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Father Involvement in Urban Low-Income Fathers: Baseline Associations and Changes Resulting From Preventive Intervention

This study investigates father involvement among a sample of ethnically diverse, low-income men participating in a randomized controlled trial of a 14-hour relationship education program that teaches skills and principles for healthy relationships. Utilizing data from 137 fathers, we examined contextual, individual, and coparental relationship pretest correlates of father involvement and found the strongest predictors were income, religiosity, ethnicity, and parenting alliance. Pre-post analyses on a subsample of 112 fathers revealed that workshop participants increased father involvement compared to controls and men whose partner attended workshops alone. Among workshop attendees, increased father involvement was significantly predicted by increased parental alliance. Implications for improving fathering by targeting the couple relationship are discussed.

Research shows that in addition to the historically prescribed role as breadwinner, fathers' involvement (or lack thereof) in day-to-day parenting tasks such as discipline and homework completion contributes in positive and negative

ways to child outcomes. One stressor known to take a toll on fathering and family processes is financial hardship, with many of the negative effects of economic strain for children either exacerbated by frustrated, irritable parenting or buffered by positive, involved parenting (Harris & Marmar, 1996; Mistry, Vandewater, Huston, & McLoyd, 2002). In this study, we sought to improve father involvement among low-income resident fathers by teaching skills to improve couples' communication, aid in coping with stress, and increase investment in and satisfaction with parenting.

Nearly 14 million children in the United States live below the poverty level, and 41% of children live in families that qualify as low-income, living at or below 200% of the poverty level (National Center for Children in Poverty [NCCP], 2009). Although many of those children live in single-parent families, more than one in four children in the United States live in low-income families with married parents. Poverty has especially deleterious effects on children and has been associated with poorer health, academic, social, emotional, and behavioral outcomes, particularly when poverty is persistent rather than transitory (Brooks-Gunn & Duncan, 1997; Dodge, Pettit, & Bates, 1994; McLeod & Shanahan, 1993). One mechanism by which financial strain impacts children is through family processes such as marital and parent-child relationship quality, with parent psychological distress implicated

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in poor relationship quality and parenting behavior (e.g., Conger, Ge, Elder, Lorenz, & Simons, 1994). According to Conger and Elder's family stress model, there is a direct link between high levels of stress caused by poverty and financial instability and increases in parental depression, leading to increased marital conflict (Conger et al., 1991). Marital discord, in turn, is associated with reduced quality of and satisfaction with parenting, especially among fathers (Coiro & Emery, 1998). Thus, understanding how to help low-income fathers mitigate stress and conflict should be a priority for researchers.

CORRELATES AND PREDICTORS OF FATHER INVOLVEMENT

To target a positive change in father involvement, we need to better understand the factors that contribute to or interfere with positive fathering. Belsky's (1984) process model proposes that competent parental functioning (for both mothers and fathers) is affected by parent characteristics (i.e., maturity, personality, psychological functioning), social/contextual factors (i.e., the marital relationship, social supports, work), and child characteristics (most notably, temperament), in that order. Doherty, Kouneski, and Erickson (1998) proposed a similar model, highlighting the coparental relationship (i.e., marital status, conflict, cooperation), mother factors (i.e., attitude toward and expectations of father), and contextual factors (i.e., employment and economic factors) as particularly pertinent to influencing fathers' relationships with their children. They cite research showing that fathers, more than mothers, withdraw from children when there are problems in the coparental relationship and that men are particularly sensitive to financial problems and negative social forces such as racism, which then are associated with poorer parenting and problems in the coparental relationship. In this study, we chose variables that are known to be related to father involvement or are most likely to change as a result of this targeted intervention and grouped them into three categories: contextual (work, financial, and child-related variables), individual (demographic and individual functioning variables), and coparental relationship (alliance, satisfaction, and communication). Because most research on these contextual, individual, and coparental relationship

factors has been conducted either on intact middle class families or nonintact families of various economic and ethnic backgrounds, the first goal of this study was to fill gaps in the literature through exploration of correlates of father involvement among a sample of ethnically diverse low-income resident fathers. The second goal was to evaluate whether attending a couples workshop that targets communication, coping, and parenting skills impacts father involvement.

CAN A COUPLES INTERVENTION IMPACT FATHER INVOLVEMENT?

There is evidence that the quality of the coparental relationship is more strongly associated with the father-child relationship than with the mother-child relationship (see Doherty et al., 1998, for a review) and that the relationship problems disrupt parenting, especially fathering (Coiro & Emery, 1998). Thus, one of the most promising areas for intervention aimed at increasing father involvement is to target the way in which couples interact, particularly in terms of communication skills and managing negative affect. Effective communication predicts relationship satisfaction, buffers against the declines in marital satisfaction that commonly occur over time, and is associated with decreased risk of divorce (Clements, Cordova, Markman, & Laurenceau, 1997; Gottman, 1993; Markman & Halweg, 1993). Evidence-based couples relationship education classes can help partners improve the quality and duration of their relationship (Halford, Markman, & Stanley, 2008), and such programs are likely to have positive effects on parenting practices (Lindahl & Markman, 1990).

