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Sandra A Graham-Bermann
University of Michigan
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Laura E Miller-Graff
University of Notre Dame
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Community-Based Intervention for Women Exposed to Intimate Partner Violence: A Randomized Control Trial

Sandra A. Graham-Bermann
University of Michigan

Laura Miller-Graff
University of Notre Dame

A community-based intervention, The Moms’ Empowerment Program, was tested with 181 mothers exposed to intimate partner violence (IPV) during the past year. Following consent, a sequential randomized control assignment procedure allocated participants to 3 conditions: mother-plus-child received intervention (M + C), child-only received intervention (CO), and a wait list comparison group (CG). A 2-level hierarchical linear model consisting of repeated observations within individuals and intervention conditions comparing the 3 conditions and from postintervention to 8-month follow-up for both intervention conditions. Outcomes were individual women’s positive parenting and depression. Women in the M + C condition showed the greatest improvement over time of the 3 conditions in both positive parenting and depression. Without intervention parenting grew significantly worse over time for women in the comparison group. Thus, this short-term group intervention program was successful in showing moderate change in both domains.

Keywords: intimate partner violence, women, parenting, depression, intervention

Effects of IPV on Women’s Mental Health and Parenting

Women who experience IPV are at high risk for developing a range of difficulties including, physical injuries, heath problems, substance use, depression, anxiety, traumatic stress, and future victimization vulnerabilities (Cannon, Bonomi, Anderson, & Rivara, 2009; Cerulli, Talbot, Tang, & Chaudron, 2011; Cougle, Resnick, & Kilpatrick, 2009; Ellsberg, Jansen, Heise, Watts, & Garcia-Moreno, 2008; Graham-Bermann, Sularz, & Howell, 2011; Martino, Collins, & Ellickson, 2005). Of these negative outcomes, major depression is one of the most common, with a lifetime prevalence of 68.2% in women with a history of violence exposure (Stein & Kennedy, 2001; Zlotnick, Johnson, & Kohn, 2006). Further, the presence of depression influences the extent to which intergenerational effects of IPV are perpetuated. For example, during the perinatal period, depression following IPV has been linked to low birth weight (Rosen, Seng, Tolman, & Mallinger, 2006).
2007) and disruptions in breastfeeding (Kendall-Tackett, 2007), both of which have long-term health implications for young children.

As children grow older, positive parenting behaviors and parental warmth may be inhibited by the presence of depressive symptoms. Studies in the general population show that depressed mothers have higher negative emotional reactivity, especially when child behavior is “aversive” (Dix, Moed, & Anderson, 2014). Yet the parent’s ability to provide support to children during times of their own distress has also predicted children’s recovery from trauma, (Cohen, Mannarino, & Deblinger, 2006). Evidence is found in other studies for the role of positive parenting, for example, parenting warmth and control, and mothers’ emotion regulation as key elements that reduce negative developmental outcomes for children in the presence of family risk and stress, including violence (Samuelson, Krueger, & Wilson, 2012; Westbrook & Harden, 2010; Whittaker, Harden, See, Meisch, & Westbrook, 2011). However, in the context of IPV, studies have shown that many mothers struggle with appropriate parenting, are less consistent and may feel less confident and “in control” regarding their parent practices (Lapierre, 2010; Letourneau, Fedick, & Willms, 2007), all of which has known implications for children’s mental health and behavior (e.g., Levendosky, Leahy, Bogat, Davidson, & Von Eye, 2006).

Process-oriented research has provided additional insight into the links between IPV, depression, and parenting, creating a strong foundation for intervention work. In one study of low-income, African American women, the link between IPV and the outcomes of depression and parenting stress were mediated by coping, spiritual well being and social support (Mitchell, Hargrove, Collins, Thompson, Reddick, & Kaslow, 2006). In another study of abused women in shelters, those who felt empowered and had access to resources had lower levels of traumatic stress (Perez, Johnson, & Wright, 2012). Mothers exposed to IPV who had more balanced (i.e., accepting and warm) representations of their young children were more likely to exhibit positive parenting behaviors (Dayton, Levendosky, Davidson, & Bogat, 2010), which have been linked to resilience in children exposed to IPV (Howell, Graham-Bermann, Czyz, & Lilly, 2010). As such, there is clear evidence to suggest that women who receive support surrounding depression and issues related to parenting may play a key role in the development of their children’s resilience in the face of exposure to violent trauma.

