 5 being very dissatisfied. Summary variables were computed for the proportion of parenting tasks done equally, proportion of parenting tasks done more by the wife, proportion of parenting tasks done more by the husband, and mean satisfaction with parenting task. Two variables were excluded from analyses due to multicollinearity issues. The proportion of work done equally was highly inversely correlated to the proportion of work done by the wife. Thus, only the proportion of work done equally was examined. The overall satisfaction with the division of labor and mean satisfaction with division of labor were also highly correlated, so the mean satisfaction with division of labor was chosen for analyses. Composite variables were created for each parent reflecting the equality of division of labor versus either the mother or father doing more work (created by subtracting the proportion of husband dominated tasks from the proportion of tasks done equally). Lower scores on the proportion of work done equally item reflected that work was done more by the mother or father, and higher scores reflected work being distributed more equally. Composite variables were also created reflecting overall satisfaction with the division of labor by summing the mean satisfaction and the appreciation felt regarding parenting work items.

Cronbach's alphas were high for the composite variables across parents reflecting good construct reliability according to George and Mallery (2003). Specifically, Cronbach's alphas were .84 for husband report of baseline tasks distribution overall, .78 for husband baseline satisfaction, .78 for wife report of baseline tasks distribution overall, .77 for wife baseline satisfaction, .88 for husband report of parenting task distribution, .78 for husband parenting satisfaction, .84 for wife report of parenting task distribution, and .86 for wife parenting task-related satisfaction. Note that because this is the first study using this measure, additional research is needed to further establish the reliability and validity of the measure.

Marital Satisfaction.—The Locke and Wallace (1959) MAT is considered a highly reliable and valid measure used to index marital satisfaction. Higher scores on the MAT

represent greater marital satisfaction. The MAT was administered during the first prenatal baseline assessment. Cronbach's alphas were .72 for husbands and .71 for wives in the current sample.

Depression.—The depression scale of the Derogatis SCL-90 revised scale was used to assess depressive symptoms in both mothers and fathers. High reliability and validity has been demonstrated for this measure (Derogatis, Lipman, & Covi, 1973). The mean total score for the depression scale was calculated and reported for baseline and follow-up time points to assess whether couples exceeded the symptom cutoff scores recommended by Aben et al. (2002). Cronbach's alphas were .89 for fathers and .88 for mothers in the current sample.

Data analytic plan.—Intent-to-treat analyses were conducted to examine differences between experimental groups, including all families with both baseline and follow-up data without regard to intervention compliance. Analysis of covariance (ANCOVA) was used to examine differences across experimental groups after controlling the following baseline characteristics: husband marital satisfaction, paternal age, and expecting a first versus later baby. These variables were chosen based marital satisfaction and age being related to fathering or coparenting in the literature (e.g., Cox, Owen, Henterson, & Margand, 1992; Van Egeren, 2004), and parity being related to differences as well as similarities in parenting adjustment over the transition to having a new baby (Katz-Wise et al., 2010). In addition, the most equivalent baseline FMQ variables were included as control variables in analyses examining the postbirth FMQ parenting variables. ANCOVA was also used to conduct follow-up analyses examining the relation between the timing of workshop administration and outcome.

Results

Fathers in the BBH group reported dividing up parenting responsibilities more equally (M=.44) compared to those in the control group (M=.34, F(6, 118)=5.62, p=.021; $\eta_p^2 = .055$). Fathers in the control group reported feeling more dissatisfied and unappreciated regarding division of labor (M=3.74) compared to those who received the BBH workshop (M=3.24, F(6, 118)=7.04, p=.028; $\eta_p^2 = .059$). There were no significant differences across groups for mother report of the equity in division of parenting labor (F(6, 118)=.87, n. s., $\eta_p^2 = .006$) or her satisfaction regarding the division of labor (F(6, 118)=.53, n. s., $\eta_p^2 = .004$). The equality in the division of parenting was significantly correlated with satisfaction for both fathers (r=.31, p=.001) and mothers (r=.38, p=.001). Follow-up analyses did not reveal any significant differences between couples who took the workshop during pregnancy and those who took the workshop after the birth of their baby.