Given the importance of positive father involvement for child outcomes, the recent increase in programs designed to improve father involvement is not surprising (see Cowan, Cowan, Pruett, Pruett, & Wong, 2009, for a review). The dearth of randomized controlled trials (RCTs) and relative lack of information about and evaluation of new programs, however, is surprising. Aside from the Cowans' Supporting Father Involvement study, ours is the only other RCT of which we are aware that targets positive change in fathering through relationship education workshops geared to both the couple and individuals. Although relationship education can improve interparental

relationships (e.g., Halford, Markman, Kline, & Stanley, 2003), it is quite challenging to engage men in couples education or parenting interventions due to a combination of pragmatic challenges (i.e., coordinating services for two parents with work schedules and child-care issues) and philosophical assumptions of programs (i.e., targeting mothers under the assumption that fathers will not enroll) (Fagan & Iglesias, 1999; McBride & Rane, 1997; Turbiville & Marquis, 2001). In addition, fathers and mothers report needing or wanting different information from interventions (Lengua et al., 1992). For this study, the importance of fathers was underscored in both recruitment and retention efforts, with workshop materials designed specifically to appeal to fathers by emphasizing concrete skills, activities, and a strong research base. We delivered the intervention to couples, fathers, and mothers. The individual intervention was developed because often only one person is willing or able to attend a couples program, and there are virtually no data on whether interventions impact the nonattending partner or whether the transfer of skills depends on the gender of the attending partner (see Markman et al., 2009).

RESEARCH QUESTIONS AND HYPOTHESES

1. Among low-income resident fathers, how is father involvement related to
 - a. The contextual variables: employment status, number of hours worked, income, number of children at home, and age of focal child?
 - b. The individual variables: age, ethnicity, level of education, degree of religiosity, depressed mood, anxiety, family stressors, and coping efficacy?
 - c. The relationship variables: marital status, parental alliance, relationship adjustment, satisfaction, communication danger signs, and negative communication patterns?
 - d. To what extent do the groups of contextual, individual, and relationship variables explain variance in father involvement, and which of the individual predictors account for significant variance in father involvement when controlling for the others?
2. We hypothesize that attending a relationship workshop will result in increases in

father involvement relative to controls. We hypothesize that when only the woman attends workshops, male nonattending partners will increase father involvement more than control group members but less than attending men.

3. Per the family stress model, we expect positive changes in individual functioning (improved psychological functioning; increases in coping) and coparental relationship (decreases in destructive communication patterns; increases in positive relationship indices such as alliance) to be associated with positive change in father involvement from pre to post, particularly for those who attend workshops.

METHOD

Study Recruitment and Qualification Procedure

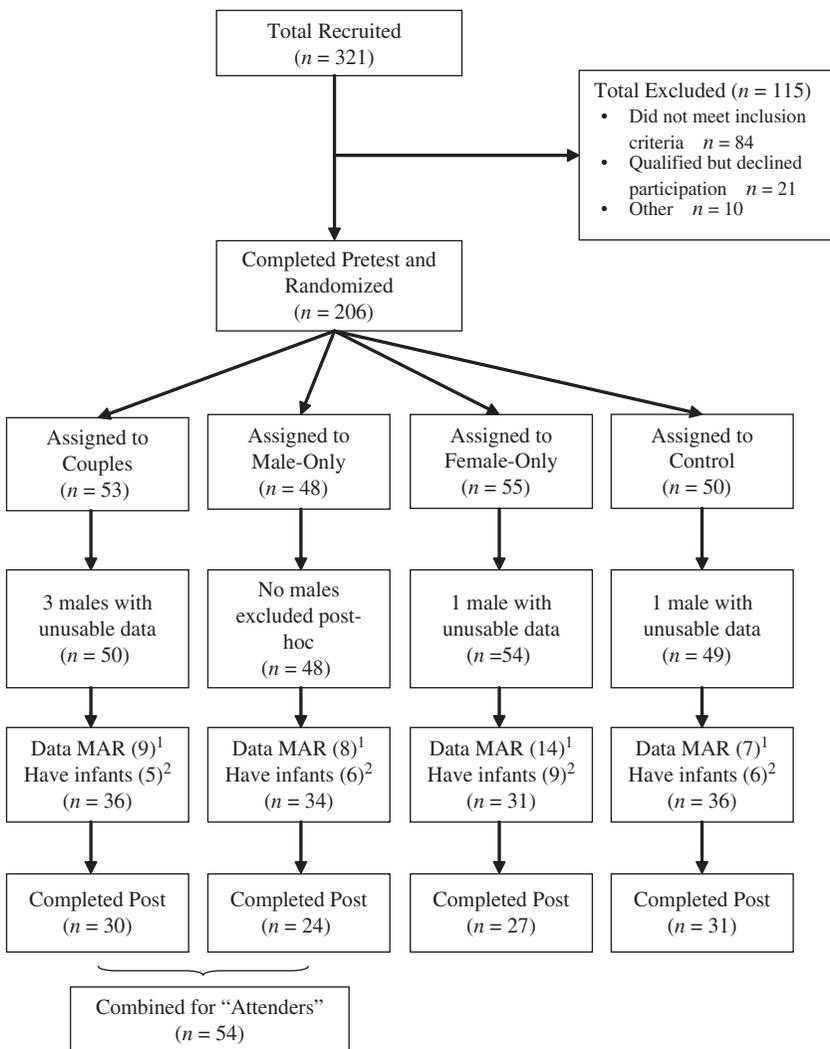
Couples were recruited through a number of means: flyers, newspaper advertisements, media interviews, and collaboration with community leaders and organizations in the Denver area. Interested couples were screened for the following criteria: involved in an ongoing committed relationship, living together for at least 6 months, coparenting at least one child under the age of 18, and an income at or below 200% of the federal poverty level. In addition, participants were screened for prior experiences with our program material. Couples who met the criteria were clearly informed that 75% of couples in the study would be randomly chosen to participate in one of the intervention groups (traditional couples group and groups for male or female partners only) and that 25% of couples would be assigned to a control group and would not attend workshops. Both partners needed to agree to these procedures and be willing and available to participate in any intervention condition before being signed up for the study. Once qualified, couples spent about 1.5 hours completing questionnaires gathering information on individual and relationship functioning and parenting. Randomization occurred after the packet was completed. Block randomized assignments were kept in sealed envelopes in the order in which they were generated and then delivered to the couples by an assessment team member who was blind to assignment. Those selected for workshops began attendance within 2 weeks of completing pre.