**Intervention Programs for Women Exposed to IPV**

Studies of interventions for sexual assault survivors far outnumber those designed for women exposed to IPV. Yet several programs have been designed for abused women or adapted from existing therapies to serve the various needs of women exposed to IPV. Cognitive processing therapy (CPT, Resick & Schnicke, 1993), for example, was originally designed to assist sexual assault victims, but has also been found to be effective for women exposed to IPV. Mechanisms of change include cognitive restructuring of the traumatic event and exposure therapy while allowing women to tell their story in the context of a private, therapeutic relationship (Resick et al., 2008). Cognitive–behavioral therapy (CBT) also showed promising results, in a recent study by Iverson et al. (2011) with 150 women exposed to various interpersonal traumas, including IPV. They found CBT reduced their trauma symptoms, depression, and future exposure to IPV (Iverson et al., 2011). Other iterations of CBT (e.g., cognitive therapy, dialectical behavior therapy) have also proven successful in reducing traumatic stress for abused women (Iverson, Shenk, & Fruzzetti, 2009; Kubany et al., 2004).

Still, the needs of abused women are great and include social support, safety planning, as well as resources around child rearing. Several programs designed to enhance the adjustment of mothers and their children have addressed these and the parenting behaviors of abused women. While few have been rigorously tested with randomized control trials (Rizo, Macy, Ermentrout, & Johns, 2011), those with the most robust designs tend to show the greatest improvements. One empirically rigorous evaluation conducted by Jouriles et al. (2008) evaluated Project Support, which has been shown to successfully reduce children’s externalizing behavior problems following exposure to IPV (Jouriles et al., 2008; Jouriles et al., 2001). All of the women participating in the intervention significantly improved in the domains of consistent and harsh parenting, compared with nontreated mothers. Differences were not found for the women’s psychiatric symptoms, yet the other changes were maintained over time (McDonald, Jouriles, & Skopp, 2006).

Lieberman and colleagues tested child–parent psychotherapy (CPP), a 52-week dyadic treatment designed to improve the parent–child relationship, reduce attachment difficulties for the preschool-aged child and enhance abused mothers’ mental health (Lieberman, Ippe, & Van Horn, 2006). The program was successful in reducing mothers’ overall distress but not their PTSD, relative to comparisons (Lieberman, Van Horn, & Ippen, 2005).

A series of studies was conducted by Sullivan and colleagues who evaluated a program for women leaving shelters consisting of 4–6 hr of advocacy and counseling for 10 weeks and found no difference between intervention and comparison groups in exposure to violence at 10 weeks postintervention but did find women’s greater use of resources, social support, and life satisfaction (Sullivan & Davidson, 1991; Sullivan, Tan, Basta, Rumpitz, & Davidson, 1992). A second program by Sullivan and colleagues that provided 16 weeks of cost-free advocacy and community support for abused mothers was evaluated and showed that intervention mothers reported less depression, higher self-esteem, and higher quality of life relative to comparison mothers (Sullivan, Bybee, & Allen, 2002). These findings held at 4-month follow-up. Another study with a group therapy design found significant improvements for the children but no clinically significant change for their mothers in terms of life stress and health (Sullivan, Egan, & Gooch, 2004). The mothers’ program focused on parenting support, peer support, and safety planning.

McWhirter (2011) compared two types of group therapy for women exposed to IPV living in shelters. In all 48 women previously exposed to family conflict were randomly assigned to either emotion-focused treatment or goal-oriented treatment—each of which took place over 5 weeks with sessions lasting for 1 hr of group therapy for 4–5 women and 1 hr of conjoint therapy sessions with all mothers and children. The goal-oriented therapy was modeled on CBT and motivational interviewing to promote goal-oriented change. The emotion-focused treatment consisted of behavioral and gestalt intervention techniques, including psychoeducation and increasing personal awareness while fostering positive...
group relations. Results showed increases in social support for the emotion-focused group and decreases in alcohol use and family conflict for the goal-directed group. While there was no comparison with women who did not receive treatment, to assess changes over time, results were consonant with the theoretical approach of each intervention (McWhirter, 2011).

Programs focused on enhancing parenting skills and reducing parenting stress are both needed and wanted by abused women, as found byPerlman, Cowan, Gewirtz, Haskett, and Stokes (2012) who studied the success of homeless shelters implementing programs to promote positive parenting practices for their clients. A recent study of the needs of abused women in Canada showed that most preferred integrated services that provide instrumental and emotional support from professional service providers as well as from peers to enhance positive parenting and healthy child development (Letourneau et al., 2013).

Taken together, it is clear that there are several effective intervention programs aimed at alleviating the negative effects of IPV on women. Few programs, however, have been able to establish positive effects on both women’s mental health and on parenting. Further, most evidence-based programs rise from individual treatment paradigms; while increasing mental health parity may make these useful to many women, individual therapies may be difficult to reliably provide in the context of shelters or other settings serving a large number of women. As such, there is a clear need for programs that are brief, have broad effects on mental health and parenting, and can be easily applied in service settings.

