

Prevention Effects on Trajectories of African American Adolescents' Exposure to Interparental Conflict and Depressive Symptoms

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The present study investigates the trajectory of children's exposure to interparental conflict during adolescence, its effects on adolescents' psychological adjustment, as well as the ability of a family-centered prevention program to alter this trajectory. A total of 331 African American couples with an adolescent or preadolescent child participated in a randomized control trial of the Promoting Strong African American Families program, a newly developed program targeting couple and cocaregiving processes. Using a multi-informant, latent growth curve approach, child exposure to interparental conflict during adolescence was found to be stable over a period of 2 years among families in the control group, but significantly declined among families in the treatment condition. Rates of change were significantly different between intervention and control groups based on parents' report of youth exposure to interparental conflict, but not for child's report. Structural equation models found trajectory parameters of interparental conflict predicted changes in adolescent depressive symptoms, with increasing rates of changes in conflict associated with increases in adolescent internalizing symptoms over the 2-year duration of the study. Finally, a significant indirect effect was identified linking treatment, changes in parents' reports of child exposure to interparental conflict, and adolescent depressive symptoms. The implications for research and intervention are discussed.

Keywords: African American, adolescents, prevention, interparental conflict, depression

Exposure to high levels of interparental conflict negatively affects children's mental, emotional, social, and physiological well-being (Cummings & Davies, 2002; El-Sheikh et al., 2009). These effects appear as early as infancy (Du Rocher Schudlich, White, Fleischhauer, & Fitzgerald, 2011) and continue into adulthood (Shimkowski & Schrodt, 2012). In light of these findings, empirically based prevention programs have emerged

aiming to promote child well-being by targeting interparental relationship quality and coparenting interactions (see Cummings & Schatz, 2012; Feinberg & Sakuma, 2011). To date, however, the majority of intervention research on interparental conflict has involved families with children at earlier developmental stages, particularly around the transition to parenthood (Feinberg & Sakuma, 2011).

Various family scholars have noted the lack of prevention research involving interparental conflict among families with adolescents (e.g., Cummings & Schatz, 2012). This scarcity stands in contrast to findings that indicate adolescence to be a time of heightened conflict within families (Herrenkohl, Kosterman, Hawkins, & Mason, 2009), suggesting that this developmental stage is particularly pertinent for research on interparental conflict and child outcomes. Moreover, two-parent African American families also have been neglected in much of the empirical research on interparental conflict and youth outcomes, with previous studies involving two-parent Caucasian families (e.g., Cui & Donnellan, 2009) or single-parent African American households (e.g., Gonzalez, Jones, & Parent, 2014). Consequently, less is known about African American children's exposure to interparental conflict during adolescence, its impact on child well-being, and the potential of a preventive intervention to affect levels of exposure.

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To address these issues, the present study investigates the effects of interparental conflict on African American youth whose parents participated in a randomized control trial of the Promoting Strong African American Families (ProSAAF) program. Using a multi-informant, latent growth curve approach, we examined the effects of (a) ProSAAF participation on rates of change in African American adolescents' exposure to interparental conflict over 2 years, (b) interparental conflict trajectories (i.e., starting level and rate of change) on change in adolescent depressive symptoms, as well as (c) ProSAAF participation on adolescent well-being via altering adolescent exposure to interparental conflict. In the remainder of the introduction, we review the respective literatures on interparental conflict during adolescence as well as prevention programs targeting interparental conflict and then conclude with an overview of the ProSAAF program and current study.

