

# Enhancing Father Engagement and Interparental Teamwork in an Evidence-Based Parenting Intervention: A Randomized-Controlled Trial of Outcomes and Processes

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This study examined the outcomes and process in a positive parenting program adapted to enhance father engagement and teamwork. A randomized control trial of the Group Triple P Program with additional father-relevant content was conducted with 42 families of children with conduct problems aged between 3 to 8 years. Families were allocated to either the intervention or waitlist condition. Assessments of child behavior, self- and partner-reported parenting, and the interparental relationship were conducted at T1 (pre), T2 (post), and T3 (6-month follow-up). Observations were used to examine fathers' and mothers' unique and shared contributions to group process during participation in parenting group sessions.

Following program completion (T2) intervention group fathers and mothers reported significantly fewer child behavior problems, dysfunctional parenting practices, and interparental conflict about child-rearing than waitlist parents. Intervention group mothers also reported increased parenting confidence and rated their partners as showing significantly fewer dysfunctional parenting practices. Intervention effects were maintained at 6-month follow-up. Observational data showed that fathers and mothers made similar contributions during the

group sessions. The most frequent types of contributions were asking questions and sharing information with other parents about implementing parenting strategies. The key differences between parents were fathers' more frequent use of humor and mothers' more frequent sharing of personal stories and reporting co-parenting cooperation. The levels of session attendance and program satisfaction were high for both fathers and mothers. Findings highlight the potential benefits of efforts to engage both fathers and mothers for program adherence, satisfaction, and effectiveness.

*Keywords:* randomized-controlled trial; conduct problems; behavioral family intervention; father; mother

THERE IS EXTENSIVE EVIDENCE that parenting interventions based on social learning principles improve conduct problems and family risk factors associated with disruptive behavior in children (Dretzke et al., 2009; Sanders, Kirby, Tellegen, & Day, 2014). Fathers are much less likely than mothers to participate in interventions, yet current research suggests the possibility that increased father involvement in Behavioral Family Interventions (BFIs) is likely to be highly beneficial for young children with conduct problems (Lundahl, Tollefson, Risser, & Lovejoy, 2008).

Findings from a small number of studies suggest that improvements in child behavior are more likely to be maintained over time when both parents take part in the program (Bagner & Eyberg, 2003;

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Webster-Stratton, 1985). One reason for these findings is that as both parents get the same message about child behavior management strategies they may be able to support and help each other, leading to greater interparental consistency and lower conflict (Bagner & Eyberg, 2003; Webster-Stratton). Parenting strategies are more likely to be effective when both parents agree on one approach (Arnold, O'Leary, & Edwards, 1997) and implement it consistently (Frick, Christian, & Wootton, 1999). Furthermore, children's positive adjustment has been associated with high-quality co-parenting behaviors, such as teamwork and support for the other parent, lack of conflict over child-rearing, and agreement on child-related topics (Teubert & Pinquart, 2010).

While there is some evidence that BFIs targeted solely at fathers are effective for improving child behavior and fathers' parenting immediately after an intervention, program effects may not generalize to the nontreated mother (Fabiano et al., 2012). Furthermore, many men are unwilling to attend father-only groups (Russell et al., 1999). These results support the need to include both parents in a BFI where possible, to increase the likelihood that intervention effects will maintain for both parents. Other potential benefits of fathers and mothers taking part together include strengthening the partner relationship, increasing father engagement with their children, and reducing interparental conflict (Cowan, Cowan, Pruett, Pruett, & Wong, 2009). This may be especially important for fathers given the strong correlation between marital quality and positive parenting for fathers (Krishnakumar & Buehler, 2000).

However, barriers to father participation in BFIs have been identified, including aspects of the program content and delivery (Fabiano, 2007). One method that program developers have used to ensure the quality and ecological fit of interventions is to obtain parent input in order to help refine existing programs to meet the needs of specific parent groups (Sanders & Kirby, 2011). A consumer preference approach to the refinement and tailoring of an evidence-based program can increase the engagement of key target groups. It also helps to develop guidance that allows practitioners to flexibly deliver evidence-based parenting programs to specific target groups (Mazucchelli & Sanders, 2010). In this study, father preference data (Frank, Keown, Dittman, & Sanders, 2015) were used to adapt an existing widely used parenting program, Group Triple P, to encourage father engagement and promote teamwork between parents. In particular, content was added to increase the relevance of examples for fathers and to encourage participation in program sessions by both parents.

This study also addresses limitations of previous research where there has been some father involvement in BFIs for young children (Sanders et al., 2014). This was achieved through including both parents in all aspects of the data collection process, having equivalent numbers of mothers and fathers in the sample, and data analysis that is gender-disaggregated (for a review see Panter-Brick et al., 2014). These methodological improvements should enable a better understanding of the effectiveness of the intervention for fathers separately from mothers. Furthermore, this study addresses another key research limitation that has possible implications for teamwork between parents: including both fathers and mothers in all aspects of screening. Most parenting interventions do not appear to involve fathers in the initial recruitment interviews. Selection for inclusion in programs is based largely on mothers' reports of child behavior (Connell, Sanders, & Markie-Dadds, 1997; Sanders et al., 2000) or it is not specified whether screening data were collected from both parents (Webster-Stratton, 1992). Father engagement and motivation to participate, their willingness to learn and implement the strategies and to support their partner, seems more likely to occur if fathers as well as mothers view their child's behavior as problematic.

There is little, if any, observational data about within-session behavior of fathers, per se, and of fathers and mothers when both parents are participating in a BFI for child conduct problems. Several studies have shown that parental engagement and quality of participation during sessions predict program outcomes (Garvey et al., 2006; Nix et al., 2009). However, these studies measured participant engagement using practitioner ratings that were totalled across several indicators, making it unclear which aspects of participation were important for intervention response. In contrast, recorded observations of group sessions have the advantage of being available for later coding of specific participant behaviors. Recordings also capture any changes in rates or types of participation as sessions progress, as well as allow comparisons between mothers' and fathers' contributions. In relation to this last point, some research has suggested that fathers may inhibit conversation among mothers and facilitators (MacLeod, 2008), while other research indicates that some professionals perceive that men may be less willing to talk if their partner is also in the group (Berlyn, Wise, & Soriano, 2008).

The main aim of this study was to evaluate the effectiveness of the Group Triple P Program that had additional father-relevant content, for fathers and mothers of children with early-onset conduct problems. A second aim of the study was to explore

the nature of fathers' and mothers' differential contributions to the group process during participation in parenting group sessions using observational coding. Specifically, the types and frequency of observed contributions made by fathers and mothers in a group setting were investigated. We had a particular interest in examining the extent to which co-parenting behaviors were evident during the parenting group sessions. Relationships between parental contributions and parenting and child behavior outcomes were also explored.

It was hypothesized that compared to parents in the control group, both mothers and fathers receiving Group Triple P would report at postintervention: (a) lower levels of child problem behavior; (b) decreased use of dysfunctional parenting practices and greater parenting confidence; and (c) improvements in the interparental relationship (increased relationship satisfaction and decreased conflict). The maintenance of the short-term effects at 6-month follow up was also examined for these child and parenting variables. No hypotheses are proposed about fathers' and mothers' differential contributions to the group process given the exploratory nature of this observational work. A methodological strength of this study was the inclusion of partner-reported parenting practices, to help minimize self-report bias.

