Despite the well-established links between couple relationship quality and healthy family functioning, and burgeoning evidence from the international intervention field, there is little or no evidence of the efficacy of couples-based interventions from the United Kingdom (U.K.). This study explored whether the Parents as Partners (PasP) program, a group-based intervention developed in the United States, brought about the same benefits in the U.K. The evaluation is based on 97 couples with children from communities with high levels of need, recruited to PasP because they are at high risk for parent and child psychopathology. Both mothers and fathers completed self-report questionnaires assessing parents’ psychological distress, parenting stress, couple relationship quality and conflict, fathers’ involvement in child care and, importantly, children’s adjustment. Multilevel modeling analysis comparing parents’ responses pre- and postintervention not only showed substantial improvements for both parents on multiple measures of couple relationship quality, but also improvements in parent and child psychopathology. Analyses also indicated most substantial benefits for couples displaying poorest functioning at baseline. The findings provide initial evidence for the successful implementation of PasP, an American-origin program, in the U.K., and add support for the concept of the couple relationship as a resource by which to strengthen families.

Keywords: Couple Relationship; Interparental Conflict; Parenting; Child Adjustment; Intervention

For decades, the British Government has invested in parenting programs as a way of enriching the developmental environment for children in families not identified as in distress, and as a way of providing remedial help for children in troubled families at high...
risk for maladaptive development (Department for Education and Skills, 2007). Although the use of the descriptor “parenting” implies that these interventions are for both mothers and fathers, in fact classes and therapy sessions are attended mostly by mothers (Panter-Brick et al., 2014). The notion of the couple relationship as a resource to strengthen families has been gaining traction in the United Kingdom (U.K.) and elsewhere, as reflected in an announcement by previous Prime Minister David Cameron to double government funding for relationship support to £70 million over the remaining period of this Conservative government (Prime Minister’s Office, 2016). The Prime Minister’s statement was followed by a government-funded report issued by the Early Intervention Foundation (Harold, Acquah, Sellers, & Chowdry, 2016), which reviewed conclusive evidence that unresolved conflict between parents is associated with less effective parenting and more negative outcomes for children and adolescents. Summarizing the existing findings, the report concludes that there is some initial evidence from international studies that interventions for parent couples in fact produce benefits for children, but no existing evidence-based programs have yet emerged in the U.K.

This paper describes an attempt to address that gap. Based on the results of successful intervention trials in California, U.S. (Cowan & Cowan, 1992; Cowan, Cowan, Ablow, Johnson, & Measelle, 2005; Cowan, Cowan, Pruett, Pruett, & Wong, 2009), the Department for Education in the U.K. funded a feasibility study of the efficacy of the Parents as Partners Program (PasP), comprising a 16-week couples curriculum modeled directly on the latest version of the U.S. intervention, Supporting Father Involvement (SFI). This report describes changes from pre- to postintervention for the first 97 couples to complete the U.K. program. The first question addressed here is not whether participants fare better than couples in a no-treatment control group, but rather whether the intervention produces the kinds of changes in U.K. participants that it did in the U.S. The second question addressed here is whether the program produces differential effects for “high” and “low” functioning couples, so categorized according to baseline scores on a number of indices of family functioning.

COUPLE RELATIONSHIPS, PARENTING, AND CHILDREN’S DEVELOPMENT

Traditionally, the target of family intervention has been promoting positive parenting practices and parent–child relationships. Harold and Leve (2012) argue that the most “substantial dividends” can be gained by targeting investment at the level of the interparental relationship because of the centrality of this relationship in the family system, the high probability of spillover from the couple relationship into mother–child and father–child relationships, and the potential for wide-reaching, short- and long-term, benefits for families. These assertions are based on a large body of international research amassed over several decades attesting to the robust association between the quality of the couple relationship and other indices of family functioning (e.g., Cummings & Davies, 2002; Fincham & Beach, 2010).

Strong, supportive, and harmonious interparental relationships have consistently been linked to children’s enhanced psychological wellbeing (Cowan & Cowan, 2002; Davies et al., 2002; Grych, Harold, & Miles, 2003) and educational attainment (Harold, Aitken, & Shelton, 2007). Mothers and fathers who are satisfied in their relationship with each other tend to establish relationships with their children that include warmth, responsiveness, limit-setting, and maturity demands (Cowan & Cowan, 1992; Faucher & Margolin, 2004; Kaczynski, Lindahl, Malik, & Laurenceau, 2006; Sturge-Apple, Davies, & Cummings, 2006), the hallmarks of authoritative parenting (Baumrind, 1971). Not only are harmonious parents more positive in their separate engagements with their children, but they are also more likely to establish a positive coparenting relationship (McHale &
Lindahl, 2011; Pruett & Pruett, 2009)—supporting rather than undermining each other’s approach to the child. Coparenting is recognized as linked to, but distinct from, other aspects of the couple relationship such as intimacy or couple-related conflict. Specifically, the coparenting relationship (between parents in intact or separated relationships) refers to “the way in which coparents work together in their role as parents” (Feinberg, 2003, p. 1499)—forming an alliance and providing support to one another in this respect, and making shared decisions about child-rearing.

Furthermore, a strong couple relationship provides a buffer against negative influences from outside the nuclear family. For example, a positive relationship between the partners disrupts the cycles of negative relationship behaviors that tend to be passed from generation to generation without any intervention (Amato & Booth, 2001; Amato & DeBoer, 2001). Similarly, strong couple relationships protect the family from the tendency for economic hardship and job loss (Masarik et al., 2016) to result in increased couple conflict, decreased parenting effectiveness, and problematic outcomes for children. These correlational studies all suggest that interventions to help strengthen couple relationships and parents’ capacity to work together could produce a healthy return on investment, due to the positioning of the interparental relationship at the fulcrum of the family system.