Participants

Pre-post data presented here are from 112 male partners (137 men at pre, see Figure 1) who were randomly assigned to one of the four conditions. Male participants were from diverse backgrounds (34.3% African American, 26.3% Caucasian, 21.9% Hispanic, 6.6% American Indian, and 10.9% biracial/multiracial or other) and averaged 36.0 ($SD = 8.9$) years

of age; their female partners averaged 31.3 ($SD = 8.7$) years. Men averaged 12.34 years of schooling ($SD = 2.27$). Among the 67.2% of men who were employed, the average number of hours worked per week was 38.68 ($SD = 13.7$) and the average family income was \$24,023.32 ($SD = \$15,609.26$). Most participants were married (69.9% with 15% engaged) and reported being in their current relationship for an average

FIGURE 1. MALE PARTICIPANT FLOW CHART OF RECRUITMENT, GROUP ASSIGNMENT, AND AVAILABILITY OF PRETEST AND POSTTEST FATHER INVOLVEMENT DATA.



Note. Data missing at random (MAR)¹ = father involvement questionnaire not included in participants' packets. Have infants² = the measure was not designed for fathers of infants, thus most items were "not applicable." These fathers had fewer than 75% of the items completed.

of 7.9 years ($SD = 6.7$). They had an average of 2.32 ($SD = 1.15$) children in the home, with 57.7% of the fathers biologically related to the focal child whose average age was 9.06 ($SD = 4.89$).

Workshops

Workshops involved 14 hours of content where participants learned communication, coping, problem solving, and parenting skills. The workshops were in one of two formats: three Saturdays or five weeknights, with meals and child-care stipends provided. Participants who were unable to attend a session were invited to make up the session. Workshops were led in pairs (usually man-woman) by trained leaders who were selected for their professionalism and cultural and economic sensitivity. Groups ranged from three to nine participants or couples.

The intervention program (called FRAME—Fatherhood Relationship And Marriage Education) is based in large part on the *Within Our Reach* (WOR) curriculum, which is a new adaptation of the Prevention and Relationship Enhancement Program (PREP; Markman, Stanley, & Blumberg, 2010), developed specifically to meet the needs of lower income and higher risk couples (Stanley et al., 2006). The curriculum was created with extensive contact, interviews, and piloting in ethnically and financially diverse communities. It has a strong skill base rooted in research on how couples communicate and handle conflict, builds on the couple's strengths, and adds critical life and relationship skills to help participants create safer, more stable couple relationships and better environments for their children. From the work of Wadsworth and colleagues (Raviv & Wadsworth, 2010; Wadsworth & Santiago, 2008), we added modules on parenting and coping with economic stress. For participants in the couples and individual groups, the same materials and skills were presented and practiced, just in a slightly different manner (i.e., in the individual group, participants partnered up to practice skills). All participants were assigned homework after each session (e.g., practicing the skills learned in the session). In addition, members of the male and female groups were instructed to talk with their partners about what they learned in the session.

To gauge fidelity, independent coders listened to audio-recordings of the sessions and used checklists to rate how well the leaders followed the FRAME script (1 = *this topic was not mentioned*; 2 = *this topic was partially covered, with a significant piece or pieces missing*; 3 = *this topic was fully covered*). The mean for all leaders across all units of the workshops on the 1–3 scale was 2.92, indicating that leaders fully covered key material a vast majority of the time.

Within 2 weeks of workshop completion, intervention and control couples completed postassessments. Couples were paid for completing questionnaires and received a child-care stipend.

Measures

Anxiety and depression. The Brief Symptom Inventory-18 (BSI-18; Derogatis, 2000) was used to assess current symptoms of anxiety and depression. This measure asks participants to indicate how much they have felt each item in the past week on a 5-point Likert scale. (Cronbach's $\alpha = .84$ for anxiety and .90 for depressed mood).

Communication danger signs. The 8-item Danger Signs scale (Stanley & Markman, 1997) was used to assess relationship "danger signs" such as escalation, invalidation, and withdrawal, which have been shown to be predictive of marital distress and dissolution. This measure has demonstrated validity and reliability ($\alpha = .86$).

Coping efficacy. We used a modified 6-item version of Sandler, Tein, Mehta, Wolchik, and Ayers' (2000) coping efficacy scale that assesses how participants feel about how well they cope with stress and how effective they feel their coping strategy will be in the future on a scale of 1 (*not at all*) to 4 (*well*). The scale had a Cronbach's α of .88 in this sample.