## Method

### PARTICIPANTS

Participants in the randomized-controlled trial were 42 mothers and 42 fathers recruited from the Auckland (New Zealand) urban area, with a child aged 3 to 8 years. The majority (93%) were the child's biological father (age  $M = 39.87$ ,  $SD = 5.95$  years) and mother (age  $M = 37.82$ ,  $SD = 5.29$  years), with the remainder comprised of step-families ( $n = 2$ ) or adoptive parents ( $n = 1$ ). The children were 69% male ( $n = 29$ ) with a mean age of 5.55 years ( $SD = 1.89$ ) and were predominantly of New Zealand European descent (81%), with smaller numbers from Maori or Pacific Island (9.5%), and Asian (9.5%) ethnic origins. The majority of families had a moderate (NZ\$50 – 100,000) ( $n = 21$ ) to high (>NZ\$100,000) ( $n = 15$ ) household income. All parents had a post-high school qualification, such as a technical or trade qualification or a university degree. Parents responded to advertisements displayed in community locations including local newspapers, early childhood centers, schools, and parenting websites. Participants signed informed consent and all procedures were approved by the University of Auckland's Ethics Committee.

Both parents took part in separate screening interviews to assess eligibility for the study using a

brief 15-item version of the Eyberg Child Behavior Inventory (ECBI; Metzler, Sanders, Rusby, & Crowley, 2012). This ECBI screener correlates highly with the original ECBI ( $r = .94$ ) and possesses good internal consistency ( $\alpha = .91$ ). To be eligible to participate in the study, parents' reports of child behavior needed to be above the clinical cutoff (a score of 55 and over) for at least one parent and no more than one standard deviation below the cutoff (a score of 45 and over) for the other parent. Parents were also both required to be involved in raising their child but they did not need to be cohabiting. Families were excluded if both parents could not commit to the requirements of the study ( $n = 26$ ); their child had a developmental disability ( $n = 2$ ); parents were currently seeing a professional for the child's behavior difficulties ( $n = 1$ ) or their own psychological needs ( $n = 1$ ). Families were also excluded if child behavior was below the cutoff score ( $n = 6$ ) or the child was outside the age range ( $n = 4$ ).

Twenty-three families were randomly assigned to the intervention group and 19 to the waitlist control group, using a random number generator and blind third-party allocator. Figure 1 shows the Consort Flow diagram of families involved in the trial. There were no significant differences between the two groups at pre-intervention on any demographic variables as indicated by a series of chi-square and *t*-test analyses, suggesting that the randomization was successful. Fathers and mothers from 16 families, who were participants from five of the nine groups in the randomized-controlled trial, were randomly selected to provide data for the second part of this study, which compared fathers' and mothers' contributions in group sessions.

### MEASURES

All measures were completed by both parents at three time points, except the family background questionnaire (T1 only) and the program satisfaction questionnaire (T2 only). Analyses of the internal consistency of each child and parent behavior measure and each of the interparental relationship measures were calculated at baseline and the Cronbach alpha coefficients are shown in Tables 1 and 2. The internal consistency results for the program satisfaction questionnaire are reported in the text below as this measure is not included in the tables.

#### *Demographics*

The Family Background Questionnaire consists of demographic data and information on family composition (Turner, Markie-Dadds, & Sanders, 2000).

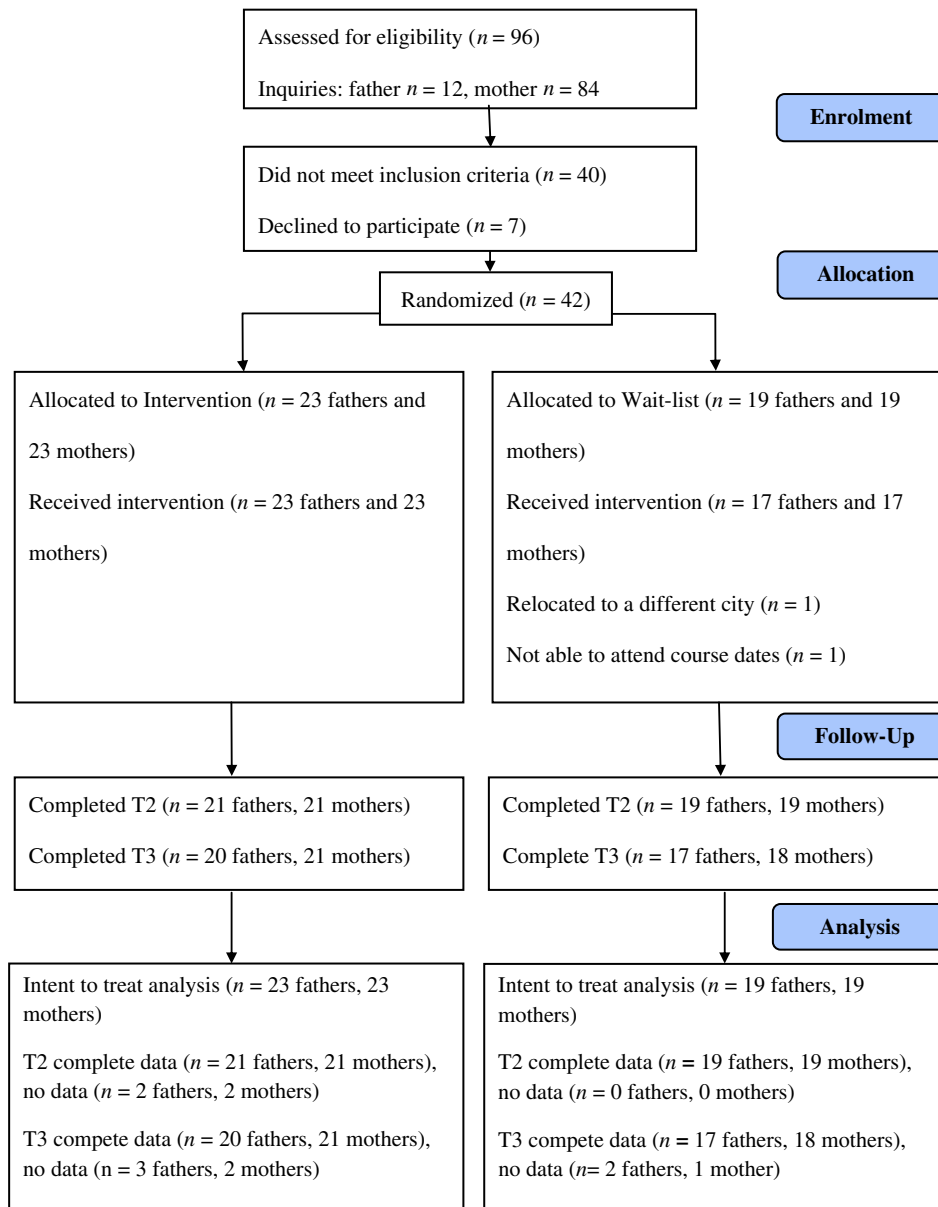


FIGURE 1 Participant flow through the study.