Discussion

The present investigation yielded results indicating that the BBH program was successful at promoting fathers' reported involvement in parenting tasks, father satisfaction with that involvement, and fathers feeling more supported by their wives regarding parenting-related

tasks. These are all indicators suggesting that the BBH couple-focused transition to parenthood program was successful in promoting father involvement. Possibly more importantly, these findings indicate the intervention was successful at promoting father satisfaction with their involvement in parenting tasks and fathers feeling supported by their partners. This could be critical for promoting positive father involvement long term given the reciprocal association between fathers feeling supported and father involvement identified in the literature (e.g., Beitel & Parke, 1998; Freeman, Newland, & Coyl, 2008; McBride et al., 2005).

Previously published research on the current sample indicated that fathers who participated in the BBH intervention were also less competitive and less negative and overstimulating during observed family-level interactions than fathers in the control group (Shapiro et al., 2011). These combined findings suggest that fathers who received the BBH program were more satisfied regarding their involvement in parenting, demonstrated more positive parenting and coparenting during family-level play, and reported being more involved with their children compared to controls.

Curiously, mothers' report of father involvement was not significantly different across groups. This is not surprising given that there is often low concordance between mother and father report of father variables, even on issues that seem straightforward, such as report of the father's occupation (see Schnitzer et al., 1995). Indeed, this is one of the reasons that researchers have advocated for obtaining father report of father variables rather than relying on mother report of father issues (e.g., Shapiro & Krysik, 2010). Such discrepancies between father and mother report have also been evident in research evaluating father involvement in both basic and applied research. For example, both Milkie et al. (2002) and Mikelson (2008) found that fathers in their sample reported higher levels of involvement in parenting tasks than their female partners reported. Conversely, Hawkins et al. (2008) found improved mother but not father report of father participation in infant care in their transition to parenthood intervention study. Discrepant findings regarding father and mother report were also found in the father intervention research by Cowan et al. (2009), in which fathers reported a decrease in parenting-related conflict when wives reported an increase in the same parenting-related conflict. Thus, this discrepancy between father and mother report appears to be an inherent challenge in the literature. It is important to note that mothers in our study did not indicate that fathers in the BBH group were less involved than controls; they simply did not note that they were significantly more involved. Thus, we are inclined to trust the father report of father involvement and suggest that the BBH program was at least somewhat successful in promoting father involvement as reflected by parenting duties.

It is possible that fathers who received the BBH intervention may have made critical steps toward being as involved with their babies as they would like to be, but they may still not be as involved in parenting tasks as their partners would like them to be. Thus, these results may both reflect positive change and also the need for a further focus on father involvement in couple-focused transition to parenthood programs. Cowan et al. (2009) were successful in promoting father involvement through a more intensive couple-focused program as reflected through numerous measures. However, their study also reported discrepancies in father and mother report regarding fathering-related issues.

It is also important to note that the current study examined a universal prevention program involving predominantly low-risk families. Thus, an alternate explanation for the mixed findings is that the low-risk fathers in the control groups may have exhibited more-than-good-enough parenting with their infants, making it difficult to detect differences across groups. Improvements in father involvement in a higher risk sample may have been more notable to the mothers as well as fathers. This interpretation is consistent with findings from other transition to parenthood universal prevention programs that include a father involvement focus (Doherty et al., 2006; Hawkins et al., 2008), which have also obtained significant results regarding only some of the father involvement variables examined.

In addition to examining differences across experimental intervention groups, the present research yielded results that may provide insights into the interrelated processes of father involvement and coparenting. Specifically, both fathers and mothers reported being more satisfied when parenting tasks were distributed more equally in contrast to mothers taking more of the parenting responsibility. This seems somewhat counterintuitive at first because one rarely hears people complaining about not having enough work to do. It also does not fit well with our stereotypical image of the father who is busy providing and seems happy to leave the bulk of the childcare to his female partner. However, this finding is consistent with research indicating that father's today want to be involved with their children and that they tend to be as involved as the mothers allow and encourage them to be (see Lamb, 2004).

Limitations and future directions

The current research was limited by heterogeneity in the sample, participant attrition, compliance difficulties, and limited statistical power due to the sample size being small for a randomized clinical trial study. In addition, the FMQ and its parenting scale are newly developed measures, and further research is needed to further establish the reliability and validity of the measure. We recommend replication and extension of the present research with larger samples.

Implications for intervention and service delivery

The present research, in combination with findings from other transition to parenthood intervention studies (Doherty et al., 2006; Hawkins et al., 2008), suggests that programs targeting couples around the time they are expecting a baby can have a positive influence on father involvement. Although more intensive couple-focused programs have had clear father involvement results across variables examined even in high-risk samples (Cowan et al., 2009), one time psychoeducation service delivery has economic advantages. The current couple-focused transition to parenthood program was associated with fathers feeling more satisfied and appreciated regarding fathering responsibilities and also with father report of involvement as well as observed positive father engagement in the coparenting context. Thus, we recommend such couple-focused psychoeducational programs for universal prevention programs.