### Intervention Evaluated in the Present Study

A community-based therapeutic group intervention, the Moms’ Empowerment Program (MEP), was tested in a randomized control trial (RCT) with mothers exposed to IPV during the past year and found to be effective in reducing symptoms of traumatic stress and an 85% reliable change reduction in posttraumatic stress disorder (PTSD), relative to a wait list comparison group (Graham-Bermann & Miller, 2013). A second RCT with 120 abused women showed that the MEP was successful in decreasing women’s exposure to violence relative to those who did not participate in the program (Miller, Howell, & Graham-Bermann, 2014). The 10-session intervention program was designed to empower women as they discuss the impact of the violence on themselves and on their children; to build parenting competence; to provide a safe place to discuss parenting fears and worries; and to build connections for the women in the context of a supportive group, thereby reducing symptoms of depression and enhancing their parenting skills. The MEP also focuses on strengthening protective aspects in the women’s lives, including connecting to social support, community resources, and safety planning.

The overarching objective of the present study was to assess the efficacy of a group intervention for women exposed to IPV. The main hypotheses were (a) women who received the MEP intervention (where the mother plus the child participate in the programs (M + C condition) are postulated to have greater improvements in positive parenting and lower levels of depression symptoms over time than those who did not receive intervention—women in the CG (no treatment comparison group) and CO conditions (child-only participates in the Kids’ Club program); and (b) M + C women are hypothesized to achieve greater long-term change in parenting and lower levels of depression symptoms following treatment than women whose child only participated in the program (CO group).

### Method

#### Participants

On average, women were 33 years old ($SD = 5.29$ years) and represented diverse racial/ethnic backgrounds (57% White, 35% African American or biracial, and 8% from other groups). Monthly income varied considerably and was generally low ($M = $1,366, $SD = $1,315). The vast majority of women had completed high school (84.6%). Most were single (23%), separated (30%) or divorced (9%). Nineteen percent were married, 9% were living with a partner and 2% were remarried. The women’s self-reports on their history of IPV indicated that the average length of their violent relationship was 10 years ($M = 125.13$ months, $SD = 71.73$), with a mean of 1.70 violent partners ($SD = 1.23$) in their lifetime. Few women were currently living with a violent partner (17%), but most had some contact with the partner (68%; $M$ contact = 158 days/year, $SD = 141.93$). Only 4% of the women were living in a shelter at the start of the study. The women’s children ranged in age from 6–12 years ($M = 8.49$, $SD = 2.16$).

### Procedures, Sample Size, and Assignment to Groups

Women who participated in the study were recruited through flyers and newspaper advertisements, at social service agencies and through shelters for abused women in five urban locations in Michigan. Each community provided a setting for the MEP, such as rooms in an existing mental health clinic, a shelter outreach center, or an education setting. Study criteria included women who had physical conflict in their relationship with an intimate partner during the past year and with children between the ages of 6 and 12. They were invited to participate in an interview and support groups for themselves and/or their children.

Following IRB approval, a sequential assignment procedure was used to assign women and children to the three conditions (see Figure 1). That is, the first seven women and children were assigned to the M + C condition by the project coordinator who did not provide either intervention or evaluation. The next seven children were assigned to the CO condition, and the following seven were assigned to the comparison group (CG) condition where the women and children were put on a wait list for treatment but did not participate in either intervention. The CG condition was oversampled due to anticipated greater attrition. This method of assignment to conditions continued throughout the study. Data were collected at baseline, 10 weeks later (Time 1 and Postintervention) and at 8-month follow-up (Time 2). However, all CG families were offered the opportunity to participate in the intervention at the end of the 10-week period and thus, were not interviewed a third time. Women gave their informed consent and were interviewed by researchers blind to group assignment. Women received $20 at each interview.

In all 221 mothers and children were interviewed at baseline. There were 62 in the CO group, 61 M + C, and 58 CG. Based on 0.8 power to detect a significant difference (calculated in G-Power, $p = .05$, $d = .25$), for repeated measures, within-between interac-
tion), approximately 60 participants were required for each study condition. Forty children and mothers (18%) who were interviewed at baseline did not continue participation in the study. Of these, two were dropped for unrepresentative high income, three moved out of state, 12 lost housing and contact with the study, three lost child custody, 14 declined the second interview once contacted, one child developed cancer, and one was injured in a fire. Four children moved to foster care and were not permitted to continue in the study. Of dropouts, 37 had been randomly assigned to the three groups—eight to the C/H group, nine to the CO group, and 20 to the CG. Analyses comparing those who dropped out of the study and those who remained showed no significant differences in terms of child age, sex or ethnicity, family income, mother’s age, marital status, education, the frequency of family violence or behavioral adjustment at baseline.