### Child Behavior

The Eyberg Child Behavior Inventory (ECBI) is a 36-item multidimensional measure of parental perceptions of disruptive behavior in children aged 2 to 16 years (Eyberg & Pincus, 1999). It incorporates a measure of the intensity of disruptive behaviors (Intensity score) rated on 7-point scales (1 = *never* to 7 = *always*) and a measure of the number of disruptive behaviors that are a problem for parents (Problem score). Scores on the intensity scale range from 36 to 252 and on the problem scale from 0 to 36, with higher scores indicating greater difficulties.

### Parent Behavior

The Parenting Scale (PS) is a 30-item measure of dysfunctional discipline parenting practices (Arnold, O'Leary, Wolff, & Acker, 1993). Each item contains a less effective and a more effective anchor, and parents rate on a 7-point scale the extent to which each end is typical of their disciplinary response. Higher scores indicate the use of more dysfunctional parenting practices. Scores can be summed to yield a total score and three subscale scores: Laxness (total possible score = 77), Overreactivity (total possible score = 70), and Verbosity (total possible score = 49).

The Authoritative Parenting Style (APS) is a 22-item subscale from the Parenting Styles and Dimensions Questionnaire (Robinson, Mandleco, Olsen & Hart, 2001). Parents rate their behavior on a 5-point scale (1 = *never* to 5 = *always* for each item), with higher scores indicating a more authoritative parenting style (Robinson et al., 2001).

The Parenting Task Checklist (PTC) is a 28-item measure used to assess how confident parents feel in managing specific child behaviors and in different settings (Sanders & Woolley, 2005). Parents are instructed to rate their level of confidence for each item on a scale from 0 (*certain I can't do it*) to 100 (*certain I can do it*). Two subscale scores, behavioral self-efficacy (e.g., refuses to do as told, constantly seeks attention) and setting self-efficacy (e.g., traveling in the car, speaking with another adult), are derived by averaging parents' responses on the 14 items on each subscale. The possible range of scores on each subscale is 0 to 100, with higher scores indicating greater parenting confidence.

#### *Interparental Relationship*

The Parent Problem Checklist (PPC) is a 16-item questionnaire measuring interparental conflict over child-rearing (Dadds & Powell, 1991). It provides an index of the number of disagreements, as well as the frequency of occurrence of such disagreements, rated on a 7-point scale (1 = *not at all* to 7 = *very much*). Scores range from 0 to 16 on the total problem scale and from 16 to 112 on the extent scale, with higher scores indicating a greater level of interparental disagreement.

The Relationship Quality Index (RQI) consists of six items measuring relationship quality and satisfaction (Norton, 1983). Five items, rated on a 7-point scale (1 = *very strongly disagree* to 7 = *very strongly agree*), assess various aspects of marital relationships and one global item, rated on a 10-point scale, assesses the happiness of the relationship (Heyman, Sayers, & Bellack, 1994). Scores range from 6 to 45, with higher scores indicating greater relationship quality.

#### *Program Satisfaction*

The Client Satisfaction Questionnaire (CSQ) is a 13-item measure adapted from the Therapy Attitude Inventory (TAI) developed by Eyberg (1993) to measure consumer satisfaction with parent training programs. Each item is rated on a 7-point scale with higher scores reflecting more satisfaction with the program. Scores range from 13 to 91. Reliability for this sample was high for both fathers ( $\alpha = .94$ ) and mothers ( $\alpha = .95$ ).

#### *Observational Coding*

A total of 25 two-hour sessions were transcribed and analyzed using an inductive approach as

outlined in Thomas (2006). The transcripts were read multiple times by the first coder and an initial coding was completed in order to identify themes. The second coder was then given a list and description of the themes along with the raw transcripts and asked to assign the participant comments to the themes. The two coded transcripts were then compared for the number of statements that were coded into the same category by each coder. The interrater reliability was 93% agreement. The transcripts were coded into themes based on the types of iterations (distinct statements) parents made during sessions. Twelve themes were coded from the transcripts and theme descriptions and examples are provided in Table 4. Two of the themes, cooperation and conflict co-parenting, were based on a co-parenting model by Margolin, Gordis, and John (2001). Cooperation refers to parents communicating, supporting, and respecting (not undermining or putting the other parent down) each other as parents. Conflict refers to parental arguments over child-rearing and criticizing or undermining the other parent.

#### PROCEDURE

The intervention group received the program approximately 3 weeks after completing T1 measures. Time two (T2) measures were completed within 2 weeks following the 8-week program, and time three (T3) measures 6 months later. Both intervention and control group participants completed measures at the same time, with the control group receiving the intervention following the completion of T3 measures.

#### THE INTERVENTION

The intervention utilized level-four Group Triple P, which is a broad focus parenting program centered around parent-child interactions and the application of positive parenting strategies to manage difficult child behavior (Sanders, 2012). The program runs over 8 consecutive weeks and includes five 2-hour group sessions and three 30-minute individual telephone sessions.

Based on father preference data collected by Frank et al. (2015), new content was incorporated into the program to maximize fathers' engagement and teamwork between parents. Additional topics included explaining the benefits of father and mother involvement for children's development, strategies for managing father-identified parenting challenges (e.g., balancing work and family, co-parenting cooperation, a range of ways to show physical affection, enhancing children's self-esteem), and father-identified areas of interest (e.g., enhancing children's social skills and competence). These adaptations were made with the full support of program

developers, and in order to maintain the fidelity of Group Triple P, no content was omitted to allow room for the new material. In some instances, existing examples and exercises were replaced with new material to provide father-specific or co-parenting illustrations of parent techniques.

Parenting strategies were taught through live and video-modeling, and practiced using group discussions and role-playing exercises. The three telephone consultations were provided with a practitioner to give parents support and feedback while they implemented the strategies at home and both parents participated together in these phone sessions by speaker phone or two handsets. A total of nine groups (with between 8 to 12 parents per group) were conducted by facilitators trained and accredited in level-four Group Triple P. Group sessions were recorded and the fidelity monitoring process showed a high level of adherence to the program content (97% as rated by another trained practitioner).

## Results

### STATISTICAL ANALYSIS

A series of ANCOVAs were used to examine differences between the intervention and control conditions at post-intervention using the pre-intervention scores on each measure as covariates. ANCOVAs were also used to analyze the between-condition effects at 6-month follow-up using the pre-intervention scores as covariates. Effect sizes were standardized differences, calculated by subtracting the pre- to post-intervention change in the control group from the pre- to post-intervention change in the intervention group and dividing this total by the pooled pre-intervention *SD* (Carlson & Schmidt, 1999; Morris, 2008), and reported as Cohen's *d*. This approach allows a comparison of change over time across the groups from pre- to post-intervention, which increases the precision on estimates of treatment effects and can statistically account for pre-intervention differences between groups (Morris, 2008). Pre- to follow-up effect sizes were also calculated to examine change over time for each outcome measure for each of the conditions separately. Cohen's *d* was derived by dividing the difference in mean pre to follow-up scores by the pooled pre- and post-intervention standard deviation (Cohen, 1992).