Demographics. A demographics questionnaire gathered descriptive information about the sample: age, ethnicity, income, years of education, religiosity, number of children, age of focal child, employment status, number of hours worked per week, and relationship status.

Father involvement. Male participants completed the 26-item Inventory of Father

Involvement (Hawkins et al., 2002), rating how well they have done over the past 12 months on items measuring affective, cognitive, and direct and indirect behavioral components of involvement. Response options were 0 (*very poor*) to 6 (*excellent*) and "NA." Sample items include: "Encouraging your children to succeed in school" "Spending time with your children doing things they like to do," and "Knowing where your children go and what they do with their friends." To better assess this measure's properties in our sample, we conducted an exploratory factor analysis that confirmed a one-factor solution for "Global Father Involvement" ($\alpha = .95$).

Negative communication. The Communication Skills Test (Saiz & Jenkins, 1995) consists of 32 questions about negative and positive communication patterns, answered on a 7-point Likert scale. This study utilized the negative communication subscale ($\alpha = .92$).

Parenting alliance. The Parenting Alliance Inventory (Abidin & Brunner, 1995) is a 20-item inventory that provides an indication of the degree to which parents perceive themselves to be in a cooperative, communicative, and mutually respectful alliance for the care of their children. All items are answered on a scale from 1 (*strongly disagree*) to 5 (*strongly agree*) and summed to create a total alliance score ($\alpha = .95$).

Relationship adjustment and satisfaction. A 7-item version of the Dyadic Adjustment Scale (DAS; Spanier, 1976) was used as a measure of relationship adjustment. The DAS is widely used and the 7-item version of this measure has proven reliable ($\alpha = .84$). One item assessed participants' global satisfaction with their relationship, rated on a scale of 1 (*extremely unhappy*) to 7 (*perfectly happy*).

Stressful events. We used a modified 33-item version of the Family Inventory of Life Events and Changes (McCubbin & Patterson, 1991) to assess the types of stressful events participants encountered within the last year (i.e., "Increase in conflict or arguments among family members," "Had to borrow money, took out or refinanced a loan"). Responses were dichotomous (1 = *yes*, 0 = *no*) and were summed for a total score ($\alpha = .82$).

RESULTS

Preliminary Analyses

To determine the degree to which randomization was successful, we conducted group analyses (attender, nonattender, control) on all study variables including father involvement and found no significant differences by group at pretest. Because biological relationship of the father and child could impact father involvement, we conducted a *t* test comparing father involvement in fathers biologically related to the focal child versus not biologically related to the focal child at pretest and found that the statistical likelihood of a difference in father involvement between the two groups was not significant, $t(135) = 1.04$, $p = .30$. We also examined attendance rates and found that in the attender group, 75.7% attended at least one session (55.7% attended all); among female partners (male nonattender group), 90.3% attended at least one session (80.6% attended all). Of the men on whom we collected valid pretest data, 87.1% came back for posttest (Figure 1). Attrition analyses on all study variables revealed that those who completed posttest had significantly higher income and more education than did those who did not come in for post.

Analytic Strategy for Research Question 1: Correlates and Predictors of Father Involvement

To determine the relationship between father involvement and the contextual, individual, and relationship variables measured on an interval scale, we calculated bivariate correlations. For variables with categorical groupings, we conducted *t* tests and univariate analysis of variance (ANOVA) as appropriate. For these analyses, we used the sample of 137 men who, at pretest, had father involvement data available (Figure 1). Aside from the "number of hours worked per week" ($n = 85$ due to unemployment), other variables in these analyses had less than 4% missing data and were conducted using listwise deletion. Multiple regression was used to explore the amount of variance in father involvement explained by each predictor, controlling for all others (full model) as well as change in variance explained by the groups of variables (contextual, individual, and relationship) when a group was removed.

Research Question 1a: Contextual factors. Correlations between demographic items and father involvement at pretest revealed no significant bivariate associations between father involvement and number of hours worked per week or number of children living at home. There was a significant negative association between father involvement and family income and age of oldest (focal) child at home (Table 1). A t test on employment status revealed significantly higher pretest father involvement among fathers who were not employed, $t(135) = 2.01$, $p < .05$ ($M = 5.32$, $SD = 0.75$), compared to those who were employed ($M = 5.02$, $SD = 0.88$).

Research Question 1b: Individual factors. Correlation analyses revealed no significant associations between father involvement and father's age or level of education. Father involvement was positively related to religiosity and coping efficacy and negatively associated with depressed mood, anxiety, and stressful events (Table 1). For ethnicity, an ANOVA revealed significant mean differences on father involvement at pretest, $F(4) = 4.02$, $p < .01$. Post hoc analyses indicated that Caucasian fathers reported significantly lower levels of father involvement ($M = 4.69$, $SD = 0.97$) than did fathers from American Indian ($M = 5.52$, $SD = 0.32$), African American ($M = 5.34$, $SD = 0.70$), Hispanic ($M = 5.11$, $SD = 0.86$), and biracial or other ($M = 5.21$, $SD = 0.81$) ethnic backgrounds. There were no significant differences between any other ethnic groups.

Research Question 1c: Coparental relationship. An ANOVA with relationship status as the grouping factor (dating, engaged, and married) revealed no significant differences in father involvement: $F(2) = 1.35$, $p = .26$. There were strong positive associations between father involvement and relationship adjustment, relationship satisfaction, and parenting alliance, whereas negative associations were found with danger signs and negative communication (Table 1).