Interparental Conflict During Adolescence

Family systems theory highlights how the functioning and well-being of one individual or subsystem within a family simultaneously affects the functioning and well-being of other family members and subsystems (Cox & Paley, 1997). Findings on interparental conflict and child well-being illustrate this interdependence, with exposure to harsh, destructive conflict patterns between parents associated with a range of detrimental effects on children; these effects appear both concurrently and cumulatively over time, as well as across all developmental stages (Cummings & Davies, 2002; Smith-Schrandt, Calhoun, Feldman, & Storch, 2013). Specifically within adolescence, higher levels of externalizing (e.g., risk taking, delinquency) and internalizing (e.g., depression) behaviors have been observed in adolescents whose parents' relationships is characterized by greater levels of conflict (Baril, Crouter, & McHale, 2007; Cui, Donnellan, & Conger, 2007; Feinberg, Kan, & Hetherington, 2007; Fröjd, Kaltiala-Heino, Pelkonen, Von Der Pahlen, & Marttunen, 2009; Gerard, Buehler, Franck, & Anderson, 2005; Shelton & Harold, 2008). These associations have been documented using youth as well as parent reports of interparental conflict (e.g., Gerard et al., 2005).

Adolescence represents a time of notable change in families, with previous longitudinal studies documenting declines in marital satisfaction and parent-child warmth as well as increases in parent-child and family-wide conflict (Herrenkohl et al., 2009; Shanahan, McHale, Crouter, & Osgood, 2007; Whiteman, McHale, & Crouter, 2007). Given these shifts, analytic techniques that capture the nature of change within individuals and within families over time (i.e., growth curves) are often advantageous to group-based mean differences approaches (i.e., autoregressive models). For instance, using growth curve techniques permit researchers to examine (a) how child exposure to interparental conflict changes within families during adolescence and (b) whether the negative effects of interparental conflict on youth result from higher earlier levels or the degree of change occurring within the family (see Cui, Conger, & Lorenz, 2005). Results from previous growth curve models of the interparental relationship during adolescence vary. Some studies have indicated no mean change in general marital hostility (Cui et al., 2005) or marital conflict over child rearing specifically (Cui & Donnellan, 2009), whereas one study, involving an African American sample, found a mean decline in coparenting satisfaction during adolescence

(Riina & McHale, 2012). The study by Cui et al. (2005) additionally explored how changes in interparental relationship conflict were associated with changes in adolescent well-being, finding increasing rates of marital hostility over time predicted increases in adolescent anxiety, depression, delinquency, and hostility.

The current study additionally contributes to the literature on interparental conflict in adolescence through its focus on two parent African American families. Previous studies of family processes and African American youth development focus almost exclusively on the parent-child relationship (e.g., Bean, Barber, & Crane, 2006). Moreover, existing coparenting research on African American families has commonly examined coparenting within single-mother households and collected data from only the mother (Gonzalez et al., 2014; Jones, Zalot, Foster, Sterrett, & Chester, 2007; Shook, Jones, Forehand, Dorsey, & Brody, 2010). With more than one third of African American children residing in two-parent households (Child Trends, 2014), an exclusive focus on single-mother households misrepresents the landscape of family structures within the African American community and neglects pertinent factors influencing the development of many African American youth.

Prevention Programs Targeting Interparental Conflict

Programs aiming to reduce child exposure to interparental conflict commonly appear for couples in the process of divorcing and are often mandated by the court (Fackrell, Hawkins, & Kay, 2011). More recently, empirically based prevention programs addressing interparental conflict have been developed for parents with intact relationships seeking enhanced family functioning along with improved adult and child well-being (see Cummings & Schatz, 2012; Feinberg & Sakuma, 2011). Efficacy trials of these programs, which have mostly targeted parents of newborns and young children, demonstrate long-term positive effects for participating families across various dimensions of couple interaction, parenting, and child well-being (e.g., Cowan, Cowan, & Barry, 2011; Faircloth, Schermerhorn, Mitchell, Cummings, & Cummings, 2011; Feinberg, Jones, Kan, & Goslin, 2010; Feinberg, Kan, & Goslin, 2009). Previous growth curve analyses of coparenting-focused prevention programs, although limited, have demonstrated participating fathers and mothers to report increases in knowledge of marital conflict and declines in aggressive, critical communication over a period of one year (Faircloth & Cummings, 2008); the study did not, however, examine whether these trends in the treatment group were significantly different from the normative trajectories observed in the control group.