For the observational data, the number of times each participant used a specific type of statement during a session was totalled and mean scores were created, based on the number of sessions each participant attended, for both total iterations and each type of statement that was made. Mann-Whitney *U* tests were used to compare the mean number

of iterations made by fathers and mothers during the group sessions for each of the themes.

### PRELIMINARY ANALYSES

There were no significant differences at T1, confirming that the randomization process produced two groups that were similar on outcome measures prior to intervention.

### ATTRITION

Two fathers and 2 mothers did not complete T2 measures. Out of the original 84 parents, 3 mothers and 5 fathers did not complete assessments at 6-month follow-up. There were no significant differences between those that completed the measures and those that did not for demographic or dependent variables at pre-intervention.

### INTERVENTION EFFECTS: PRE- TO POST-INTERVENTION

The mean and standard deviations of all the outcome variables are summarized in Tables 1 and 2. Following program completion intervention group fathers reported significantly fewer and less severe child behavior problems than control fathers. Medium to large effects were obtained on the ECBI problem  $F(1, 38) = 21.85, p < .001, d = 1.76$ , and intensity  $F(1, 38) = 5.19, p = 0.029, d = 0.60$ , scales. The intervention group mothers also reported significantly fewer child behavior problems than control group mothers, on the ECBI problem score  $F(1, 38) = 11.64, p = .002$ . There were large effect sizes for both the problem ( $d = 1.29$ ) and intensity scales ( $d = 1.01$ ).

The ANCOVA results for self-rated negative parenting showed medium to large effects for the difference between intervention and control group PS total scores for fathers  $F(1, 39) = 6.37, p = .015, d = 0.50$ , and for mothers  $F(1, 39) = 14.78, p < .001, d = 1.29$ . According to their partners, intervention group fathers were also using significantly less negative parenting practices than comparison group fathers at post-intervention  $F(1, 39) = 10.77, p = .002, d = .61$ . There were no significant differences between the intervention and control group for paternal ratings of mothers' parenting on the Parenting Scale or for father and mother self-rated and partner-rated authoritative parenting practices.

Results of the analyses show that intervention group mothers reported significantly higher levels of parenting confidence than control mothers, with large effect sizes obtained for parenting confidence on the PTC behavior,  $F(1, 38) = 13.22, p < .001, d = 1.04$ , and setting  $F(1, 38) = 10.07, p = .003, d = 0.80$ , scores. For interparental conflict over child rearing, the intervention group mothers reported

Table 1  
Intervention Effects at T2 and T3 for Fathers

Measure	$\alpha$	Intervention			Control			<i>Post-intervention</i>		<i>Follow-up</i>		<i>T1-T3 time effect</i>	
		Pre	Post	6-Month	Pre	Post	6-Month	<i>treatment effect</i>		<i>treatment effect</i>		<i>I</i>	<i>C</i>
		<i>M (SD)</i>	<i>M (SD)</i>	<i>M (SD)</i>	<i>M (SD)</i>	<i>M (SD)</i>	<i>M (SD)</i>	<i>P</i>	<i>d (CI)</i>	<i>P</i>	<i>d (CI)</i>	<i>d (CI)</i>	<i>d (CI)</i>
<b>ECBI</b>													
Intensity	0.85	147.70 (22.69)	122.80 (24.83)	121.46 (27.76)	146.68 (23.09)	135.84 (18.33)	141.75 (23.45)	0.029	0.60 (-0.01-1.21)	0.003	0.91 (0.29-1.54)	1.04 (0.40-1.67)	0.21 (-0.44-0.87)
Problem	0.89	18.91 (8.64)	7.34 (6.10)	8.75 (6.85)	17.11 (6.70)	19.58 (11.29)	16.46 (7.56)	<0.001	1.76 (1.06-2.46)	0.001	1.19 (0.55-1.84)	1.30 (0.65-1.96)	0.09 (-0.56-0.74)
<b>S-R APS</b>	0.88	3.57 (0.51)	3.77 (0.60)	3.62 (0.46)	3.47 (0.70)	3.68 (0.48)	3.50 (0.50)	0.111	-0.02 (-0.61-0.58)	0.457	0.03 (-0.56-0.63)	0.10 (-0.49-0.69)	0.05 (-0.60-0.70)
<b>P-R APS</b>	0.93	3.26 (0.72)	3.41 (0.62)	3.30 (0.64)	3.13 (0.59)	3.22 (0.65)	3.29 (0.63)	0.053	0.09 (-0.51-0.69)	0.589	0.18 (-0.77-0.42)	0.06 (-0.53-0.65)	0.26 (-0.39-0.92)
<b>S-R PS</b>	0.78	3.35 (0.65)	2.71 (0.63)	2.74 (0.87)	3.37 (0.60)	3.05 (0.62)	3.16 (0.63)	0.015	0.50 (-0.11-1.11)	0.006	0.62 (0.01-1.24)	0.79 (0.18-1.41)	0.34 (-0.32-1.00)
<b>P-R PS</b>	0.82	3.55 (0.70)	3.02 (0.91)	3.15 (0.94)	3.73 (0.67)	3.63 (0.65)	3.69 (0.56)	0.002	0.61 (0.00-1.22)	0.015	0.51 (-0.09-1.12)	0.48 (-0.12-1.08)	0.06 (-0.59-0.72)
<b>PTC</b>													
Setting	0.94	81.74 (14.62)	89.46 (7.05)	89.18 (7.69)	81.79 (12.95)	85.74 (12.04)	83.77 (13.92)	0.14	0.27 (-0.33-0.87)	0.063	0.39 (-0.22-0.99)	0.64 (0.03-1.24)	0.15 (-0.51-0.80)
Behavior	0.96	75.71 (15.93)	86.89 (9.02)	85.15 (10.77)	66.77 (20.35)	77.32 (16.13)	74.84 (17.4)	0.088	0.03 (-0.56-0.64)	0.093	0.07 (-0.52-0.67)	0.69 (0.08-1.30)	0.43 (-0.23-1.09)
<b>PPC</b>													
Total	0.87	7.57 (5.03)	3.26 (3.38)	5.43 (5.26)	7.05 (4.08)	5.75 (6.90)	5.71 (3.20)	0.044	0.64 (0.03-1.25)	0.626	0.17 (-0.43-0.77)	0.42 (-0.18-1.01)	0.37 (-0.29-1.02)
Extent	0.92	38.35 (18.41)	34.86 (22.24)	33.29 (14.25)	39.58 (16.54)	31.68 (13.68)	35.75 (13.47)	0.917	-0.25 (-0.84-0.35)	0.517	0.07 (-0.53-0.66)	0.31 (-0.29-0.90)	0.25 (-0.40-0.91)
<b>RQI</b>	0.93	32.7 (8.32)	33.87 (7.37)	32.14 (7.65)	34.05 (5.08)	34.26 (8.05)	35.25 (6.12)	0.73	0.13 (-0.46-0.73)	0.196	-0.24 (-0.84-0.35)	-0.07 (-0.66-0.52)	0.21 (-0.44-0.87)

ECBI = Eyberg Child Behavior Inventory, S-R APS = Self rated Authoritative Parenting Scale, P-R APS = Partner rated Authoritative parenting scale, PS = Parenting Scale, PTC = Parent Task Checklist, PPC = Parent Problem Checklist, RQI = Relationship Quality Index, I = intervention, C = control.