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Author Biographies

Alyson F. Shapiro, PhD, is an assistant professor in the Department of Child and Family Development at San Diego State University. Her research focuses on family dynamics around the transition to parenthood period and child development within the family context. Specific subareas of interest include father involvement, coparenting, prenatal family influences, and mindfulness in relationships.

John M. Gottman, PhD, is a researcher and clinical psychologist who is internationally recognized for his 40 years of research on marital stability, predicting divorce, father involvement, and parent emotion coaching to promote emotionally intelligent children. He is also known for his work translating that research into programs for promoting positive couple and family relationships. He is the cofounder of the Gottman Institute.

Brandi C. Fink, PhD, is an assistant professor and a KL2 Scholar in the Department of Psychiatry and Behavioral Sciences at the University of New Mexico. Her research includes a focus on marital relationships, family dynamics and dysfunction, intimate partner violence, and substance abuse. She utilizes neuropsychological approaches to further understanding in these areas with the goal of developing novel interventions.

References

Aben I, Verhey F, Lousberg R, Lodder J, & Honig A (2002). Validity of the Beck Depression Inventory, Hospital Anxiety and Depression Scale, SCL-90, and Hamilton Depression Rating Scale as screening instruments for depression in stroke patients. Psychosomatics, 43, 386–393. [PubMed: 12297607]

Andrews AB, Luckey I, Bolden E, Whiting-Fickling J, & Lind KA (2004). Public perceptions about father involvement: Results of a statewide household survey. Journal of Family Issues, 25(5), 603–633. doi:10.1177/0192513X03258303

Beitel A, & Parke R (1998). Paternal involvement in infancy: The role of maternal and paternal attitudes. Journal of Family Psychology, 12, 268–288.

Blair P, Cox MJ, Kanoy KW, Harter KS, Burchinal M, & Margand NA (2005). Adult attachment and marital interaction as predictors of whole family interactions during the transition to parenthood. Journal of Family Psychology, 19, 420–429. [PubMed: 16221022]

Bouchard G, Lee CM, Asgary V, & Pelletier L (2007). Fathers' motivation for involvement with their children: A self-determination theory perspective. Fathering: A Journal of Theory, Research, and Practice about Men as Fathers, 5(1), 25–41. doi:10.3149/fth.0501.25

Bronte-Tinkew J, Horowitz A, & Carrano J (2010). Aggravation and stress in parenting: Associations with coparenting and father engagement among resident fathers. Journal of Family Issues, 31(4), 525–555. doi:10.1177/0192513X09340147

Cabrera NJ, & Tamis-LeMonda CS (Eds.). (2013). Handbook of father involvement: Multidisciplinary perspectives (2nd ed.). New York, NY: Routledge/Taylor & Francis Group. Retrieved from http://libproxy.sdsu.edu/login?url=http://search.ebscohost.com/login.aspx?direct=true&db=psyh&AN=2012-30818-000&login.asp&site=ehostlive&scope=site

Cowan CP, & Cowan PA (2000). When partners become parents: The big life change for couples. Mahwah, NJ: Lawrence Erlbaum Associates.

Cowan PA, & Cowan CP (1990). Who does what? In Touliatos JF, Perlmutter BF, & Straus MA. (Eds.), Handbook of family measurement techniques (pp. 447–448). Thousand Oaks, CA: Sage.

Cowan PA, Cowan CP, Pruett MK, Pruett K, & Wong JJ (2009). Promoting fathers' engagement with children: Promoting interventions for low-income families. Journal of Marriage and Family, 71, 663–679.

Cox MJ, Owen MT, Henterson VK, & Margand NA (1992). Predictions of infant-father and infant-mother attachment. Developmental Psychology, 28, 474–483.