Although the effects of prevention programs on expectant and new parents are promising, whether prevention programs can affect change in child exposure to interparental conflict during adolescence is largely unknown. Previous findings suggest family-based interventions encounter unique challenges when children reach adolescence. For instance, family-wide conflict typically increases during adolescence (Herrenkohl et al., 2009), influences from peer and social environments are more salient (Collins & Laursen, 2004), and youth and families become engaged in more structured activities (Melman, Little, & Akin-Little, 2007) that compete with family-wide activities and potentially interfere with program participation. Nevertheless, adolescence still represents an opportune time for intervention precisely because it entails a

time of heightened family conflict along with the lasting effects that destructive family conflict patterns during adolescence can have on children once they reach adulthood (Herrenkohl, Lee, Kosterman, & Hawkins, 2012).

We identified only two studies on programs that targeted interparental conflict among families with adolescent children with efficacy data. The first study by Cummings and Schatz (2012) observationally found treatment couples and their adolescents to have more supportive and constructive couple and family communication patterns than those in the control condition. The second study by Beach and colleagues (2014) of the current ProSAAF intervention found treatment effects on fathers' and mothers' self-reported effective communication, which in turn, were linked to fathers' and mothers' reported levels of arguing in front of their child. Treatment effects in both studies were limited to mean group differences and did not consider postprogram trajectories for control and treatment groups. Additionally, neither study provided data on measures collected from youth self-reports or examined whether treatment effects on family interactions were related to any child development outcomes.

ProSAAF and the Present Study

ProSAAF was designed to meet the needs of two-parent African American couples raising preadolescent and adolescent youth. Few programs are available for this demographic. Most existing family-centered programs designed to promote positive developmental trajectories for African American youth have focused strictly on the parent-child dyad and have not engaged the father or father-figure (e.g., Brody et al., 2006). This lack of programming for stable two-parent African American families is limiting not only because it neglects an important family process affecting many adolescent youth, but also because changes in couple functioning may be associated with changes in other areas of family functioning (e.g., parenting; Adler-Baeder et al., 2013).

ProSAAF program content, which targeted couple, cocaregiving, and parent-child relationship processes, was based on two existing efficacious African American programs: one focused on couple functioning (Program for Strong African American Marriages; Beach et al., 2011) and another focused on parenting processes and youth competencies (Strong African American Families; Brody et al., 2006). Some of the topics addressed in the six-session program included relationship expectations; listening, support, and conflict; supporting children; and no-nonsense parenting. The ProSAAF implementation model was tailored to achieve high rates of participation among fathers and father figures, which included offering the 6-week program in the family home and encouraging participation by both parent figures (see Barton et al., 2015 for additional implementation details).

The present study addressed two primary issues. Across separate models based on parent (father and mother) and child report of interparental conflict, we first examined intervention effects on child exposure to interparental conflict. In this, we sought to identify whether ProSAAF participants showed a different trajectory of child exposure to interparental conflict over time. A different slope among treatment families would indicate that not only were differences observed between treat-

ment and control groups but also that treatment-specific changes enacted in the family were lasting and growing over time rather than converging over time (i.e., differences in child exposure to interparental conflict continued to diverge following participation). Second, we examined the effects of interparental conflict trajectories on adolescent changes in adolescent depressive symptoms, along with the direct effects and indirect effects (IEs) of treatment on depressive symptoms.

Method

Participants and Procedures

A total of 331 African American families ($n = 164$ treatment) participated in a randomized control trial of ProSAAF. Families were informed about the study through referrals and advertisements distributed through a variety of outlets (e.g., churches, community fairs, radio shows, newspapers, local businesses). To be eligible, individuals had to be an African American adult at least 21 years of age with a mate (of any race) also willing to participate. The couple must have been (a) married or planning to marry with a definite date in mind, (b) living together, and (c) corearing an adolescent or preadolescent child (between 9–17 years old).