Table 2  
Intervention Effects at T2 and T3 for Mothers

Measure	$\alpha$	Intervention			Control			<i>Post-intervention treatment effect</i>		<i>Follow-up treatment effect</i>		<i>T1-T3 time effect</i>	
		Pre	Post	6-Month	Pre	Post	6-Month	<i>p</i>	<i>d (CI)</i>	<i>p</i>	<i>d (CI)</i>	<i>I</i>	<i>C</i>
		<i>M (SD)</i>	<i>M (SD)</i>	<i>M (SD)</i>	<i>M (SD)</i>	<i>M (SD)</i>	<i>M (SD)</i>					<i>d (CI)</i>	<i>d (CI)</i>
<b>ECBI</b>													
Intensity	0.88	160.70 (24.38)	127.09 (35.63)	128.80 (33.3)	150.42 (26.53)	142.96 (25.35)	143.08 (26.90)	0.056	1.01 (0.38-1.64)	0.004	0.95 (0.32-1.58)	1.09 (0.46-1.73)	0.27 (-0.38-0.93)
Problem	0.79	20.01 (6.12)	10.21 (6.42)	12.03 (8.15)	18.26 (5.60)	16.22 (6.37)	15.19 (5.48)	0.002	1.29 (0.64-1.95)	0.174	0.82 (0.20-1.44)	1.11 (0.47-1.74)	0.55 (-0.11-1.22)
<b>S-R APS</b>	0.88	3.50 (0.52)	3.77 (0.51)	3.77 (0.57)	3.65 (0.44)	3.68 (0.43)	3.70 (0.46)	0.317	0.49 (-0.12-1.09)	0.238	0.44 (-0.16-1.05)	0.49 (-0.10-1.10)	0.11 (-0.76-0.54)
<b>P-R APS</b>	0.91	3.61 (0.66)	3.23 (0.70)	3.32 (0.64)	3.74 (0.56)	3.17 (0.62)	3.26 (0.63)	0.573	0.30 (-0.30-0.90)	0.443	0.30 (-0.30-0.90)	-0.45 (-1.04-0.15)	-0.81 (-1.48-0.12)
<b>S-R PS</b>	0.75	3.35 (0.50)	2.62 (0.67)	2.7 (0.62)	3.28 (0.47)	3.19 (0.44)	3.16 (0.51)	<0.001	1.29 (0.64-1.94)	<0.001	1.07 (0.43-1.71)	1.15 (0.51-1.79)	0.24 (-0.41-0.90)
<b>P-R PS</b>	0.89	3.61 (0.58)	2.96 (0.84)	3.15 (0.87)	3.47 (0.84)	3.71 (0.67)	3.69 (0.63)	0.259	1.23 (0.58-1.88)	0.693	0.94 (0.31-1.57)	0.62 (0.02-1.23)	-0.30 (-0.95-0.36)
<b>PTC</b>													
Setting	0.89	81.47 (9.66)	90.38 (6.46)	89.58 (6.72)	82.18 (12.12)	82.30 (11.95)	85.31 (11.62)	0.003	0.80 (0.18-1.41)	0.018	0.45 (-0.15-1.05)	0.97 (0.35-1.60)	0.26 (-0.39-0.92)
Behavior	0.96	65.40 (19.01)	86.10 (12.17)	84.73 (10.61)	70.33 (18.51)	71.06 (20.93)	76.29 (17.10)	<0.001	1.04 (0.41-1.68)	0.007	0.70 (0.08-1.31)	1.26 (0.61-1.90)	0.33 (-0.32-0.99)
<b>PPC</b>													
Total	0.83	6.52 (4.14)	3.53 (3.40)	4.23 (3.34)	7.05 (4.08)	5.52 (4.40)	5.85 (4.61)	0.098	0.35 (-0.25-0.95)	0.134	0.26 (-0.34-0.86)	0.61 (0.00-1.21)	0.28 (-0.38-0.93)
Extent	0.93	44.13 (20.49)	28.53 (13.02)	30.96 (9.38)	46.68 (23.97)	37.21 (20.63)	43.33 (23.71)	0.035	0.27 (-0.33-0.87)	0.006	0.44 (-0.17-1.04)	0.83 (0.21-1.44)	0.14 (-0.51-0.79)
<b>RQI</b>	0.95	33.43 (8.75)	34.03 (7.36)	32.92 (9.45)	33.18 (6.80)	34.37 (7.86)	32.91 (8.96)	0.587	-0.07 (-0.67-0.52)	0.616	-0.03 (-0.63-0.57)	-0.06 (-0.65-0.54)	-0.03 (-0.69-0.62)

ECBI = Eyberg Child Behavior Inventory, S-R APS = Self rated Authoritative Parenting Scale, P-R APS = Partner rated Authoritative parenting scale, PS = Parenting Scale, PTC = Parent Task Checklist, PPC = Parent Problem Checklist, RQI = Relationship Quality Index, I = intervention, C = control.



significantly less frequent disagreements than control group mothers,  $F(1, 38) = 4.75, p = .035, d = 0.27$ , immediately following the intervention. Intervention group fathers reported significantly fewer child-rearing conflicts with medium effect sizes obtained for the difference between the intervention and control groups,  $F(1, 38) = 4.47, p = .044, d = 0.64$ . There were no significant differences between the intervention and control groups for fathers' parenting confidence and paternal and maternal ratings of the interparental relationship.

#### INTERVENTION EFFECTS AT 6-MONTH FOLLOW-UP

Results of the analyses show that the significant differences between intervention and control group for father reports of decreases in disruptive child behavior and self-reported negative parenting practices were maintained at follow-up. Significant differences between the intervention and control group were also maintained for partner reports of decreases in negative paternal parenting practices.

For mothers, significant differences between the intervention and control groups were maintained at 6-month follow-up for self-reported decreases in dysfunctional parenting practices and interparental conflict about child-rearing, and increases in parenting efficacy. Mothers' reports for child behavior showed significant differences between conditions for the extent scale (intensity of problems),  $F(1, 38) = 9.71, p = .004, d = 0.95$ , at follow-up (in contrast to the post-intervention difference in the total number of problems).