Research Question 1d: Variance explained. All variables with significant bivariate relationships with father involvement were included simultaneously in a multiple regression where we found that, when controlling for all other

predictors, family income, father's religiosity, ethnicity (White or not), and parental alliance explained significant variance in father involvement (Table 2). In three separate regressions, we tested change in R^2 when groups of variables were removed and found that the removal of contextual variables (income, child age, and employment status) resulted in F change (3, 89) = 6.02, $p = .001$, $\Delta R^2 = -.09$; removal of individual factors (religiosity, coping, depressed mood, anxiety, stressful events, and ethnicity) resulted in F change (6, 89) = 3.02, $p = .01$, $\Delta R^2 = -.09$; and the removal of relationship variables (adjustment, satisfaction, parenting alliance, danger signs, and negative communication) resulted in F change (5, 89) = 5.25, $p < .001$, $\Delta R^2 = -.14$.

Analytic Strategy for Research Question 2: Postworkshop Changes in Father Involvement

To answer the question of whether attending a relationship workshop results in increases in father involvement relative to controls and men whose female partner attended, we used repeated measures analysis of covariance (ANCOVA) where group (attenders, nonattenders, and controls) was a between-subjects factor and time (pre and post) was a within-subjects factor. Because of their significant association with father involvement at pretest, age of child, income, and ethnicity were included as covariates as was workshop format (weekend vs. weeknight model). Analyses were conducted with the more conservative intent to treat approach, which does not take into consideration workshop attendance rates.

Question 2: Change in father involvement with preventive intervention. Results of the repeated measures ANCOVA revealed a significant Time \times Group interaction, $F(2, 105) = 3.46$, $p = .04$ (partial $\eta^2 = .06$), with male attenders increasing in involvement from pre to post while nonattenders decreased and members of the control group showed little change (see Table 3 for study descriptives and Figure 2). To test simple effects, we reran the ANCOVAs restricting them to two groups at a time and found no significant difference on the Time \times Group interaction for controls compared to nonattenders, $F(1, 52) = 0.83$, $p = .37$ (partial $\eta^2 = .02$), but found a significant difference between attenders and nonattenders,

Table 1. *Father Involvement and Individual, Contextual, and Relationship Variables: Correlations*

| Variables | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 |
|-------------------------------|--------|-------|--------|-------|-------|-------|------|------|--------|--------|--------|--------|--------|--------|--------|--------|----|
| 1. Father involvement | — | | | | | | | | | | | | | | | | |
| 2. Hours worked/week | -.17 | — | | | | | | | | | | | | | | | |
| 3. Family income | -.35** | .30** | — | | | | | | | | | | | | | | |
| 4. Number of children | -.07 | .01 | .09 | — | | | | | | | | | | | | | |
| 5. Focal child age | -.18* | .00 | .13 | .31** | — | | | | | | | | | | | | |
| 6. Age | -.04 | .08 | .19* | .01 | .41** | — | | | | | | | | | | | |
| 7. Education | -.09 | .00 | .22** | -.02 | -.08 | .14 | — | | | | | | | | | | |
| 8. Religiosity | .27** | -.03 | -.05 | -.10 | .12 | .22** | .13 | — | | | | | | | | | |
| 9. Depressed mood | -.25** | .01 | .09 | -.01 | -.00 | .01 | .15 | -.04 | — | | | | | | | | |
| 10. Anxiety | -.19* | .03 | .06 | -.01 | -.01 | .04 | .07 | .00 | .84** | — | | | | | | | |
| 11. Stressors | -.26** | .07 | .10 | .10 | .00 | -.05 | .13 | .05 | .30** | .37** | — | | | | | | |
| 12. Coping efficacy | .21* | .00 | -.14 | -.04 | .01 | .02 | .04 | .09 | -.36** | -.36** | -.08 | — | | | | | |
| 13. Danger signs | -.26** | -.03 | .12 | -.07 | -.03 | -.17* | .13 | .01 | .40** | .31** | .46** | -.26** | — | | | | |
| 14. Relationship adjustment | .41** | -.01 | -.26** | .04 | .06 | .05 | -.02 | .11 | -.24** | -.14 | -.26** | .37** | -.68** | — | | | |
| 15. Relationship satisfaction | .31** | -.02 | -.10 | .13 | .11 | -.04 | -.07 | -.00 | -.19* | -.12 | -.35** | .23** | -.64** | .74** | — | | |
| 16. Parental alliance | .54** | .02 | -.18* | -.07 | -.24* | -.00 | .05 | .13 | -.20* | -.06 | -.30** | .25** | -.43** | .61** | .52** | — | |
| 17. Negative communication | -.22** | -.09 | .08 | -.04 | .04 | -.07 | -.08 | -.03 | .42** | .39** | .31** | -.47** | .70** | -.61** | -.50** | -.45** | — |

* $p < .05$. ** $p < .01$.