A COUPLES INTERVENTION FOR LOW-INCOME FAMILIES WITH EVIDENCE OF EFFECTS ON CHILDREN

Reviews of the international couples intervention literature make four important points. First, in studies of family strengthening interventions, fathers are almost always excluded, yet when fathers attend parenting interventions along with mothers, the results are significantly stronger for parenting quality and children’s outcomes (Panter-Brick et al., 2014). Second, several studies of couples group interventions show that intervention-induced changes in couple relationship quality affect positive changes in parenting. However, these studies did not provide data on whether the effects on parenting extended to the children (Cowan & Cowan, 2014). Third, two recent comprehensive surveys of the international literature searched for couples-based interventions that examine the effects of parents’ participation on how their children fare. Both supported the hypothesis that children benefit from their parents’ participation in a successful couples group intervention. None of the intervention studies picked up by the reviews took place in the U.K. (Cowan & Cowan, 2014; Harold et al., 2016).

A further point to note is that many of the these interventions are “universal” in their offer, referring to the fact that recruitment into the program is not restricted to couples with certain demographic characteristics or levels of psychological risk. These interventions are typically evaluated across the entire sample of attendees, with differences between average pre- and postintervention scores being interpreted as program effects for all, regardless of baseline characteristics. However, authors from diverse disciplines have recommended that the impact of intervention programs should be estimated according to specific subgroups of participants, defined by pretreatment characteristics (e.g., Bloom & Michalopoulos, 2013; Fournier et al., 2010; Quirk, Strokoff, Owen, France, & Bergen, 2014). An analysis of subgroups may help to clarify the intervention effects, and contribute to the discussion of “what works best for whom?”, which would be relevant for those with research, economic, and political interests. At present, very few couple intervention evaluations have examined outcomes for specific subgroups; those that have tend to be from the field of relationship education and they indicate stronger intervention effects for economically disadvantaged couples (Amato, 2014) or couples at high risk for relationship breakdown (e.g., Halford, Sanders, & Behrens, 2001).
In their research program, the Cowans began with two relatively small studies (N = 100 families in each) of couples groups for primarily working-class and middle-class mothers and fathers (i) making the transition to parenthood (Becoming a Family; Cowan & Cowan, 1992) or (ii) having a first child entering the elementary school system (Schoolchildren and their Families; Cowan et al., 2005; Cowan, Cowan, & Barry, 2011). Next, along with Marsha Kline Pruett and Kyle Pruett, the Cowans recruited larger, higher-risk samples of low-income Mexican American, African American, and European American couples in five rural and urban California counties (SFI; Cowan et al., 2009; Cowan, Cowan, Pruett, Pruett, & Gillette, 2014) that involved more than 800 families. Taken together, the three U.S. studies included three RCTs and one pre–post replication, and provide strong evidence that a couples’ group intervention could not only reduce distress between the parenting partners, but also improve parent–child relationships and reduce the risks for children’s behavior problems. These reports have been followed by an investigation by Epstein et al. (2015) into the differential impact of the SFI intervention for couples initially reporting low, medium, and high levels of conflict, which showed the greatest and most immediate intervention effects for couples with high levels of conflict at baseline.

THE PRESENT STUDY

This report describes a first exploration of the feasibility of adapting, implementing, and replicating a U.S.–designed program in a U.K. context, which is offered to families from communities with high levels of need. We report changes in couples participating in the PasP intervention on a range of indicators of family functioning that include couple relationship quality and conflict, father involvement, mothers’ and fathers’ psychological wellbeing, and children’s emotional and behavioral difficulties. In the analysis of children’s problem behaviors we set the analysis up in two ways: First, we examined changes in children’s behaviors over the course of the program differentially according to mothers’ and fathers’ reports. In this analysis we controlled for child age and gender, because we wanted to remove some of the variation in this relatively small sample while focusing on reporter effects. Second, instead of removing variation due to child gender from the analysis, we made this a focus of the analysis by examining changes over the course of the program differentially according to child gender. This is because of the overwhelming evidence that boys and girls show different levels of problem behaviors (Cummings, Davies, & Campbell, 2000). In the second analysis we still controlled for the age of the child.

The current study adds significantly to the couples’ intervention literature by going beyond an examination of average intervention effects across the sample to explore patterns of change for different groups of parents distinguished by their levels of initial distress.

METHOD

Procedures

The PasP program was located in Tavistock Relationships in central London, which is a U.K. voluntary sector clinical training, practice, and research organization that specializes in delivering couple counseling and psychotherapy. Professors Philip and Carolyn Cowan from the University of California, Berkeley, provided advice, training, support, and ongoing feedback to the program in order to preserve fidelity to the intervention model. Tavistock Relationships worked in close partnership with Family Action, a
voluntary organization with an established history of delivering family support to communities across the U.K. Couples were recruited from six London boroughs and, in the second year, from Manchester as well. These were all areas with high levels of need; five of the seven areas fall into the top 20 of 326 local authority districts in England with the highest proportion of children from families in income deprivation (people who are out of work and those who are in work but have low earnings; Department for Communities and Local Government, 2015). In each of these areas, advertisements were published in the local press and on social media, leaflets were sent through schools and community centers, and professional networks were alerted. Because the program requires joint attendance by mothers and fathers, particular attention was paid to the engagement of men, both by direct publicity (e.g., in sports clubs) and by encouraging social workers and health professionals to focus on men.

As in the U.S. Supporting Father Involvement intervention, couples eligible for the program were those with a child under 11, living together or separated. Exclusion criteria were: couples or coparents currently involved in court proceedings; couples in current, ongoing domestic violence; or couples with drug or alcohol addiction, or mental ill-health problems that made participation in a group impossible. The adults also needed sufficient facility in the English language to take part in a group conducted in English. A brief screening interview with both parents was conducted by a Family Case Worker. Of 219 couples who expressed initial interest, 142 met the inclusion criteria (see Figure 1 Flow Chart).