Of the 123 children and their mothers in the intervention program, seven (5.7%) were not interviewed a third time (one from each intervention condition stayed in the program but refused the interviews, and five dropped out after the intervention—four of whom were from the CO group). Thus, 56 CO and 60 M/H participants completed the intervention and third interview. M/H and CO did not differ from CG participants on ethnicity, income, maternal age or marital status, level of education, the frequency of family violence or behavioral adjustment at baseline.

The Intervention

The MEP is offered in conjunction with The Kids Club (Graham-Bermann, 1992, 2012) group program for children ages 6–12 who have been exposed to IPV. The program targets children’s knowledge about family violence, their attitudes and beliefs about families and family violence, their emotional adjustment, and their social behavior in the small group. An RCT compared 181 children who did and did not receive the intervention and showed that the greatest improvements in internalizing and externalizing behavioral adjustment problems was found for children whose mothers also participated in the MEP (Graham-Bermann, Lynch, Banyard, DeVoe, & Halabu, 2007). These changes lasted or increased at 8-month follow-up.

Both programs are manualized and phase-based; such that early sessions build the groundwork for discussing future topics. For example, setting rules, making introductions, exploring expectations, and identifying topics of interest take place in the early sessions of the MEP, whereas such topics as family-of-origin violence and parenting distress come later. The MEP relies on the principles of interpersonal theory (Sullivan, 1953) that emphasizes the whole person and fosters strengths and abilities through social support that enhances adjustment. The program also works to incorporate mental health components with developing supports for instrumental needs (e.g., safety planning).

There is no doubt that parenting stress is higher for women exposed to IPV than for other mothers (Levendosky & Graham-Bermann, 1998; Meyers & Battistoni, 2003). This is especially the case for women whose children have emotional and behavioral problems following exposure to IPV (Owen, Thompson, & Kaslow, 2006). Research has also shown that verbally aggressive parenting can increase anxiety and depression in children exposed to IPV (Morrel, Dubowitz, Kerr, & Black, 2003). Given that
parenting stress can negatively affect the parent–child relationship and thereby increase poor parenting practices, as well as child maltreatment and/or neglect (Larson, 2004), the MEP first provides women with the opportunity to discuss their fears and worries about parenting in a supportive environment and to then try out new discipline strategies and ways of communicating with their children. By emphasizing positive parenting the MEP seeks to help reduce children’s behavioral problems, thereby diminishing parenting stress for their mothers.

Each MEP intervention group consists of six to eight women and two trained co-leaders, or therapists, who provide support and feedback, as well as educational materials. Group therapists received intensive training in group therapy, ethics, and clinical work with at-risk populations. They are supervised weekly by a licensed clinical psychologist, where process notes, session plans and adherence to the training manual are reviewed and evaluated. The present study tests the efficacy of the MEP in reducing depression and enhancing parenting skill.

Measures

Demographic questionnaire. Sample characteristics were ascertained with questions concerning the woman’s age, ethnicity, monthly income, highest level of education, present relationship status, and whether she has ever lived in a shelter for abused women.

Intimate partner violence (IPV). IPV was assessed using the Severity of Violence against Women Scales (SVAWS; Marshall, 1992) that include items assessing women’s experiences of emotional harm (19 items), physical harm (30 items), and sexual violence (six items). The SVAWS has been used in other studies of women exposed to IPV (Levendosky, Leahy, Bogat, Davidson, & von Eye, 2006). Original SVWAS scale internal reliabilities ranged from .86 to .96 (Marshall, 1992). In the current study women were asked how many times each tactic was used in the past year. Internal reliabilities (α) were as follows: SVAWS physical harm = .86, emotional harm = .85, and sexual violence = .55.

The women were also asked to report the number of violent partner they had and how many months they lived in a violent relationship in their lifetime, whether they are currently living with an abusive partner, and if not, how much contact (days per year) they have with their last abusive partner.

Women’s depression. Symptoms of depression were evaluated using the Beck Depression Inventory (BDI; Beck, Ward, Mendelson, Mock, & Erbaugh, 1961). The BDI consists of 21 items and has been validated in studies comparing clinically depressed and nondepressed adults with strong evidence for its reliability and validity (Beck et al., 1961; Bumberger, Oliver, & McClure, 1978). For each item in the BDI, respondents select one of four statements that they feel most reflects their emotional state in the past week (scored 0 to 3). A total score consists of the sum of all responses (range: 0–63). The BDI has established clinical ranges: 0–9 = minimal depression, 10–18 = mild depression, 19–29 = moderate depression, 30–63 = severe depression. Internal consistency for the present study was high (α = .92).