Across time (from pre-intervention to 6-month follow-up), when within-group changes were examined, medium to large effect sizes were found on child behavior and parenting variables for both fathers and mothers in the intervention condition. Large effect sizes were obtained for father- and mother-reported decreases in disruptive child behavior on the ECBI intensity (father  $d = 1.04$ , mother  $d = 1.09$ ) and problem (father  $d = 1.30$ , mother  $d = 1.11$ ) scales. Large effects were also obtained for mothers' reports of decreases in dysfunctional parenting practices ( $d = 1.15$ ) and increases in parenting efficacy for both setting ( $d = 0.97$ ) and behavior ( $d = 1.26$ ). The effect sizes for decreases in fathers' dysfunctional parenting practices ( $d = 0.79$ ) and increases in parenting efficacy for both setting ( $d = 0.64$ ) and behavior ( $d = 0.69$ ) were medium. For mothers, effect sizes for the decreases in the extent of interparental conflict ( $d = 0.83$ ) were large, and medium for decreases in interparental conflict on the total ( $d = 0.61$ ) scores and for partner-rated parenting practices ( $d = 0.62$ ). With the exception of mother-reported decreases in disruptive child behavior on the ECBI problem scale ( $d = 0.55$ ) and

increases in maternal authoritative parenting practices (partner rated;  $d = -0.81$ ), pre to follow-up effect sizes for all other outcome measures in the waitlist group were small or negligible.

#### RELIABLE AND CLINICALLY SIGNIFICANT CHANGE FOLLOWING INTERVENTION

Evaluations of reliable and clinical change were conducted for parent-reported child behavior and dysfunctional parenting. Reliable change was calculated using methods outlined by Jacobson and Truax (1991), to determine how many participants reliably improved on each measure. Reliable change indicates that participants experienced a degree of change greater than that which could be accounted for due to measurement error. Reliable change was calculated using the formula where the reliability of change is the standard error of measurement of a difference ( $SE_{diff} = SD1 \sqrt{2} \sqrt{1 - r}$ ) with  $SD1$  being the pre-intervention scores and  $r$  the reliability of the measure. Change which exceeds 1.96 times this standard error is unlikely to be due to chance, which indicates that it is statistically reliable. The standard clinical cutoff scores for the ECBI and PS were used to determine clinical change (i.e., if the participant moved from the clinical range at pre-intervention to the nonclinical range at post-intervention).

As illustrated in Table 3, a greater proportion of fathers and mothers in the intervention group compared with fathers and mothers in the control group experienced reliable improvement and clinical improvement. Chi-square analyses show significant differences between the intervention and control groups for both mothers' and fathers' reliable change. A significantly greater number of fathers in the intervention group demonstrated reliable change compared with the control group for child behavior on both the ECBI intensity,  $\chi^2(1, 42) = 4.27, p = .039$ , and problem scales,  $\chi^2(1, 42) = 14.09, p < .001$ , as well as mother-reported parenting,  $\chi^2(1, 42) = 5.02, p = .025$ . Intervention group mothers also showed significantly higher rates of reliable change compared with the control group for child behavior on both the intensity,  $\chi^2(1, 42) = 10.38, p = .001$ , and problem scales,  $\chi^2(1, 42) = 11.33, p = .001$ , as well as self-reported,  $\chi^2(1, 42) = 5.02, p = .025$ , and father-reported parenting,  $\chi^2(1, 42) = 4.40, p = .036$ . A significantly greater number of fathers in the intervention group rated their partner as demonstrating clinical change in parenting practices compared with control group fathers,  $\chi^2(1, 42) = 13.84, p < .001$ . Intervention group mothers also reported their partners as demonstrating clinical change in parenting practices compared with the control group,  $\chi^2(1, 42) = 7.79, p = .005$ .

Table 3  
Reliable and Clinical Change for Intervention (I) and Control (C) Group Fathers and Mothers at Post-Intervention and Follow-up

Outcome measure	Reliable change % (n)											
	Father				Mother				Couple			
	T2		T3		T2		T3		T2		T3	
	I	C	I	C	I	C	I	C	I	C	I	C
ECBI Intensity	56.5%	21.1%	52.2%	10.5%	60.9%	21.1%	52.2%	15.8%	34.8%	0%	39.1%	5.3%
	(13/23)	(4/19)	(12/23)	(2/19)	(14/23)	(4/19)	(12/23)	(3/19)	(8/23)	(0/19)	(9/23)	(1/19)
ECBI Problem	73.9%	15.8%	65.2%	31.6%	73.9%	26.3%	52.2%	10.5%	56.5%	5.3%	26.1%	0%
	(17/23)	(3/19)	(15/23)	(6/19)	(17/23)	(5/19)	(12/23)	(2/19)	(13/23)	(1/19)	(6/23)	(0/19)
Self-rated Parenting Scale	43.5%	21.1%	21.7%	10.5%	60.9%	31.6%	52.2%	5.26%	34.8%	0%	21.7%	0%
	(10/23)	(4/19)	(5/23)	(2/19)	(14/23)	(6/19)	(12/23)	(1/19)	(8/23)	(0/19)	(5/23)	(0/19)
Partner-rated Parenting Scale	56.5%	31.6%	43.5%	10.5%	39.1%	10.5%	13.0%	10.5%	26.1%	5.3%	8.7%	0%
	(13/23)	(6/19)	(10/23)	(2/19)	(9/23)	(2/19)	(3/23)	(2/19)	(6/23)	(1/19)	(2/23)	(0/19)
	Clinical change % (n)											
	Father				Mother				Couple			
	T2		T3		T2		T3		T2		T3	
	I	C	I	C	I	C	I	C	I	C	I	C
ECBI Intensity	55.6%	23.1%	61.1%	7.7%	50.0%	31.3%	55%	18.8%	35.3%	0%	35.3%	27.3%
	(10/18)	(3/13)	(11/18)	(1/13)	(10/20)	(5/16)	(11/20)	(3/16)	(6/17)	(0/11)	(6/17)	(3/11)
ECBI Problem	85.7%	7.1%	92.9%	23.1%	83.3%	33.3%	27.8%	8.3%	71.4%	0%	21.4%	12.5%
	(12/14)	(1/14)	(13/14)	(3/14)	(15/18)	(4/12)	(5/18)	(1/12)	(10/14)	(0/8)	(3/14)	(1/8)
Self-rated Parenting Scale	72.7%	9.1%	81.8%	9.1%	78.6%	33.3%	71.4%	22.2%	44.4%	25.0%	55.6%	12.5%
	(8/11)	(1/11)	(9/11)	(1/11)	(11/14)	(3/9)	(10/14)	(2/9)	(4/9)	(2/8)	(5/9)	(1/8)
Partner-rated Parenting Scale	31.3%	7.1%	37.5%	21.4%	43.8%	30.0%	43.8%	20.0%	23.1%	0%	7.7%	0%
	(5/16)	(1/14)	(6/16)	(3/14)	(7/16)	(3/10)	(7/16)	(2/10)	(3/13)	(0/9)	(1/13)	(0/9)

At 6-month follow-up a significantly greater number of intervention fathers reported reliable change compared with control group fathers for both their own,  $\chi^2(1, 42) = 11.63, p = .001$ , and their partners',  $\chi^2(1, 42) = 11.63, p = .001$ , parenting practices. A significantly greater number of intervention group mothers also reported reliable change compared with control group mothers for both their own,  $\chi^2(1, 42) = 4.71, p = .030$ , and their partners',  $\chi^2(1, 42) = 6.15, p = .013$ , parenting practices. Chi-square analyses showed a significantly greater number of fathers in the intervention group rated themselves,  $\chi^2(1, 42) = 6.15, p = .013$ , and their partner,  $\chi^2(1, 42) = 16.24, p < .001$ , as demonstrating clinical change in parenting practices compared with control group fathers. Intervention group mothers also reported their partners as demonstrating clinical change in parenting practices compared with the control group,  $\chi^2(1, 42) = 9.61, p = .002$ . A significantly greater number of intervention group mothers compared with control group mothers reported clinical change for child behavior on both the intensity,  $\chi^2(1, 42) = 4.71, p = .030$ , and problem scales,  $\chi^2(1, 42) = 9.61, p = .002$ .