Table 2. Summary of Multiple Regression Analysis for Variables Predicting Father Involvement (N = 104)

| Variable | Full Model | | |
|---------------------------|------------|------|---------|
| | B | SE B | β |
| Contextual | | | |
| Family income | -1.4E-5 | 0.00 | -.27** |
| Age of focal child | -0.02 | 0.02 | -.10 |
| Employed | -0.09 | 0.16 | -.05 |
| Individual | | | |
| Father's religiosity | 0.08 | 0.04 | .18* |
| Coping efficacy | -0.04 | 0.13 | -.03 |
| Depressed mood | 0.04 | 0.16 | .04 |
| Anxiety | -0.09 | 0.16 | -.09 |
| Stress | -0.02 | 0.01 | -.13 |
| Ethnicity | -0.33 | 0.15 | -.18* |
| Relationship | | | |
| Relationship adjustment | 0.01 | 0.02 | .07 |
| Relationship satisfaction | 0.07 | 0.07 | .11 |
| Parental alliance | 0.02 | 0.01 | .38** |
| Danger signs | 0.06 | 0.22 | .04 |
| Negative communication | 0.07 | 0.09 | .10 |
| R ² | .54 | | |
| F | 7.49** | | |

Note. Ethnicity was dummy coded 0 = non-White, 1 = White.

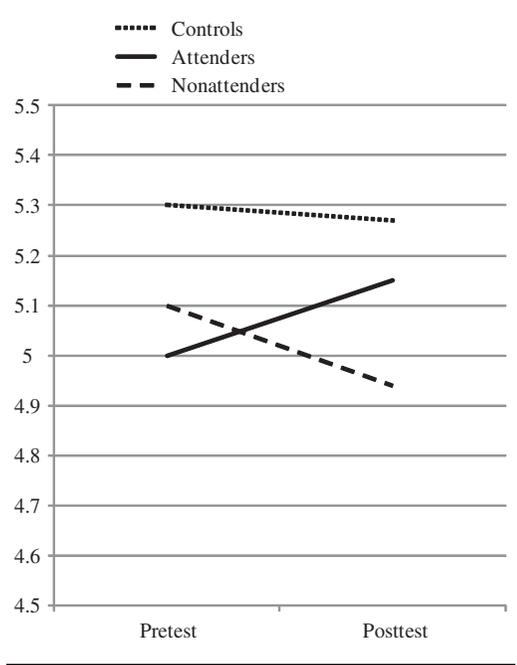
* $p < .05$. ** $p < .01$.

$F(1, 75) = 4.74, p = .03$ (partial $\eta^2 = .06$), and a trend when comparing controls and attenders, $F(1, 79) = 2.80, p = .10$ (partial $\eta^2 = .03$).

Analytic Strategy for Research Question 3: Predicting Changes in Father Involvement

To determine whether change in individual and coparental factors was associated with change in father involvement among workshop attendees, we chose four variables shown to be associated with pretest father involvement that were also likely to change as a result of the intervention: depressed mood and coping efficacy (workshops included relaxation, coping, and problem solving skills) as well as communication danger signs and parenting alliance (both of which were specifically targeted in communication and parenting units). We created change scores (Time 2 to Time 1) for those four variables and included them in a multiple regression predicting posttest father involvement along with pretest father involvement and the previously used

FIGURE 2. PRETEST AND POSTTEST FATHER INVOLVEMENT BY WORKSHOP CONDITION.



control variables: age of child, income, ethnicity, and workshop format.

Question 3: Change in individual and coparental factors predicting change in father involvement. For attenders, increases in parental alliance were significantly associated with increased father involvement at posttest when controlling for change in depressed mood, coping efficacy, and danger signs (Table 4). For nonattenders, increases in coping efficacy significantly predicted increased father involvement when controlling for other variables.

DISCUSSION

This study provides information about the contextual, individual, and coparental relationship variables that are associated with father involvement in intact urban low-income families. We present evidence that, compared to nonattenders, fathers who attend workshops where communication, coping, problem solving, and parenting skills are taught increase their level of involvement with their children, and that positive change in father involvement is linked to improved parental alliance.

Table 3. Pretest and Posttest Means and Standard Deviations

| Variables | Pretest | | | Posttest | | |
|---------------------------|-----------------------------------------|-----------------------------------------|-----------------------------------------|-----------------------------------------|-----------------------------------------|-----------------------------------------|
| | Controls | Attenders | Nonattenders | Controls | Attenders | Nonattenders |
| | <i>n</i> = 31 <i>M</i> (<i>SD</i>) | <i>n</i> = 54 <i>M</i> (<i>SD</i>) | <i>n</i> = 27 <i>M</i> (<i>SD</i>) | <i>n</i> = 31 <i>M</i> (<i>SD</i>) | <i>n</i> = 54 <i>M</i> (<i>SD</i>) | <i>n</i> = 27 <i>M</i> (<i>SD</i>) |
| Father involvement | 5.30 (0.63) | 5.00 (0.93) | 5.10 (0.88) | 5.27 (0.65) | 5.15 (0.85) | 4.94 (1.00) |
| Individual functioning | | | | | | |
| Depressed mood | 0.52 (0.68) | 0.70 (0.76) | 0.70 (0.90) | 0.30 (0.53) | 0.54 (0.67) | 0.40 (0.56) |
| Anxiety | 0.63 (0.78) | 0.66 (0.78) | 0.75 (0.81) | 0.29 (0.45) | 0.51 (0.65) | 0.46 (0.61) |
| Stress | 9.73 (5.81) | 10.01 (5.50) | 11.24 (6.10) | 6.77 (5.98) | 8.20 (5.64) | 8.30 (7.24) |
| Coping efficacy | 2.88 (0.61) | 2.91 (0.66) | 3.01 (0.51) | 3.08 (0.72) | 2.98 (0.62) | 3.18 (0.51) |
| Coparental relationship | | | | | | |
| Danger signs | 1.91 (0.60) | 1.87 (0.47) | 1.91 (0.54) | 1.81 (0.60) | 1.76 (0.57) | 1.70 (0.52) |
| Relationship adjustment | 29.35 (6.54) | 29.90 (5.48) | 29.80 (5.22) | 31.52 (6.17) | 30.69 (6.25) | 29.96 (5.76) |
| Relationship satisfaction | 4.59 (1.32) | 4.66 (1.32) | 4.93 (1.36) | 4.81 (1.22) | 4.57 (1.40) | 5.04 (1.16) |
| Parental alliance | 84.08 (14.42) | 84.43 (11.36) | 84.50 (15.03) | 84.14 (17.33) | 85.38 (13.53) | 86.64 (10.70) |
| Negative communication | 3.81 (1.47) | 3.74 (1.12) | 3.59 (1.17) | 3.66 (1.40) | 3.33 (1.09) | 3.29 (1.13) |