Parenting. Women’s parenting was assessed using The Anxiety and Parental Child rearing Styles Scale (Sameroff, Thomas, & Barrett, 1990). This scale evaluates characteristics of parenting styles including effectiveness, warmth, child-centered parenting, democratic styles, and guilt induction. The internal reliability of scales in the original study fell between .66 and .74. This measure has been used in other studies on the role of parenting processes, for example, for preschoolers exposed to violence, for school-age children’s family stereotypes, for groups of families with and without domestic violence, and for resilience in children (Levendosky & Graham-Bermann, 1998; Graham-Bermann, Gruber, Girz, & Howell, 2009). In the current study, the subscales of parent effectiveness and parental warmth were summed to create a total positive parenting score. The parental effectiveness items measure the degree to which the parent believes it is important to control their child, to keep the child out of trouble, to influence the child to study, and to be respected by the child. The parental warmth items evaluates characteristics of the parent–child relationship such as the extent to which parents show their children that they are proud of them, whether they have fun together, and whether they are attentive to their children’s feelings. For each item, women were asked to respond using two polar choices that were then judged by the respondent to be sort of true or really true, resulting in a 4-point scale for each item with higher scores indicating more positive parenting. Internal reliability for the Positive Parenting Scale in the present study was (α = .88).

Statistical Procedures

Data were analyzed using hierarchical linear modeling (HLM6 software; Raudenbush, Bryk, Cheong, & Congdon, 2004). Following descriptive analyses, the first model fitted the two dependent variables (positive parenting, depression) using full maximum likelihood (FML). The model compared the two treatment groups (M + C and CO) with the control group in terms of change from baseline to Time 1 (posttreatment). Repeated measures of observations were nested within individuals in order to account for the correlation of measures over time for each individual. Thus, the analysis assessed the relationship of the independent variables in the model with change in a specified dependent variable from baseline to postintervention for an individual woman. The dependent variables were positive parenting and depressed mood. The model, fit using HLM was specified as follows:

Level 1: \[ Y_{it} = P_{0i} + P_{1i}(\text{Time } I_{0i}) + E_{it} \]

where \( Y_{it} \) was the value on the dependent variable for individual \( i \) at time \( t \); where \( P_{0i} \) was the intercept for individual \( i \) in the study, indicating the expected status of individual \( i \) at baseline, \( P_{1i} \) was the estimated change in the dependent variable over time and \( E_{it} \) was the within-person error of prediction for individual \( i \) at time \( t \). Time (Time \( I_{0i} \) was measured as 0 for baseline and 1 for postassessment or time point 1.

The Level 2 analysis was designed to build upon the first level by accounting for the relationship of assigned treatment conditions with individual change in the outcome variables. At the second level we specified the individual effects at Level 1 as follows:

\[ P_{0i} = \beta_{00} + \beta_{01}(\text{CM Group}) + \beta_{02}(\text{CO Group}) + R_{0i} \]
\[ P_{1i} = \beta_{10} + \beta_{11}(\text{CM Group}) + \beta_{12}(\text{CO Group}) \]

where the Level 1 effect \( P_{0i} \) was defined using the main effects of the condition assignments, which were time invariant. The random
term $R_0i$ allowed the intercept for each individual to be affected to some degree by random variation around the average intercept and was assumed to be distributed with mean zero and variance $V_o$; and where Level 1 effect $P_{1i}$ was also defined using the main effects of the condition assignments.

The second model compared the two treatment conditions only from postintervention (Time 1) to follow-up (Time 2) controlling for baseline score. The model was specified in the same manner as the first, except that time was now measured as 0 for the Time 1 postintervention assessment and 1 for the follow-up assessment. These analyses will distinguish both short-term and longer-term effects of the women’s program on the two outcomes of positive parenting and depressed mood.

A post hoc stepwise regression analyses was included to ascertain whether group and baseline depression score added variance to positive parenting post intervention.

Results

At baseline, the women in this study were exposed to acts of physical violence slightly less than once per month (see Table 1). While the reported frequency of acts of physical violence varied considerably among the sample, emotional harm was a regular part of most of the women’s lives, occurring approximately once each week. According to the women’s reports, acts of sexual violence took place approximately 35 times in the last year. The frequency of physical harm, emotional harm, and sexual violence did not differ significantly by group assignment at baseline. Women in the present study exhibited clinical range scores on the BDI with 27% having minimal depression, 37% with mild depression, 22% with moderate depression, and 15% with depression scores in the severe range.