After attending the Initial Screening Interview, each eligible couple was offered a 2-hour interview with the Group Leaders to introduce the program and assess risk. This included an interview with the couple and individual, separate interviews with each parent. During this process of assessment, Group Leaders seek to be satisfied that both members of the couple can tolerate being in a group setting as a pair without this precipitating extreme anxiety for them, and without distressing or disrupting the group too much (Stock Whitaker, 2001). Additionally, Group Leaders may seek advice from referrers or mental health professionals who have worked with the individual parent as to whether he or she is suitable for the group. Finally, Group Leaders also take into consideration whether the couple is able to contribute to the task of the group, and not distract from it (Foulkes, 1964). A high proportion of those interviewed agreed to participate in the 16-week program and fill out the pretreatment questionnaires (73%) and almost all of those who completed the questionnaires went on to attend the group meetings. Retention was excellent. Of those who started groups, 88% completed the program and 80% completed the postintervention questionnaires. The median number of the 16 sessions attended was 14 (M 13.7 sessions, SD 2.14). Of the parents who dropped out before the end of the program, the number of sessions attended ranged from 1–6, with an average of 2.9 sessions attended (SD 1.61). There was no difference in the attendance of mothers and fathers (if parents dropped out, this tended to be as a couple). Regardless of how many sessions they attended, all participants were included in the analysis of pre- to postintervention changes (i.e., akin to an intention-to-treat analysis).

Participants

The sample described in the present paper comprises 97 couples who attended the first 18 Parents as Partners groups offered. Sixteen groups took place across six London boroughs, and two groups took place in Manchester. 89% of parents provided information with regard to their ethnicity. Of these parents, the majority were White British/Irish (43%), and a quarter (26%) described themselves as “White other.” 19% of parents were Black (African or Caribbean), 6% were from a mixed ethnic background, 4% were
Chinese, and the remaining 2% selected “Other.” 55.29% of parents were in an inter-ethnic union with their partner, higher than the 9% average for England and Wales (Office for National Statistics (ONS), 2014). Here we are using the ONS definition of an inter-ethnic relationship, which refers to people in a couple relationship who each identify with an ethnic group different from the other partner. Therefore an inter-ethnic relationship could describe a relationship in which one partner identifies as Black Caribbean and the other identifies as White British, for example, as well as relationships between partners within the same broad ethnic group categories such as White British and White Irish. Almost 98% of parents provided information with regard to their relationship status. The majority of parents were married (45.4%) or cohabiting (31.4%). Others were in a relationship and raising children together, but living apart (10.8%), and a small proportion (10.3%) had ended their romantic relationship but were raising children together. 92.3% of parents
gave information about their employment status: Most were employed full-time (39.1%) or part-time (22.9%); 15.6% were unemployed as they entered into the program; and a further 17.9% were full-time homemakers/careers. Two parents (1.1%) were retired and 6 (3.4%) were full-time students. 7.9% \((n = 13)\) parents said that they were receiving benefits, although 15.5% of parents did not provide this information so it is possible that this number is higher. Similarly, 3.1% said that they were currently receiving statutory sick pay (money paid to you by your employer if you are ill and unable to work). The participants were relatively highly educated. The majority had qualifications at least to GCSE level (94.2%; equivalent to the U.S. High School Diploma); 26.9% were educated to undergraduate level and a further 22.8% had postgraduate qualifications. The median age of mothers was 39 years, and of fathers was 40 years. At baseline the number of children in each household ranged from 1–5, with most parents having 1 (34.0%) or 2 children (39.2%). The median age of the youngest child was 5.4 years, and ranged from 6 months to 11 years.

The Parents as Partners Group Intervention

The PasP program underwent very few modifications in the process of implementing it in the U.K. The model itself was unchanged; in content, structure, and delivery, the program was identical to that of the original in the U.S. Groups of five or six couples met for 16 weekly 2-hour sessions. Crèches (child care) were provided for the children alongside each couples group. Each group was led by a male–female pair, who were both qualified social work or mental health professionals. Each couple also had an allocated Family Case Worker, who, as well as administering the pre- and postgroup questionnaires, was available to troubleshoot any difficulties in attendance, and link families with additional support services where needed. All Group Leaders were trained in the PasP model of intervention, and followed a manualized curriculum. The curriculum is organized around five domains, based on potential risks and buffers for optimal family functioning, and each session is focused on risks and protective factors in each of those domains: (1) individual mental wellbeing; (2) couple relationship qualities; (3) the quality of relationship of each parent to the child(ren); (4) the impact of intergenerational themes, the culture of each parent’s family of origin, and relationships with their in-laws; and (5) supports and stresses in the world outside the family. Of the 16 sessions, 3 were dedicated to individual issues, 5 to the couple relationship, 4 to parenting, 2 to intergenerational issues, and 1 to stresses and supports outside the family. The final session was used to tie all of the domains together.