Table 4. Summary of Simple Regression Analyses for Change Variables Predicting Posttest Father Involvement by Group

| Variable | Attenders | | | Nonattenders | | | Controls | | |
|----------------------------|-----------|-------------|-------------------|--------------|-------------|------------------|----------|-------------|-------------------|
| | <i>B</i> | <i>SE B</i> | β | <i>B</i> | <i>SE B</i> | β | <i>B</i> | <i>SE B</i> | β |
| Pretest father involvement | 0.86 | 0.11 | .91** | 1.14 | 0.24 | .99** | 0.48 | 0.19 | .44* |
| Focal child age | -0.1 | 0.02 | -.08 | 0.05 | 0.03 | .24 | -0.02 | 0.02 | -.18 |
| Income | 3.4E-6 | 0.00 | .07 | 1.6E-5 | 0.00 | .20 | -2.8E-6 | 0.00 | -.07 |
| Ethnicity | -0.18 | 0.19 | -.10 | 0.12 | 0.38 | .05 | -0.40 | 0.28 | -.27 |
| Workshop model | -0.19 | 0.16 | -.11 | 0.01 | 0.35 | .00 | 0.02 | 0.21 | .01 |
| Depressed mood change | -0.30 | 0.16 | -.20 [†] | 0.27 | 0.17 | .28 | -0.17 | 0.30 | -.15 |
| Coping efficacy change | -0.17 | 0.13 | -.13 | 0.48 | 0.22 | .30* | -0.50 | 0.25 | -.39 [†] |
| Danger signs change | -0.08 | 0.17 | -.05 | -0.59 | 0.51 | -.19 | 0.10 | 0.40 | .05 |
| Parenting alliance change | 0.03 | 0.01 | .31** | 0.02 | 0.01 | .29 [†] | 0.04 | 0.02 | .39 [†] |
| <i>R</i> ² | .74 | | | .84 | | | .83 | | |
| <i>F</i> | 11.12** | | | 7.84** | | | 6.50** | | |

Note. Ethnicity was dummy coded 0 = non-White, 1 = White; workshop model was coded 0 = weekends, 1 = weeknights.

[†] $p < .10$. * $p < .05$. ** $p < .01$.

Correlates and Predictors of Father Involvement

In terms of contextual variables, our results supported other research by finding an association between father involvement and age of the focal child (see Yeung, Sandberg, Davis-Kean, & Hofferth, 2001) and no association with number of children in the home (Coley & Hernandez, 2006), implying that fathers in our study decrease their involvement as children get older (and potentially more self-sufficient), but not as the number of children increases. We also found that lower father involvement was related to higher income, though not to number

of hours worked, and that those who were not employed were more involved. Although Fagan (1998) found that increased time availability (and therefore accessibility) did not relate to more father involvement and others have noted that gainful employment and the self-perception of being a successful provider are strongly tied to individual functioning and family relationships (Bowman & Sanders, 1998; Doherty et al., 1998), it is possible that the unemployed fathers in our study do not view financial support as the hallmark of fatherhood. Rather, their availability may truly result in more time spent in quality interactions with their children.

When we examined links between individual variables and father involvement, we did not find higher levels of father involvement among older or more educated men as others have found (Bailey, 1993; Parke, 1996). The lack of association with education is likely driven by the fact that our Caucasian fathers had, on average, more years of education than did other ethnic groups and they were also the fathers who were less involved. This finding is consistent with other studies showing differences in father involvement by ethnicity (i.e., Hofferth, 2003) and may indicate that ethnicity is tied to cultural beliefs about families and the role of fathers. One explanation is that fathers from ethnic minority groups feel a need to be involved with children in a way that helps prepare them for the likelihood of encountering racism (Coley & Hernandez, 2006; LeMasters & Defrain, 1983). Further exploration of the role of culture in father involvement is warranted.

In terms of individual functioning, we found that fathers in our sample who felt efficacious at coping with stress rated themselves as more involved, whereas those with a greater number of stressors, higher anxiety, and more depressed mood were less involved. This supports the idea that poor psychosocial functioning is related to poorer fathering (Belsky, 1984; Roggman, Boyce, Cook, & Cook, 2002) and points to the important role that stress management can play in improving fathering.

Consistent with previous research (e.g., McBride & Rane, 1998; Volling & Belsky, 1991), coparental relationship variables were strongly related to father involvement, as men who reported better relationship adjustment and satisfaction, higher levels of parenting alliance, and lower levels of negative communication and “danger signs” were also more involved as fathers.