Attendance ranged from five to 10 sessions ($M = 7.35$, $SD = 1.50$). The number of sessions did not differ significantly for those in the M + C and CO conditions, $t = .08, p = .94$, nor by women’s age, or by outcome variables at baseline. Caucasian women attended, on average, one more session than did minority women ($M = 7.69$, $SD = 1.38$, vs. $M = 6.88$, $SD = 1.57$), $t(1,117) = 2.99, p = .003$. There was an inverse relationship between the amount of violence experienced and sessions attended ($r = -.27, p = .003$). Depression and positive parenting scale mean scores for women in the C + M, CO, and Comparison groups are shown in Table 2.

HLM Results

Positive parenting changed significantly from baseline to Time 1 for the M + C group (see Table 3). There was a significant difference in change between the Comparison and M + C groups, while the CO and M + C groups did not differ in short term change on positive parenting. Effect sizes of change in positive parenting from baseline to Time 1 were Cohen’s $d = -.71$ for the Comparison group, $d = 0.73 = 0$ for the C + M group, and $d = 0.55$ for the CO group. The Comparison group grew significantly worse in parenting from baseline to Time 1, relative to the M + C and CO groups. The standardized mean difference was 1.44 between the C + M and Comparison groups’ effect sizes and 1.26 between the CO and Comparison groups’ effect sizes. Changes in positive parenting, however, were not fully sustained from Time 1 to Time 2. The C + M group experienced a significant and negative change in positive parenting from Time 1 to Time 2 follow-up as did the CO (see Tables 2 and 3). Thus, the first hypothesis, that there would be significant change in positive parenting for women in the M + C group postintervention was partially confirmed, as significant short-term change was also found for those in the CO condition, relative to comparison women.

There also was improvement in depression from baseline to posttreatment for all conditions with no statistically significant differences between any of the groups (Cohen’s $d = .35$ for the Comparison Group, $d = .52$ for C + M, and $d = .56$ for the CO group). The standardized mean difference between the C + M and Comparison group was $d = .17$ and between the CO and Comparison group was $d = .21$. From posttreatment to follow-up, there was greater improvement for the M + C’s group ($d = .77$) as compared with the CO condition ($d = .30$). Specifically, the standardized mean difference between the M + C and CO groups’ effect sizes was 1.07, suggesting much greater improvement in depression for the C + M group relative to the CO group women. The hypothesis that there would be greater short-term improvement in depression for women in the treatment condition was not confirmed but the second hypothesis of greater long-term change in depression for M + C women versus CO women was confirmed.

Post Hoc Analyses

Post hoc analyses were undertaken to test the role of depression at baseline to the relationship between treatment group and posi-

<table>
<thead>
<tr>
<th>Table 1</th>
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<tbody>
<tr>
<td>Mean Number, Range, and Frequency of Intimate Partner Violence Tactics per Year Experienced by the Woman, Positive Parenting, and Depressed Mood at Time 1</td>
</tr>
<tr>
<td>Item</td>
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<tr>
<td>Items</td>
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<tr>
<td>Intimate partner violence</td>
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<tr>
<td>SVAWS physical harm</td>
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<tr>
<td>SVAWS emotional harm</td>
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<tr>
<td>SVAWS sexual violence</td>
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<tr>
<td>Positive parenting</td>
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<tr>
<td>Depression</td>
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* Women could indicate a tactic occurred more than once per day. SVAWS = Severity of Violence Against Women Scales.
tive parenting at Time 1 (postintervention). Stepwise regression analyses tested for the contribution of group and depression to variance in positive parenting. Results indicate that depression played an additive rather than a mediating role in the relationship between group and positive parenting at Time 1 ($F = 9.283, p < .001$; Group $\beta = 1.88, p = .005$; Depression $\beta = -.227, p = .001$). Here depression had a negative impact on parenting skill at the post intervention evaluation.

### Discussion

The results for positive parenting are similar to those of other studies that report significant change as a result of intervention relative to comparison subjects, such as McDonald, Jouriles, & Skopp (2006) finding of less inconsistent and harsh parenting over time for abused mothers who participated in Project Support. Interestingly, significant change in parenting was also found in the present study for mothers who brought their child to the Kids’ Club program, regardless of whether the mother also received services (Graham-Bermann, Lynch, Banyard, DeVoe, & Halabu, 2007), perhaps the children in the CO groups exhibited changed behavior, due to the sustained positive parenting of their mothers. Conversely, perhaps the improved behavior of the child influenced the woman’s reporting of her parenting behavior. We know from other research that mothers with more positive impressions of their child are more likely to use positive parenting skills than those without such perceptions (Dayton, Levendosky, Davidson, & Bogat, 2010). Another possibility is that mothers whose children received the CO intervention may have become more aware of their own behavior and paid attention to their parenting. Alternatively, changes may have been due to the effects of attention given to the family. Still, the greatest changes in positive parenting over time were for M + C women.