Derogatis LR, Lipman RS, & Covi L (1973). The SCL-90: An outpatient psychiatric rating scale – Preliminary report. Psychopharmacology Bulletin, 9, 13–25. [PubMed: 4682398]

Dickstein S, & Parke RD (1988). Social referencing in infancy: A glance at fathers and marriage. Child Development, 59, 506–511. [PubMed: 3359868]

Doherty WJ, Erickson MF, & LaRossa R (2006). An intervention to increase father involvement and skills with infants during the transition to parenthood. Journal of Family Psychology, 20, 438–447. [PubMed: 16938002]

Epifanio MS, Genna V, De Luca C, Rocella M, & La Grutta S (2015). Paternal and maternal transition to parenthood: The risk of postpartum depression and parenting stress. Pediatric Reports, 7(2), 5872. doi:10.4081/pr.2015.5872 [PubMed: 26266033]

Fagan J, & Barnett M (2003). The relationship between maternal gatekeeping, paternal competence, mother's attitudes about the father role, and father involvement. Journal of Family Issues, 24(8), 1020–1043. doi:10.1177/0192513X03256397

Feinberg ME, & Kan ML (2008). Establishing family foundations: Intervention effects on coparenting, parent/infant well being and parent-child relations. Journal of Family Psychology, 22, 253–263. [PubMed: 18410212]

Freeman H, Newland LA, & Coyl DD (2008). Father beliefs as a mediator between contextual barriers and father involvement. Early Child Development and Care, 178(7–8), 803–819. doi: 10.1080/03004430802352228.

Galovan AM, Holmes EK, Schramm DG, & Lee TR (2014). Father involvement, father-child relationship quality, and satisfaction with family work: Actor and partner influences on marital quality. Journal of Family Issues, 35, 1846–1867. doi:10.1177/0192513X13479948

George D, & Mallery RA (2003). SPSS for Windows step by step: A simple guide and reference. 11.0 update (4th ed.). Boston, MA: Allyn & Bacon.

Gottman JM (1994). What predicts divorce? The relationship between marital processes and marital outcomes. Hillsdale, NJ: Lawrence Erlbaum Associates.

Hawkins AJ, Lovejoy KR, Holmes EK, Blanchard VL, & Fawcett E (2008). Increasing fathers' involvement in childcare with a couple-focused intervention during the transition to parenthood. Family Relations, 57, 49–59.

Howard K, & Brooks-Gunn J (2009). Relationship supportiveness during the transition to parenting among married and unmarried parents. Parenting: Science & Practice, 9, 123–142.

Hudson DB, Elek SM, & Fleck CM (2001). First-time mothers' and fathers' transition to parenthood: Infant care self-efficacy, parenting satisfaction, and infant sex. Issues in Comprehensive Pediatric Nursing, 24, 31–43. [PubMed: 11881635]

Jeynes WH (2015). A meta-analysis: The relationship between father involvement and student academic achievement. Urban Education, 50(4), 387–423. doi:10.1177/0042085914525789

Katz-Wise SL, Priess HA, & Hyde JS (2010). Gender-role attitudes and behavior across the transition to parenthood. Developmental Psychology, 46, 18–28. [PubMed: 20053003]

Knox V, Cowan PA, Cowan CP, & Bildner E (2011). Policies that strengthen fatherhood and family relationships: What do we know and what do we need to know? Annals of the American Academy of Political and Social Science, 635(1), 216–239. doi:10.1177/0002716210394769

Koester C, & Petts RJ (2017). Fathers' parenting stress after the arrival of a new child. Family Relations: An Interdisciplinary Journal of Applied Family Studies, 66(3), 367–382. doi:10.1111/fare.12263

Kreig DB (2007). Does motherhood get easier the second time around? Examining parenting stress and marital quality among mothers having their first or second child. Parenting Science and Practice, 7, 149–175.

Lamb ME (2004). The role of the father in child development (4th ed., Vol. 27). Hoboken, NJ: John Wiley & Sons Inc.

Lamb ME, Pleck JH, Charnov EL, & Levine J (1987). A biosocial perspective on paternal behavioral and involvement. In Lancaster JB, Altmann J, Rossi AS, & Sherrod LR (Eds.), Parenting across the lifespan: Biosocial dimensions (pp. 111–142). New York, NY: Aldine de Gruyter.

Lawrence E, Cobb RJ, Rothman AD, Rothman MT, & Bradbury TM (2008). Marital satisfaction across the transition to parenthood. Journal of Family Psychology, 22(1), 41–50. doi:10.1037/0893-3200.22.1.41 [PubMed: 18266531]

Lewis C, & Lamb ME (2003). Fathers' influences of children's development: The evidence from two-parent families. European Journal of Psychology of Education, 18(2), 211–228.

Locke HJ, & Wallace KM (1959). Short marital-adjustment and prediction tests: Their reliability and validity. Marriage and Family Living, 27, 251–255.