The delivery of the model occupies a territory midway between a psychoeducational parenting group and open–ended group psychotherapy. Here open–ended refers to the first part of each of the 16 sessions, an open “check-in” for parents to bring their own questions and concerns that may have arisen since the previous session. Depending on the urgency of the issues, this “check-in” may last from 20–50 minutes of the 2-hour session, and the content is open-ended in the sense that parents can raise issues that are pertinent to their particular situation (e.g., couple, individual, parent–child issues). The sessions then go on to focus on one of the five domains using exercises, discussions, and activities in pairs and small groups. Two of the sessions (session 5 and session 11, both covering the parent–child relationship) are conducted separately for mothers and fathers; in the second hour, fathers are joined by their youngest child. The reason for splitting coparents for these sessions is to create the opportunity for smaller, more intimate groups, which can allow for deeper or freer conversation. The groups were separated according to gender for two reasons (a) so that it would facilitate the women’s staying engaged with each other while the program supported men’s involvement, at the same time that the men played...
with and talked about being fathers to their children, and (b) to enable both partners to raise issues that they were not willing or able to raise in the combined couples groups. The only changes to the program in order to adapt for U.K. delivery were in the language used in the manual and by the intervention team (cultural references to professional agencies and systems) and to the name of the program. The decision to change the name of the program from “Supporting Father Involvement” to “Parents as Partners” in part reflected the locus of the U.K. program within a couple therapy organization (TR), for whom the predominant focus is strengthening the couple relationship. However, the name change was also in recognition of the shift in prevailing patterns of gendered parental involvement in families in the U.K. It was felt that there is more public awareness of the benefits of father involvement in recent years (the U.S. program was instituted in 2002), that local authorities had already done much to promote this, and thus, speaking to the “couple” as a partner unit was more relevant.

**Measures**

Parents were asked to complete a booklet of questionnaires before starting group sessions and again within a month of the final group session. Pregroup questionnaires were administered by Caseworkers and Group Leaders at the initial interview stage (the majority were administered by Caseworkers; only the Clinical Outcomes in Routine Evaluation Outcome Measure [CORE-OM] and the Couple Communication questionnaire were administered by Group Leaders because they were also used by them as screening aids), and postgroup questionnaires were administered by Caseworkers at a visit with couples after 16th session.

**Parents’ psychological wellbeing**

*Clinical Outcomes in Routine Evaluation—Outcome Measure (CORE-OM; Evans et al., 2002)*: The CORE-OM is a widely used 34-item self-report questionnaire designed to tap into clients’ global psychological distress, including items that focus on risk to self and others. Respondents answer questions about how they have been feeling over the last week, using a 5-point scale ranging from “not at all” to “most or all of the time.” Total scores range from 0 to 40, with higher scores representing greater distress. The cut-off between clinical and nonclinical populations is a score of 10 on the CORE-OM (Connell et al., 2007). Internal consistency for this sample was excellent for both mothers and fathers (both with a Cronbach’s alpha of .93).

*Parenting Stress Index (PSI; Abidin, 1997):* The PSI is a standardized measure of stress associated with parenting. Subscale scores are obtained for Parental Distress, Parent–Child Dysfunctional Interaction, and Difficult Child, and combined to create a total score. Total scores were used in the present analysis, and can range from 0–180, with higher scores representing greater levels of stress. Scores greater than 90 indicate clinically significant levels of stress. Internal consistency in the sample was excellent (Cronbach’s alphas of .92 and .94 for mothers and fathers, respectively).

**Couple relationship quality**

*Quality of Marriage Index (QMI; Norton, 1983):* The QMI is a 6-item measure of each partner’s satisfaction with the couple relationship. Maximum scores on the QMI can reach 45, with higher scores representing greater satisfaction. Cronbach’s alphas of .93 and .92 for mothers and fathers, respectively, indicated excellent internal consistency for this measure in the current sample.

The Couple Communication Questionnaire (Cowan & Cowan, 1990a) is a 27-item measure of the amount of conflict between partners, specific areas of conflict, and the
strategies employed by the couple in dealing with conflict. We used three subscales (score range in parentheses): (a) overall frequency of conflict (0–78), (b) conflict about the children (0–12), and (c) violent problem solving (0–14), a 14-item scale measuring the combined occurrence of physical and verbal violence between partners. Within the violent problem scale are 7 behaviors referring to the respondent and the same behaviors repeated but referring to the partner (e.g., when we attempt to solve a marital problem “I push, grab or shove my partner” and “my partner pushes, grabs or shoves me”). In these items, 1 of 7 is verbal (“I yell or insult my partner”), 2 are nonverbal, nonhitting (e.g., stomping out of the room, throwing things), and 4 involve physical violence against the partner (e.g., hitting or slapping your partner). Internal consistency in this sample for the three subscales was adequate, with alphas ranging from .76–.88 for mothers and .67–.76 for fathers.

Father involvement

Who Does What? (Cowan & Cowan, 1990b): Who Does What? is an 11-item questionnaire completed by both mothers and fathers to assess fathers’ relative involvement in the care of the couple’s youngest child (e.g., feeding, laundry, responding to cries). Responses to items are on a scale of 1 (she does it all) to 9 (he does it all), with midrange scores (5) indicating that the couple shares child-rearing tasks equally. High scores represent greater involvement by fathers in each task. Mothers’ and fathers’ responses indicated good internal consistency for this measure in this sample (Cronbach’s alphas of .80 for both mothers and fathers).

Children’s emotional and behavioural difficulties

Strengths and Difficulties Questionnaire (SDQ; Goodman, 1994, 1997): Mothers and fathers completed the SDQ about their youngest child. The SDQ produces an overall assessment of the child’s psychological state; total scores are used here, which can range from 0–40, with high scores representing greater difficulties. Woerner, Becker, and Rothenberger (2004) recommend that total SDQ scores of 16 and above are in the “abnormal” range (approximately 10% of a community sample scores in the abnormal band); scores of 13–15 are in the “borderline” range (8.4% of a community sample); and scores of 0–12 are in the “normal” range (81.6% of a community sample (Woerner et al., 2004).

RESULTS

Pre- and postgroup mean scores are presented in Table 1, model coefficients in Tables 2 and 3.

Data Analysis

Data were analyzed using Hierarchical Linear Modelling (HLM; (Raudenbush & Bryk, 2002), also called multilevel modeling (Snijders & Bosker, 1999). HLM allows researchers to study the trajectory of individual change over time, and has several advantages over more traditional statistical techniques. First, and perhaps most importantly, HLM is well suited to the study of couples because it accounts for correlations in the data (between repeated measures and between data from individuals within a couple). Second, HLM does not require that all individuals provide data at every interval. Unlike more traditional statistical methods, HLM accounts for missing data provided that the data are “Missing at Random.” This feature allowed us to include in the analysis parents who had started but “dropped out” of the program (n = 24; 1 of whom still completed postgroup measures), and those who had completed the program but from whom we had not received postgroup data.
who had provided incomplete data (exact number varies from measure to measure). This makes the analysis far less susceptible to bias caused by only including data from “completers,” and is therefore more stringent.