Of particular note is the fact that without intervention for either the mother or the child (CG), positive parenting deteriorated significantly. Because effective parenting is also critical to reducing a host of negative effects found for children living in families with IPV, it is clearly essential that parenting be addressed (Levendosky, Leahy, Bogat, Davidson, & Von Eye, 2006; Samuelson, Kreuger, & Wilson, 2012; Westbrook & Harden, 2010). However, because the C + M group showed a significant reduction in positive parenting at the time of the follow-up evaluation, it appears that more than a 10-week intervention may be needed to achieve changes.

### Table 2

<table>
<thead>
<tr>
<th>Table 2 Means and the Significance of Differences From Baseline to Time 1 (Postintervention) and Time 1 to Follow-Up Within Three Groups on Positive Parenting and Depression</th>
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</thead>
<tbody>
<tr>
<td><strong>Child-only group</strong></td>
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<tr>
<td><strong>Baseline</strong></td>
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<tr>
<td><strong>Scale</strong></td>
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<tr>
<td><strong>Parenting</strong></td>
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<tr>
<td><strong>Depression</strong></td>
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</tbody>
</table>

**Note.** Paired t-tests assess change from Baseline to Time 1; analyses of covariance assess change from Time 1 to Time 2 holding. Baseline constant, $^*$ $p < .05$. **$p < .01$. ***$p < .001$. ES = effect size.

### Table 3

**Results of Hierarchical Linear Model Analyses of Positive Parenting and Depression Comparing Child Only and Comparison Groups to Mother + Child Group at Baseline and Posttreatment (Time 1), and Child Only and Mother + Child Groups at Follow-Up (Time 2)**

| Fixed effect | **Positive parenting** | | | | **Depression** | | | |
|--------------|-----------------------|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|
|              | $\beta$ | Standard | T-ratio | $\beta$ | Standard | T-ratio |
| For intercept, P0 | | | | | | | |
| Intercept2, $\beta00$ | 2.068 | 0.023 | 91.351*** | 2.608 | 0.112 | 23.270*** |
| CO group, $\beta01$ | -0.044 | 0.032 | -1.393 | 0.018 | 0.157 | 0.117 |
| Com group, $\beta02$ | -0.385 | 0.032 | -12.014*** | 0.207 | 0.158 | 1.307 |
| For posttreatment slope, P1 | | | | | | | |
| Intercept2, $\beta10$ | 0.136 | 0.030 | 4.517*** | -0.469 | 0.117 | -4.021*** |
| CO group, $\beta11$ | 0.017 | 0.042 | 0.396 | 0.011 | 0.163 | 0.065 |
| Com group, $\beta12$ | -0.370 | 0.044 | -8.462*** | 0.043 | 0.170 | 0.255 |
| For follow-up slope, P2 | | | | | | | |
| Intercept2, $\beta20$ | 0.033 | 0.033 | 0.981 | -0.924 | 0.130 | -7.080*** |
| CO group, $\beta21$ | 0.054 | 0.046 | 1.189 | 0.374 | 0.178 | 2.100* |

**Note.** CO group = child only group; Com group = comparison group.

* $p < .05$. *** $p < .001$. This document is copyrighted by the American Psychological Association or one of its allied publishers. This article is intended solely for the personal use of the individual user and is not to be disseminated broadly.
sustain the gains in positive and effective parenting made during the time of the intervention. Studies of sheltered women consistently report that support around parenting is wanted and needed (Perlman, Cowan, Gewirtz, Haskett, & Stokes, 2012). Further, abused women prefer services that are responsive to their diverse needs, for example, social support from peers, instrumental assistance with safety planning, parenting support, and obtaining necessary resources—all needs that go beyond addressing mental health issues alone (Letourneau et al., 2013). The MEP provides such services.

Interestingly, all of the women in the study improved in depression from baseline to the immediate posttreatment period (T1; see Table 2). Because these were not women departing from shelters, as in most other studies of intervention for abused women, perhaps participation in the study, with its promise of services for all groups (women in the CO and CG groups were offered the MEP after 10 weeks’ time) might have enhanced their outlook and lessened their depression. There was also significant improvement at follow-up for the M + C condition. Overall, M + C women’s mean depression scores at Time 2 were half of what they were at baseline.