When we examined all key contextual, individual, and relationship functioning variables simultaneously in a model predicting father involvement, the only significant predictors were income, ethnicity, religiosity, and parenting alliance, once again highlighting that our non-White lower income participants were more likely to be involved with their children. The finding that greater religiosity and parenting alliance are associated with more father involvement replicates the work of others who have found that more religious fathers report being more involved as fathers and having better

relationship quality (see King, 2003). This points to the important interrelationships between the couple relationship and parenting. Indeed, much like the model proposed by Doherty and colleagues (1998), all three groups of variables were valuable for explaining father involvement, but in our sample, the factor that was most predictive at pretest was the group of relationship variables, and among those, parenting alliance was foremost. These findings contribute to our understanding of the ways in which higher levels of marital quality are linked to better child functioning (e.g., Howes & Markman, 1989), as the effect may be mediated by father involvement with the child. Future research should formally test this mediation hypothesis.

Can Father Involvement Change With Preventive Intervention?

A primary aim of this study was to teach relationship skills to low-income couples with the goal of improving the couple relationship and, by extension, each member of the couple’s individual functioning and parenting. When looking at pre-post change for participants who were in the control group, workshop group, or who had a partner who attended workshops, we found that only attenders reported increased father involvement following workshops compared to nonattenders, who decreased father involvement, and control group members, who stayed the same. The finding that, over time, attenders differed significantly from nonattenders on father involvement was surprising, both because pretest analyses revealed no significant differences by group on any study variables and because attending partners were asked to share workshop materials with nonattending partners. To the degree that the female partners did indeed share the material and teach their partners skills, we predicted an increase in father involvement. The apparent decline in father involvement may indicate the men’s reluctance to learn the skills or even that a sort of information “gatekeeping” occurred, with female partners presenting the material in such a way that caused the male partner to feel defensive or react negatively. A third possibility is that as women learned the tenets of a healthy relationship, they realized that their own relationship was unsatisfactory and began the process of relationship dissolution. As mothers have a powerful influence over fathers’ access to and relationship with children (Allen

& Hawkins, 1999), they may have been actively discouraging father involvement by posttest. This finding that what the women learned may not have been accurately transferred to partners is somewhat concerning in that mothers are much more likely to participate in relationship education programs (Markman et al., 2009). Further research is needed to more clearly gauge how information transfer occurs, how it is received, and the overall impact on the relationship.

On a more positive note, the finding that increased parental alliance is significantly associated with positive change in father involvement is encouraging. Although it may seem to be a small window of time for couples to incorporate skills and make meaningful changes by 2 weeks posttest, the workshops are designed to produce immediate improvement in couples' communication, and part of our curriculum specifically addresses the importance of parenting as a team and communicating about parenting. Skills are practiced during workshops and participants are given "homework" to complete before the next session. The homework assignments all directly relate to the practice of skills; therefore, we expected to see changes in the way couples coparent their children together, and the results suggest that we do.

Limitations of the Study

Although one goal of the study was to provide more information about an understudied population, this also becomes one limitation of the study. We cannot generalize the findings to middle- or upper-class populations, as it is possible that father involvement intersects with income in such a way that it would manifest differently at higher income levels (Harris & Marmar, 1996). In addition, although the workshops appear to create positive change for our participants, it is possible that our participants signed up for the study because they were already motivated to change, potentially rendering the material less effective in the general population. In terms of measurement, our reliance on self-report is a limitation that should be addressed in future studies where interviews and videotapes of couple interactions would likely capture changes in the couple dynamic that are not evident in self-reports of more global constructs. We are also limited by having only father reports of father involvement, which may be inflated compared to mothers'

reports of father involvement (Coley & Morris, 2002). If only one report can be obtained, however, Coley and Morris found that mothers and fathers have similar patterns of responding, and Hernandez and Levine-Coley (2007) found more consistent predictive validity with father reports of involvement compared to mother reports.

As would be expected in an intervention study that requires a large time commitment from participants, we experienced some attrition from pre to post, most notably in the male-only group. Although this seems to reinforce the idea that it is difficult to recruit and retain men for relationship or parenting interventions, our study's overall attrition rate of 12.8% is encouraging, considering that our families face much hardship and that low-income men, in particular, tend to be fairly transient (see Roy & Kwon, 2007). As noted in the attrition analyses, fathers with lower income were less likely to return, which, we believe points to the barriers to help-seeking created by financial hardship and emphasizes the need for policymakers and service providers to reach out to low-income populations. Finally, although we conducted analyses to verify that men in the couples group and the male-only group were not statistically different from each other on key study variables (and that they did not differentially increase on father involvement), the combination of the two into one group may have introduced bias into our analyses due to a larger sample size in the combined group, different attrition rates, and slightly different workshop formats.

Overall, the study findings suggest that couples education may be an effective means of increasing father involvement and that improved parental alliance, in particular, is associated with that change. Caution is warranted, though, as it seems that in some cases, providing services to one member of the couple may be less effective or even detrimental, depending on the outcome measured. In this case, father involvement improved when men attended workshops, whereas having their partner attend alone resulted in decreased involvement. Future studies should examine in more detail the effects that gender composition of the workshop group may have on skill learning as well as outcomes that may be particularly sensitive to gender effects in both the learning and transfer of skills. A strong understanding of the mechanisms of change by which couples' education can impact

couple, individual, and family functioning will be an important advancement in the field of couples research.

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