### Table 1
Pre- and Postgroup Means and Standard Deviations for all Measures, for Mothers and Fathers

<table>
<thead>
<tr>
<th></th>
<th>Mothers</th>
<th>Fathers</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Pregroup</td>
<td>Mean</td>
</tr>
<tr>
<td>CORE-OM</td>
<td></td>
<td>12.81</td>
</tr>
<tr>
<td>Parenting Stress Index</td>
<td>89.98</td>
<td>25.08</td>
</tr>
<tr>
<td>Quality of Marriage Index</td>
<td>24.03</td>
<td>7.40</td>
</tr>
<tr>
<td>Couple Communication Questionnaire</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Couple conflict</td>
<td>33.64</td>
<td>13.61</td>
</tr>
<tr>
<td>Violent problem solving</td>
<td>3.37</td>
<td>2.28</td>
</tr>
<tr>
<td>Conflict about the kids</td>
<td>7.00</td>
<td>3.75</td>
</tr>
<tr>
<td>Who Does What?</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Father involvement</td>
<td>36.92</td>
<td>13.45</td>
</tr>
<tr>
<td>Total</td>
<td>14.69</td>
<td>7.10</td>
</tr>
</tbody>
</table>

### Table 2
Estimated Model Parameters for all Measures, Showing Effect of Parent Gender on the Intercept, Effect of Time (slope), and the Effect of Parent Gender on Slope

<table>
<thead>
<tr>
<th></th>
<th>Intercept</th>
<th>Slope</th>
<th>Parent gender × Time interaction</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>B</td>
<td>SE B</td>
<td>z</td>
</tr>
<tr>
<td>CORE-OM</td>
<td>−2.15</td>
<td>0.76</td>
<td>−2.83**</td>
</tr>
<tr>
<td>Parenting Stress Index</td>
<td>−4.29</td>
<td>2.74</td>
<td>−1.56</td>
</tr>
<tr>
<td>Quality of Marriage Index</td>
<td>1.84</td>
<td>0.76</td>
<td>2.44*</td>
</tr>
<tr>
<td>Couple Communication Questionnaire</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Couple conflict</td>
<td>−0.90</td>
<td>1.64</td>
<td>−0.55</td>
</tr>
<tr>
<td>Violent problem solving</td>
<td>−0.24</td>
<td>0.24</td>
<td>−1.01</td>
</tr>
<tr>
<td>Conflict about the kids</td>
<td>−1.55</td>
<td>0.37</td>
<td>−4.23***</td>
</tr>
<tr>
<td>Who Does What?</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Father involvement</td>
<td>7.66</td>
<td>1.23</td>
<td>6.23***</td>
</tr>
<tr>
<td>Total</td>
<td>−1.79</td>
<td>0.69</td>
<td>−2.60**</td>
</tr>
</tbody>
</table>

* p < .05, ** p < .01, *** p < .001.
We used a three-level model, with repeated measures (pre–post), individuals, and the couple unit as the three levels. Individuals’ data were fitted with an intercept, which indicates their initial score on a given measure, and a slope, which indicates their rate of change over time on that measure. Data were represented at the individual level by random effects for the intercept, and by random effects for both the intercept and the slope at the couple level as recommended by Atkins (2005). For each measure we examine parents’ scores at pre- and postintervention on each measure, and test for differences between the amount of change reported by mothers and fathers by including an interaction term between Gender and Time in the model. The statistics relevant to this interaction are noted in Table 2, but we describe only statistically significant differences between males and females in the text below. Following these tests, we then examine differences in the amount of change reported by parents according to their baseline severity on each measure, comparing trajectories of parents with initially “high” and “low” distress. We chose to examine the effect of gender and level of impairment separately so as to directly examine the influence of each independently of the other. Effect sizes are calculated by dividing the coefficient for the main effect of Time by the square root of the combined between–couple, between–individual, and residual variance (Taylor, 2014).

### Analysis of Missing Data

Missing data analyses were carried out in order to test the assumption that data are Missing at Random (MAR). Of the eight baseline questionnaires, logistic regression analyses suggested that only CORE-OM scores predicted missingness, \( (B = -0.08, \text{Wald } \chi^2(1) = -2.88, p < .01) \) such that individuals with higher levels of psychological distress at baseline were less likely to complete postgroup questionnaires. However, an odds ratio so close to 1 (exp(B) = .92, 95% CI [0.87–0.97]) suggests that baseline CORE-OM scores may have little substantive bearing on the odds of postgroup questionnaire completion (all