To further investigate the extent to which fathers and mothers within the same family agreed on the level of change that had occurred with their child's and their own behavior, the data were also examined at a couple level. Table 3 shows the number of families where both the father and mother reported reliable or clinical change when rating the same child. Analyses showed that a third of father and mother pairs in the intervention group reported clinical and reliable change on the ECBI intensity scale for their child. Additionally, half of the couples in the intervention group both reported reliable change for their child on the ECBI problem scale, with over 70% moving from the clinical to nonclinical range. Conversely, no control group families had both parents report clinical and reliable change in their child's behavior. In regards to parenting, fathers and mothers from four families in the intervention group both rated their own parenting as both reliably and clinically improved, compared with no families in the control group. Fathers and mothers from two intervention families also rated their partners' parenting to have both clinically and reliably improved, compared with no families in the control group.

#### INTERVENTION GROUP FATHER AND MOTHER COMPARISONS

Paired *t*-tests were used to examine the extent to which intervention group mothers' and fathers' reports of parenting and child behavior differed from pre- to post-intervention. At T1 mothers reported significantly higher frequencies of child behavior problems than fathers on the ECBI intensity scale,  $t(1,22) = 2.15, p = .043, d = 0.55$ , but there was no significant difference between mothers' and fathers' ratings following the intervention. Intervention mothers' and fathers' parenting confidence scores on the PTC behavior scale also moved closer together from T1 to T2, with fathers' scores significantly higher than mothers' scores,  $t(1, 22) = 2.10, p = .047, d = 0.58$  at T1, but not at T2.

#### SATISFACTION AND PROGRAM ATTENDANCE

There were no significant differences between father and mother attendance rates or satisfaction ratings. Program attendance was high for both fathers and mothers, with 89% attending at least six of the eight sessions. There was no significant difference in the number of sessions attended by fathers ( $M = 7.148, SD = 1.33$ ) and mothers ( $M = 6.95, SD = 1.64$ ). The main reasons for nonattendance were illness and being out of the country. Program satisfaction was also high for fathers and mothers, with the highest possible overall satisfaction score of 91 (father  $M = 75.12, SD = 10.11$ ; mother  $M = 75.81, SD = 11.2$ ).

#### THEMES OF PARENTS' CONTRIBUTIONS

Twelve themes emerged during the coding of the group transcripts, which are illustrated in Table 4. The frequency of each theme was similar for fathers and mothers, with communication between parents within the group being the most frequent type of iteration. Sharing personal stories and responding to the facilitator's questions were the next most frequent themes used by both fathers and mothers. Statistically significant gender differences were found for the use of some themes. During the group sessions fathers used significantly more humor than mothers ( $Z = -2.05, p = .041$ ) when contributing to the group discussion, sharing personal stories, or responding to the facilitators' questions during learning exercises. Mothers in the group sessions shared significantly more personal stories than fathers ( $Z = -2.20, p = .028$ ) and also reported more co-parenting behavior ( $Z = -2.27, p = .023$ ). Fathers and mothers did not differ significantly in the frequency of their reported use of parenting strategies or in asking for strategies to be clarified. However, twice as many mothers (9) as

fathers (4) across the 16 families asked questions about using quiet time and time-out.

For both fathers and mothers the themes that came up the least during the group sessions were co-parenting conflict, co-parenting cooperation, and reflecting on the impact of their own behavior. Overall, 11 mothers and 7 fathers made at least one comment about co-parenting cooperation with their partner. In 7 of the 16 families, both the father and mother commented positively about co-parenting. Similar patterns were not seen for conflict statements. Although reports of co-parenting conflict and cooperation were relatively low, fathers reported significantly less conflict during the final two sessions than the first two sessions ( $Z = -2.00, p = .046$ ) and both mothers ( $Z = -2.51, p = .012$ ) and fathers ( $Z = -2.23, p = .026$ ) reported significantly more cooperation during the final two sessions than the first two sessions.

Spearman's correlations showed that mothers' reports of greater reductions in interparental conflict on the PPC from pre-intervention to 6-month follow-up were related to both mothers' ( $r = .63, p = .029$ ) and fathers' ( $r = .86, p < .001$ ) reports of co-parenting cooperation during the group sessions. Mothers who reported more co-parenting cooperation during the group sessions were also more likely to rate fathers as showing reductions in dysfunctional parenting practices from pre- to post-intervention ( $r = .62, p = .011$ ), and also at the 6-month follow-up ( $r = .60, p = .013$ ).

To investigate changes in parent session contributions as the program progressed, the total number of iterations made by participants during sessions one and two was also compared with the total number of iterations made during sessions three and four. When comparing the mean number of iterations, there was no significant difference between mothers ( $M = 24.75, SD = 14.74$ ) and fathers ( $M = 19.88, SD = 13.58$ ) in the number of contributions made across the five group sessions. Both mothers ( $Z = -3.297, p = .001$ ) and fathers ( $Z = -2.970, p = .002$ ) contributed significantly more during sessions three and four than in sessions one and two.

#### Discussion

This study examined the effectiveness of the Group Triple P Program that incorporated additional father-relevant content for fathers and mothers of children aged 3 to 8 years with elevated levels of conduct problems. As hypothesized, there were significant short-term intervention effects on father- and mother-reported child behavior, interparental conflict about child-rearing, dysfunctional parenting practices, and mothers' parenting confidence.

Table 4  
Themes of Contributions From Fathers and Mothers During the Program

Theme	Description	Example	Iterations mothers	Iterations fathers
Question or comment to other parent	General conversation within the group or asking another parent a question	What are you doing for your behavior chart?	645	482
Personal stories	Sharing anecdotes about their child or family and stories about implementing parenting strategies	We took them for dinner, they got five stamps (each for following the rules and behaving well) and ice-cream	462	335
Contributing to exercise	Offering a response to the activities from the Triple P workbook	What are some rules we could use at dinnertime? Stay in your seat, use inside voices, eat with a spoon and fork	289	224
General question or comment to facilitator	Questions or comments about the program structure, child development, or parenting	Is there any rule of thumb about what you should expect developmentally at what age?	171	131
Use of humour	Making a humorous comment to the group or in response to an exercise	Parent 1 - What would you do if your child keeps climbing out the window? Parent 2 – Plant a cactus	63	149
Use of parenting strategies	Reported use of strategies at home	I yelled from the kitchen and got no response so I went into the room and asked them again and it worked	77	55
Clarification of strategy	Asking a question to clarify how to implement a specific strategy	So if they are screaming do you just ignore it and when does the time start?	54	33
Impact of own behavior	Commenting on the impact their behavior has on their child	I have realized I have high standards that aren't achievable for the kids	44	43
Advice to other parent	Giving childrearing advice to another parent in the group	I go to the \$2 shop to get rewards, maybe that would work for your kids.	44	28
Resistance comment	Negative comment about strategies effectiveness/ease of use	I have been told to get down to my child's level, that doesn't work, and consequences don't work	34	40
Cooperation	Reported communication and supporting each other in the implementation of strategies	We have been talking a lot more, good things come from talking	28	18
Conflict	Parental arguments over childrearing and criticising or undermining the other parent	He was using this strategy but there was no follow through	7	11

Improvements in father-reported parenting practices were also corroborated by maternal ratings of their partner's parenting. The significant short-term effects were maintained at 6-month follow-up.