Marsiglio W, Amato P, Day RD, & Lamb ME (2000). Scholarship on fatherhood in the 1990s and beyond. Journal of Marriage and the Family, 62, 1173–1191.

McBride BA, Brown GL, Bost KK, Shin N, Vaughn B, & Korth B (2005). Paternal identity, maternal gatekeeping, and father involvement. Family Relations, 54, 360–372.

McClain L, & Brown SL (2017). The roles of fathers' involvement and coparenting in relationship quality among cohabiting and married parents. Sex Roles, 76(5–6), 334–345. doi:10.1007/s11199-016-0612-3 [PubMed: 30555203]

McHale JP, Kazali C, Rotman T, Talbot J, Carleton M, & Lieberson R (2004). The transition to co-parenthood: Parents' pre-birth expectations and early co-parental adjustment at 3 months postpartum. Development and Psychopathology, 16, 711–733. [PubMed: 15605633]

Mikelson KS (2008). He said, she said: Comparing mother and father reports of father involvement. Journal of Marriage and Family, 70(3), 613–624. doi:10.1111/j.1741-3737.2008.00509.x

Milkie MA, Bianchi SM, Mattingly MJ, & Robinson JP (2002). Gendered division of childrearing: Ideals, realities, and the relationship to parental well-being. Sex Roles, 47(1–2), 21–38. doi:10/1023/A:102627602889

Office for Long Range Planning. (1990). Census 1990: Population changes in Seattle 1980–1990. Seattle, WA: Author.

Pleck JH, & Masciadrelli BP (2004). Parental involvement by U.S. residential fathers: Levels, sources, and consequences. In Lamb ME (Ed.), The role of the father in child development (4th ed., pp. 222–271). New York, NY: Wiley.

Pruett MK, Pruett K, Cowan CP, & Cowan PA (2017). Enhancing father involvement in low-income families: A couples group approach to preventive intervention. Child Development, 88(2), 398–401. doi:10.1111/cdev.12744 [PubMed: 28146337]

Schnitzer PG, Olshan AF, Savitz DA, & Erickson J (1995). Validity of mother's report of father's occupation in a study of paternal occupation and congenital malformations. American Journal of Epidemiology, 141, 872–877. [PubMed: 7717364]

Shapiro AF (2005). Examining relationships between the marriage, mother-father-baby interactions and infant emotion regulation. Dissertation Abstracts International: Section B: The Sciences and Engineering.

Shapiro AF & Gottman JM (2005). Effects on marriage of a psycho-communicative educational intervention with couples undergoing the transition to parenthood, evaluation at 1-year post intervention. Journal of Family Communication, 5, 1–24. doi: 10.1207/s15327698jfc0501_1.

Shapiro AF, Gottman JM, & Carrère S (2000). The baby and the marriage: Identifying factors that buffer against decline in marital satisfaction after the first baby arrives. Journal of Family Psychology, 14(1), 59–70. [PubMed: 10740682]

Shapiro AF, & Krysik J (2010). Finding fathers in social work research and practice. Journal of Social Work Values and Ethics, 7(1), 1–8. Retrieved from http://www.jswvearchives.com/spring2010/4findingfathers

Shapiro AF, Nahm EY, Gottman JM, & Content K (2011). Bringing baby home together: Examining the impact of a couple-focused intervention on the dynamics within family play. American Journal of Orthopsychiatry, 8(3), 337–350. doi: 10.1111/j.1939-0025.2011.01102.x.

Shrive FM, Stuart H, Quan H, & Ghali WA (2006). Dealing with missing data in a multi-question depression scale: A comparison of imputation methods. Biomedical Research Methodology, 6, 57. doi:10.1186/1471-2288-6-57

Silverstein LB (2002). Fathers and families. In McHale JP & Grolnick WS (Eds.), Retrospect and prospect in the psychological study of families (pp. 35–64). Mahwah, NJ: Lawrence Erlbaum Associates.

Van Egeren LA (2004). The development of coparenting over the transition to parenthood. Infant Mental Health Journal, 25, 453–477.

Van Egeren LA, & Hawkins DP (2004). Coming to terms with coparenting: Implications of definition and measurement. Journal of Adult Development, 11, 165–178.

Wolfson A, Lacks P, & Furtman A (1992). Effects of parent training on infant sleeping patterns, parents' stress, and perceived parental competence. Journal of Consulting and Clinical Psychology, 60, 41–48. [PubMed: 1556284]