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**Table 3**

<table>
<thead>
<tr>
<th>Measure</th>
<th>Intercept Mean</th>
<th>Intercept SE</th>
<th>Intercept z</th>
<th>Slope Mean</th>
<th>Slope SE</th>
<th>Slope z</th>
<th>Interaction Mean</th>
<th>Interaction SE</th>
<th>Interaction z</th>
</tr>
</thead>
<tbody>
<tr>
<td>CORE-OM</td>
<td>9.60</td>
<td>0.61</td>
<td>15.62***</td>
<td>-2.12</td>
<td>0.49</td>
<td>-4.34***</td>
<td>-5.36</td>
<td>0.82</td>
<td>-6.53***</td>
</tr>
<tr>
<td>Parenting Stress Index</td>
<td>36.19</td>
<td>2.19</td>
<td>16.53***</td>
<td>-4.94</td>
<td>1.62</td>
<td>-3.05**</td>
<td>-10.85</td>
<td>2.80</td>
<td>-3.88***</td>
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<td>Quality of Marriage Index</td>
<td>-11.20</td>
<td>0.74</td>
<td>-15.18***</td>
<td>3.05</td>
<td>0.78</td>
<td>3.93***</td>
<td>6.07</td>
<td>1.20</td>
<td>5.07***</td>
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<tr>
<td>Couple Communication Questionnaire</td>
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<tr>
<td>Couple conflict</td>
<td>20.62</td>
<td>1.34</td>
<td>15.36***</td>
<td>-6.42</td>
<td>1.63</td>
<td>-3.95***</td>
<td>-13.56</td>
<td>2.53</td>
<td>-5.37***</td>
</tr>
<tr>
<td>Violent problem solving</td>
<td>3.48</td>
<td>0.21</td>
<td>16.64***</td>
<td>-2.05</td>
<td>0.18</td>
<td>-11.61***</td>
<td>-2.49</td>
<td>0.30</td>
<td>-8.24***</td>
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<tr>
<td>Conflict about the kids</td>
<td>5.86</td>
<td>0.31</td>
<td>18.80***</td>
<td>-1.22</td>
<td>0.32</td>
<td>-3.79***</td>
<td>-3.86</td>
<td>0.52</td>
<td>-7.36***</td>
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<tr>
<td>Who Does What?</td>
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<tr>
<td>Father involvement</td>
<td>20.93</td>
<td>1.38</td>
<td>15.20***</td>
<td>0.58</td>
<td>0.98</td>
<td>.55</td>
<td>-10.97</td>
<td>1.83</td>
<td>-6.00***</td>
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<td>Strengths and Difficulties Questionnaire</td>
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<tr>
<td>Total</td>
<td>10.51</td>
<td>0.70</td>
<td>15.00***</td>
<td>-2.13</td>
<td>0.66</td>
<td>-3.23***</td>
<td>-4.93</td>
<td>1.08</td>
<td>-4.58***</td>
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**p < .01; ***p < .001.**
other factors being equal). Of the demographic variables, only relationship status predicted missingness ($X^2 (3, N = 190) = 15.9, p < .01$), with couples who were separated at baseline being less likely to complete postgroup questionnaires. However, with only 10 separated couples in the sample, statistical power to detect differences was low. Analysis with and without individuals with missing follow-up data revealed no differences in the pattern of results, or in the estimates. Thus, we decided to proceed as if the data were MAR, but the results reported below should be considered with this in mind.

**Pre- to Postintervention Changes**

We found significant pre–post improvement in 7 of the 8 measures (all but the Who Does What?) and a consistent tendency for those at higher levels of stress or distress on entering the study to show more positive changes than those with relatively little distress.

**Parents’ psychological wellbeing**

Following the end of group sessions, parents reported a significant decrease in general psychological distress as measured by the CORE-OM, $B = -2.37, SE = 0.49, z = -4.82, p < .001$, 95% CI $[-3.34$ to $-1.41], d = -0.40$. In order to determine whether parents in higher or lower levels of distress improved most, we categorized participants using the recommended questionnaire cut-off of 10 (out of 40; Connell et al., 2007). Whereas parents in the nonclinical range reported no change in their level of psychological distress, parents in the clinical range reported a significant reduction after attending the group sessions ($B = -4.80, SE = 0.62, z = -7.70, p < .001$, 95% CI $[-6.03$ to $-3.58]$). Of the parents reporting clinical levels of distress at baseline, 50.6% were no longer within this range at the end of the program.

Parents also reported a significant decrease in the amount of stress experienced associated with parenting (PSI), $B = -4.43, SE = 1.61, z = -2.75, p < .01$, 95% CI $[-7.58$ to $-1.28], d = -0.20$. Mothers reported a significantly larger reduction in parenting stress than fathers, $B = 5.33, SE = 2.59, z = 2.06, p < .05$, 95% CI $[0.26$–$10.40]$. Mothers and fathers experiencing “clinical” ($n = 84$) and “nonclinical” ($n = 104$) levels of stress associated with parenting were distinguished using the recommended questionnaire cut-off of a score 90 (Abidin, 1995). Parents’ initial level of parenting stress had a significant effect on the slope, $B = 10.85, SE = 1.10, z = 87.79, p < .001$, 95% CI $[87.62$–$91.92]$. While parents in the nonclinical range maintained a stable (low) level of stress associated with parenting, those in the clinical range reported a highly significant reduction in this regard, $B = -10.36, SE = 2.28, z = -4.54, p < .001$, 95% CI $[-14.84$ to $-5.89]$. Of the parents reporting clinical levels of parenting stress at baseline, 34.4% were no longer within this range at the end of the program.