Greater proportions of fathers and mothers in the intervention group, including parents from the same family, achieved reliable and clinically important change on child behavior outcomes and dysfunctional parenting. Furthermore, the effect sizes obtained for fathers in this study for improvements in child behavior problems and negative parenting practices were medium to large compared with the small to medium effects obtained in previous studies involving fathers in the Triple P Parenting Program (Sanders et al., 2014). However, the larger effects may partly be due to the high-risk sample used in this study and the inclusion of fathers in the screening process. Another possible reason for these findings could be the involvement of fathers in all aspects of the intervention. In connection with this last point, it is noteworthy that the level of session attendance and program satisfaction was high for both fathers and mothers. It is possible that high attendance was achieved by having both parents attend together so that each was accountable to the other. Efforts to increase teamwork, such as joint telephone sessions and tailoring the content for fathers and mothers, may have influenced program satisfaction. However, additional studies are needed to further understand the role of dual-parent involvement compared with one-parent involvement. It is also possible that this middle-income sample had fewer barriers (i.e., child-care) to attendance and were more motivated and had fewer life stressors, which may have allowed them to focus more on the treatment of their child's problems.

Contrary to predictions, no short-term intervention effects were found for relationship satisfaction for either parent or for father's parenting confidence. The lack of improvement for general relationship quality may reflect that families were well functioning at baseline, creating a ceiling at T1. Though no intervention effect was evident for fathers' parenting confidence, medium effect sizes were obtained for the intervention group on both efficacy scales for the difference between pre-intervention and follow-up scores.

A key strength of the study is that both parents were included in all aspects of the intervention and data collection, there were equivalent numbers of fathers and mothers in the sample, and the data analyses were gender disaggregated. Thus, this study provides a better understanding of the effectiveness of the intervention for fathers separately from mothers, compared with much of the previous parenting program research involving fathers (Panter-Brick

et al., 2014). Findings also support the suggestion from several previous studies (Bagner & Eyberg, 2003; Webster-Stratton, 1985) that improvements in child behavior are likely to be maintained over time when both parents take part in the program.

The observational data of father and mother contributions provides new insight into the nature of father and mother participation patterns during the group parenting sessions. The high frequency of conversation between participants and sharing of personal stories by both fathers and mothers is inconsistent with past research, which suggests that fathers may be less willing to talk if their partner is present (Berlyn et al., 2008) or that fathers may inhibit conversations among mothers and facilitators (MacLeod, 2008). Overall, the patterns that emerged from these observations showed few differences in the type or frequency of contributions made by fathers and mothers. The only gender differences that appeared were as follows: fathers used humor more frequently and mothers shared personal stories and reported co-parenting more frequently. However, it is possible that these results would be different in parent training programs that did not include content that was focused on fathers' role in parenting. Fathers may contribute less to group discussions and exercises if the content is perceived as less relevant to their needs and interests. As such, further research is needed to establish the extent to which these gender differences in patterns of contributions are found in other parenting groups and to establish whether patterns of father contributions are different in a standard parenting program without additional father relevant content. These observational findings are based on 16 parents who were randomly selected from the 42 families who participated in the study. It is possible that the results may have differed if the whole sample was included in the analysis. For example, higher rates of contributions may have been found for some themes and additional themes may have been identified. However, these observational findings may provide useful guidance for parenting programs delivered to couples, as well as helping to reduce some of the concerns facilitators may have about involving both fathers and mothers in the same group.

The finding that both mothers' and fathers' reports of co-parenting cooperation behaviors at home was associated with maternal ratings of reductions in interparental child-rearing disagreements and improvements in paternal parenting suggests that some mothers and fathers were becoming more consistent with each other in their implementation of parenting strategies. Support for this possibility also comes from the finding that within the intervention group significant pre-intervention differences between

father and mother reports of child behavior problems and parenting confidence were no longer apparent at post-intervention. Thus, following the intervention, these parents were more similar in their views of their child's behavior and in their parenting confidence. Given the number of parents who reported use of co-parenting cooperation behaviors at home, as conveyed during the final group sessions, future research should consider measuring co-parenting cooperation behaviors used by both parents at all three time points to test for short- and long-term intervention effects on these behaviors.

One limitation of this study is that data were collected using parents' self-reports of their parenting practices. However, having each parent complete measures of their partner's parenting practices helped to address self-report bias to some extent. This point is supported by the finding that mothers' and fathers' reports of improvements in fathers' dysfunctional parenting concurred with each other. However, mothers' self-reports were not supported by father reports. Inspection of the data showed that fathers in both groups reported an improvement in mothers' parenting following the intervention, whereas for mother reports' of their partner's parenting improvements were apparent in the intervention group only. The different results for fathers' ratings may be due to some control group fathers' perceptions that their partner's parenting was improved as a consequence of closely monitoring her parenting practices. A second limitation is that no independent measures of child behavior were used. Future research would benefit from the inclusion of observational measures of both parent and child behaviors. Finally, the parents that did participate were relatively homogeneous, limiting the generalizability of the findings. It will be important for future research to continue this work with fathers and mothers from more diverse ethnic and economic backgrounds and high-risk or less traditional families, such as same-gendered couples and blended families. Furthermore, to better understand the contribution of dual parent involvement to clinically important changes in child behavior, studies with three-group designs are needed that compare dual-parent intervention groups with mother-only and control groups. Future research in this area could also focus on ways to engage both parents in other variants (e.g., online delivery) of the Triple P Program.

Overall, the findings highlight some potential benefits of involving both parents in a BFI, with additional father-relevant content, targeted at children with conduct problems, including strengthening teamwork between parents in their implementation of parenting strategies and keeping fathers engaged in the program. The design of this trial allowed for

separate intervention effects to be demonstrated for father- and mother-reported child behavior problems and dysfunctional parenting practices.

#### Conflict of Interest Statement

The Triple P-Positive Parenting Program is owned by the University of Queensland (UQ). The University through its main technology transfer company UniQuest Pty Limited has licensed Triple P International Pty Ltd to disseminate the program worldwide. Royalties stemming from this dissemination activity are distributed to the Parenting and Family Support Centre, School of Psychology, UQ; Faculty of Health and Behavioural Sciences at UQ; and contributory authors. No author has any share or ownership in Triple P International Pty Ltd. Matthew Sanders is the founder and an author on various Triple P programs and a consultant to Triple P International.

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