Overall, there is evidence that the MEP was successful in reducing depression and improving parenting over time. It is important to recognize, however, that the improvements in CO groups (especially for parenting) indicate that other mechanisms in addition to actual treatment content are at play. It is also important to note that other parenting programs include elements that are designed to directly assist parents with coping with difficult emotional problems, such as depression (e.g., Triple P, Sanders, 1999; cognitive-behavioral family intervention, Sanders & McFarland, 2000). These programs have not, to date, been examined for effectiveness with families experiencing IPV, but will be valuable to include in head-to-head efficacy trials in future research. Essentially, all of these studies, including the MEP, show strong evidence for family wide intervention as the likely best practice when addressing parenting and depression.

Thus, even though all of the women showed less depression in the short run, the MEP was successful in reducing depression over time with a 10-week program for M + C women relative to those in the CO group whose depression increased. This compares with longer programs that also reduce depression for abused women, such as CBT (Iverson et al., 2011; Johnson & Zlotnick, 2006) and home-based advocacy and community support services for women (Sullivan et al., 2002). Given that major depression is commonly found among abused women (68%, Stein & Kennedy, 2001), that it is a predictor of physical assaults (Acierno et al., 1999), and that it is related to multiple deleterious outcomes for infants and children (Kendall-Tackett, 2007; Levendosky et al., 2006; Rosen et al., 2007), this is a critically important area of change. Still the majority of women in the present study did not show evidence of severe depression, as 59% fell in the mild to moderate range on depression and 27% reported only mild depression. Thus, there may have been a floor effect that limited the chances of the study’s showing greater reductions in depression.

**Limitations and Future Directions**

The sample is restricted to those women living in Michigan who were interested in taking part in an RCT, with children between the ages of 6–12, and who were willing to join an intervention program for themselves and their child. While the sample represents both Caucasian and African American women, there are few Latina and Hispanic women, and few from other minority groups. Most women were low income but, unlike many other studies of intervention for abused women, the vast majority were not departing from or residing in shelters. Still, frequent moves, the loss of housing, custody issues, and lack of consistent contact information contributed to sample attrition after random assignment. It should also be noted that, without receiving intervention, more women in the comparison group dropped out of the study.

The measures in this study relied on the self-report of the women, and as such, it is possible that the measures were subject to some reporting bias. Although it is common for women to self-report these issues, other sources of information, such as police reports of domestic violence calls, evaluations from mental health providers, behavioral assessments of parenting or documented mental health diagnoses, are important directions for future research. Still, additional sources, such as those of the children evaluating the woman’s parenting, observation of the parent–child dyad, or reports from others close to the family, would have added methodological rigor.

Ideally, research studies that include different forms of treatment for women exposed to IPV are needed, as they could yield information on the relative merits of the MEP compared with existing treatments for depression, PTSD, and parenting skills. As designed, the present study compared women with children who did and did not receive services with a group whose children received services to assess potential effects of the child’s improvement on the mother’s mental health and parenting. Further, the addition of a fourth group whereby neither the woman nor her child participated in the intervention would provide yet another source of comparison for the Moms’ Empowerment Program.

Additional controlled studies are needed that focus on factors that may contribute to or mediate program success, for example, changes in parenting and depression for the women in this study. By doing so, we can produce needed information to design better programs targeted for women with a range of problems following exposure to IPV. This would enable providers to identify the most appropriate mode of intervention for the women they serve. Still, future research could include measures of the extent to which women felt empowered by the program, had better safety planning as a result of the program, used more resources, or otherwise had resilient coping introduced or enhanced. In other words, process variables are missing, which could serve to identify the mechanisms through which the MEP program was successful.

**Clinical Implications**

Additional attention should be paid to enhancing participation, as the women and children received on average seven out of 10 sessions. One element that is related to attendance is transportation, which was not provided for the families in this study. It is especially useful to know that women exposed to more IPV attended less, as these are the women most in need of services.

While there are many programs that address the mental health needs of women who have sexually abused or traumatized, only a few programs provide the range of services that abused women may have been a floor effect that limited the chances of the study’s showing greater reductions in depression.
community based services for women exposed to IPV can be broad-ranging and can include attention to a host of the women’s needs, beyond the focus on mental health issues. However, it is not possible to improve all issues in such a short period of time. Perhaps service providers can first deliver short-term group services, such as the MEP for women exposed to IPV, and then make referral to additional special programs, hospital clinics, or other services for individual women whose mental health needs remain.

The MEP has been proven to reduce future violence exposure, reduce PTSD by 85%, and now to support positive parenting for mothers who received services (Graham-Bermann & Miller, 2013; Miller, Howell, & Graham-Bermann, 2014). As such it is an effective evidence-based and community-based program that has been implemented in many communities within the United States and is currently being evaluated in Alaska, Sweden, and Canada.

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