**Parents’ relationship quality**

Overall relationship satisfaction (QMI). HLM analyses indicated that both parents reported significant improvement in the quality of their relationship with their coparent after having attended the PasP program, $B = 2.94, SE = 0.76, z = 3.85, p < .001$, 95% CI $[1.44$–$4.43], d = .41$. Because mothers’ and fathers’ baseline QMI scores were significantly different ($B = 1.84, SE = 0.76, z = 2.44, p < .05$), cut-off scores were established separately for mothers and fathers (medians of 23.0 and 27.0, respectively). Parents scoring above this cut-off were categorized as being in a high quality relationship and those below the cut-off in a “poor” quality couple relationship for the analysis. There was a significant effect of initial relationship quality on the gradient of the slope (a significant interaction term), $B = 6.07, SE = 1.20, z = 5.07, p < .001$, 95% CI $[3.72$–$8.42]$. While parents who began the program in high quality relationships reported no significant change in this
Parents reported a significant reduction in the amount of couple conflict, from before to after having attended the program, \( B = -6.73, \ SE = 1.63, z = -4.14, p < .001, 95\% \ CI [-9.92 \text{ to } -3.54], d = -.52 \). Mothers and fathers changed differently over the course of the program as indicated by the significant effect of parent gender on the slope (interaction effect), \( B = -6.67, SE = 2.20, z = 3.02, p < .001, 95\% \ CI [2.34 \text{ to } 10.99] \), with mothers reporting a greater reduction in couple conflict than fathers. Baseline CCQ conflict scores were statistically equivalent for mothers and fathers, and therefore the overall sample median was used to establish the cut-off to distinguish individuals’ reporting high and low couple conflict (a CCQ conflict score of 33.0). Whereas initially “low” conflict parents experienced a stable (low) level of conflict between the beginning and end of the program \( (B = 0.36, SE = 2.12, z = .17, p = .87, 95\% \ CI [-3.79 \text{ to } 4.50]) \), initially “high” conflict parents reported a significant reduction in the level of couple conflict, \( B = -13.20, SE = 2.00, z = -6.60, p < .001, 95\% \ CI [-17.12 \text{ to } -9.28] \).

Conflict about the children

Parents’ amount of conflict about matters to do with raising their children also declined between pre- and postprogram measurements, \( B = -1.30, SE = 0.35, z = -3.72, p < .001, 95\% \ CI [-1.98 \text{ to } -0.62], d = -.38 \). There was not only a significant effect of parent gender on the gradient of the slope, \( B = 1.76, SE = 0.47, z = 3.76, p < .001, 95\% \ CI [0.84 \text{ to } 2.68] \), but also on the intercept, which indicated that mothers reported higher levels of disagreement about child-rearing than fathers at baseline, \( B = -1.55, SE = 0.37, z = -4.23, p < .001, 95\% \ CI [-2.27 \text{ to } -0.83] \). The reduction in couple conflict about the children was statistically significant only for mothers, \( B = -2.18, SE = 0.42, z = -5.20, p < .001, 95\% \ CI [-3.00 \text{ to } -1.36] \). The analysis also indicated a significantly different effect of the program on initially “high” and “low” conflict parents, \( B = -3.86, SE = 0.52, z = -7.36, p < .001, 95\% \ CI [-4.89 \text{ to } -2.83] \). Whereas low conflict parents sustained this low level, high conflict parents reported significant reductions in conflict about child-rearing \( (B = -3.16, SE = 0.42, z = -7.52, p < .001, 95\% \ CI [-3.98 \text{ to } -2.33]) \).

Violent problem solving

After attending the program, both parents experienced similar, significant reductions in “violent problem solving” \( (B = -1.82, SE = 0.23, z = -8.36, p < .001, 95\% \ CI [-2.25 \text{ to } -1.39], d = -.93) \), also a subscale of the CCQ. There was a differential impact of the program on parents’ use of violent problem solving for initially “high” and “low” violent problem solving parents, \( B = 2.24, SE = 0.31, z = 7.26, p < .001, 95\% \ CI [1.64 \text{ to } 2.85] \). Parents with initially “high” and “low” levels of conflict about their children were distinguished using median scores for mothers and fathers \((8/12 \text{ and } 6/12, \text{ respectively}) \) on this subscale of the CCQ. Although parents with both “high” and “low” scores on violent problem solving reported a significant reduction in this respect, the reduction was greater for parents with initially “high” violent problem solving scores.

Father involvement

On average, both parents reported little change with regard to father involvement after having attended the 16 group sessions. However, there was a significant difference in the responses to the program with respect to father involvement (FI) between parents who described initially “high” and “low” levels of FI \( (B = -10.97, SE = 1.83, z = -6.00, p < .001, 95\% \ CI [-13.54 \text{ to } -4.44], d = -3.86) \).
p < .001, 95% CI [−14.56 to −7.39], with a significant increase in father involvement for “low” FI parents only (B = 6.22, SE = 1.52, z = 4.09, p < .001, 95% CI [3.24–9.20]).

Children’s psychological wellbeing

Children’s age (grand mean centered) was included as a control variable in the analysis of SDQ data. Both mothers and fathers reported a reduction in their youngest child’s overall emotional and behavioral problems (total SDQ score), B = −1.36, SE = 0.61, z = −2.23, p < .05, 95% CI [−2.54 to −0.17], d = −.22. There was no significant effect of child gender on either the intercept or the slope (B = 1.33, SE = 1.25, z = 1.07, p = .29, 95% CI [−1.11 to 3.77]), indicating that (i) there was little difference between the total SDQ scores of boys and girls prior to their parents attending the program and (ii) both showed a similar degree of improvement. Children experiencing emotional and behavioral difficulties beyond that expected in the general population were distinguished using the cut-off values recommended by Woerner et al. (2004). That is, children’s preintervention level of difficulty was converted into a binary variable by combining children rated “normal” and “borderline” into one group (n = 98), and children in the “abnormal” range into another group (n = 45). There was a significant effect of children’s initial level of problems on the amount of change reported by parents over the course of group sessions (B = −4.93, SE = 1.08, z = −4.58, p < .001, 95% CI [−7.05 to −2.82]). Whereas the behavior of children with normal or borderline levels of emotional or behavioral difficulties remained stable according to their parents, children with an initially “high” (abnormal) level of difficulty were described as showing significant improvement, (B = −4.93, SE = 1.08, z = −4.58, p < .001, 95% CI [−7.05 to −2.82]). Of the parents describing an “abnormal” level of difficulty in their children at baseline, 47.4% now reported normal/borderline difficulties after attending group sessions.

DISCUSSION

We examined the implementation of the U.S. Supporting Father Involvement (SFI) intervention in the U.K., where it is known as Parents as Partners (PasP). This intervention represents one of very few interventions, especially in the U.K., that addresses family-wide issues by targeting the couple relationship, and is unique in its integration of issues in the couple relationship, parenting, and the psychological wellbeing of parents and children.

The results reported here indicated successful implementation of PasP in several important ways. Both mothers and fathers were attracted to participate in the intervention. They came to group meetings (most attended frequently) and participated in the follow-up assessments. Their responses to the follow-up questionnaires administered about one month after the groups ended showed positive changes in their psychological well-being (global psychological distress and parenting stress), multiple measures of couple relationship quality (satisfaction, overall conflict, conflict about children, violent problem solving), father involvement (for those initially less involved), and their children’s problematic behaviors. This pattern of results repeats those found in the randomized control trial (RCT) assessing the impact of the Supporting Father Involvement (SFI) intervention in the U.S., from which PasP has been adapted (Cowan et al., 2009). It was noteworthy that participants in the U.K. groups showed a statistically significant increase in couple relationship satisfaction, where previous U.S. trials showed no change in couple relationship satisfaction, compared with control participants whose satisfaction declined over time. Importantly, in the American study (Cowan et al., 2009), control group parents reported little benefit on them as individuals, declining satisfaction as partners, and increases in their children’s problem behaviors. In the absence of a control group in the
current evaluation, this consistency between the positive changes reported by parents before and after attending PasP groups and those found in the RCT evaluation of the SFI intervention is encouraging.

The analyses consistently indicated the greatest intervention effects for those in most need on entering the program, that is, those who had described low levels of functioning on each measure of individual and family functioning. Importantly, parents already describing relatively high functioning in a given domain at baseline were able to sustain that level and showed no signs of deterioration over the 16 weeks. For some, this begs the question of inviting highly distressed couples after a screening process. Before introducing such a screening criterion, it would be necessary to first compare the outcomes of a heterogeneous group to a group containing only highly distressed couples. Based on the experiences of the group leaders of both the U.S. and U.K. groups, we would speculate that there is great value in including couples at all points along a continuum of distress in the same group and that this particular feature of the program is one of the reasons why the highly distressed couples benefit from the group. While the program may serve to cement the existing skills of high functioning couples (relatively speaking) and bolster protective factors in advance of future challenges, these couples may also act as effective models for lower functioning couples. That said, even couples with initially low levels of violent problem solving strategies reported a significant reduction following the group sessions. This is an important finding given the evidence showing that any degree of interparental violence in the family environment is particularly harmful for children (Wolfe, Crooks, Lee, McIntyre-Smith, & Jaffe, 2003). With respect to fathers’ engagement in their children’s care, whereas there was no aggregate level improvement, when analyzed according to baseline levels of father involvement we found that parents reporting low levels of father involvement before entering the group reported men’s greater involvement after the groups ended.

Limitations

There are a number of limitations inherent in this evaluation. First, it lacked a matched control group who did not receive any intervention. The funding received for the PasP program was earmarked for the successful adaptation, delivery, and implementation of the U.S. intervention in the U.K., not for a full-scale RCT. Thus, we cannot attribute the positive pre–post group changes to parents’ program attendance with certainty. However, the uniformity between results produced by the current evaluation and those produced by the RCT in the U.S. allows a degree of confidence in the intervention impact. Second, self-report questionnaires were used to measure each domain of family functioning in this evaluation and this inevitably excludes the valuable objectivity of observational measures or questionnaires completed by independent raters such as children’s teachers.

Third, the analysis examining the influence of baseline functioning on intervention effects is problematic in some ways: (a) we took the decision to look into “high” and “low” function on each measure individually, measure by measure. This may make clinical interpretation of the results difficult since parents may be high functioning on one measure yet low functioning on another; (b) the impact of baseline impairment on program outcomes is difficult to approximate for some measures because of the way in which “high” and “low” functioning individuals were identified. For some measures, this threshold was set according to the sample median scores, which is in essence a type of data manipulation, and; (c) statistically speaking, this analysis is also problematic because splitting the sample in this way creates extreme groups, and with that comes increased possibility of regression towards the mean (heightened especially for those measures without a predefined clinical cut-off score). That is, there is always the chance that the results of these
analyses could be an artifact of the tendency of people who obtain extreme scores at either end of a questionnaire scale to obtain scores that are closer to the average scores at subsequent measurement.

Finally, these results can only speak to the immediate benefit of having attended the PasP program because they are based on a comparison of data collected prior to the first group session and follow-up data collected within one month of program completion. Although it is not possible at this stage to speak to the program’s ability to bring about sustained benefits for families, a second round of follow-up data collection is underway, measuring the same aspects of family wellbeing six months after group completion. Also underway is an exploration into the range of couples for whom the program can be beneficial. We are conducting pilot trials with adoptive couples, separated couples, and same-sex couples, but systematic data need to be gathered and analyzed before drawing conclusions concerning the breadth of application of PasP.

CONCLUSIONS

The limitations that we have enumerated are all expectable in the early stages of exploring the efficacy of an intervention developed in one country for the population of another. What we have learned so far is that it has been possible to mount the Parents as Partner program successfully in England, based on SFI developed in the U.S., with a great deal of program fidelity, and with very little change in curriculum from its U.S. predecessor.

The results reported here are promising. After attending Parents as Partners groups parents reported improvement on almost every index of family functioning assessed, including parents’ and children’s psychological adjustment, results which are consistent with the extensive testing of the same intervention model in three randomized control trials in the U.S (Cowan & Cowan, 2000; Cowan et al., 2005, 2009, 2011, 2014; Schulz, Cowan, & Cowan, 2006). The findings not only provide initial evidence for the successful implementation of the PasP program in the U.K., but they also constitute support for approaching the task of promoting parents’, children’s, and family wellbeing by strengthening the inter-parental couple relationship as well as the parent–child relationships. This evaluation of the PasP program adds to mounting evidence for the innoculative effect of strong couple relationships for families and children.

REFERENCES


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