Of the randomized sample, 89% percent were married ($n = 296$), with an average marital duration of 12 years (range = 0–37 years). Although only 1 partner in the couple was required to be African American, the vast majority of the men (98%) and women (98%) in the treatment sample reported being African American. Fathers' mean age was 41 (range 25–71) and mothers' mean age was 39 (range 22–68). Mean monthly income from primary jobs was \$1,606 (range \$1–\$15,000) for men and \$1,677 (range \$0–\$14,000) for women. Most men (89.6%) and women (79.5%) reported full- or part-time employment. Total number of children residing in the home ranged from 1 to 10, with a mean of 2 children residing in the home. At baseline, target adolescents' mean age was 13 years of age (range 9–17) and mean grade in school was seventh grade (range = fourth grade–high school).

Families who responded to study advertisements were screened for eligibility and, if eligible, were randomly assigned to the control or treatment condition. Two trained field interviewers visited families' homes and collected pretest data separately from each family member (i.e., father, mother, target child). Baseline data was collected using face-to-face interviews in which interviewers asked all questions to participants. Couples assigned to the control group were provided the book *12 Hours to a Great Marriage* (Markman, Stanley, Blumberg, Jenkins, & Whaley, 2004) at the conclusion of their baseline assessment. For couples in the treatment condition, a facilitator visited couples' homes over a period of 6 weeks to deliver the ProSAAF program. All facilitators were married, middle-aged African Americans from participants' local communities who had received 24 hours of specialized training in the program. Each session lasted approximately 2 to 2.5 hours. Attendance levels among treatment families were high, with mean couple attendance of 5.08 sessions. Over three quarters of treatment families (76%; $n = 125$ couples) attended all six sessions.

Follow-up data collection occurred for both treatment and control groups at 14 and 24 months following pretest.¹ The 14-month and 24-month follow-up data collection was self-administered (paper and pencil or online). Study retention at Wave 3 for fathers, mothers, and children was 82%, 83%, and 83%², respectively (for CONSORT diagram and additional program information, see Beach et al., 2014).

Measures

Child exposure of interparental conflict. Child exposure to interparental conflict was assessed from parent (father and mother) and youth reports.³ Parent reports of child exposure to interparental conflict were assessed using five items from the O’Leary–Porter scale (Porter & O’Leary, 1980). These items assessed spouses’ tendency (0 = *never*; 4 = *very often*) to disagree about discipline, family roles, and each other’s personal characteristics in front of the child (e.g., *How often do the arguments between you and your mate happen in front of [target adolescent’s name]?*). Fathers’ and mothers’ scores were moderately correlated across the three waves ($r_s = .422, .510, .516$; $p < .01$) and combined to calculate single measure for parents’ report. Youth reports of interparental conflict were assessed using the Conflict Properties subscale of the Children’s Perception of Interparental Conflict Scale (Grych, Seid, & Fincham, 1992). This 19-item scale assessed children’s perceptions of the frequency (e.g., *My parents often nag and complain about each other around the house* [reverse coded]), intensity (e.g., *My parents hardly ever yell when they have a disagreement*), and resolution (e.g., *My parents still act mean after they have had an argument* [reverse coded]) of interparental conflict (1 = *True*, 2 = *Sort of True*, 3 = *False*). Higher mean scores reflected more child exposure to interparental conflict; for parent/child measures: $\alpha_s = .84/0.84$ (pretest), $0.87/0.88$ (14-month follow-up), $0.87/0.89$ (24-month follow-up).

Child depressive symptoms. Youth report of depressive symptomatology was assessed using the Child Development Inventory (Kovacs, 1978). This symptom-oriented scale has been widely used in community samples and targets aspects related to negative self-esteem, ineffectiveness, interpersonal problems, negative mood, and anhedonia. Sample items from the 27-item scale (3-point Likert) include: *I feel alone all the time*, *I hate myself*, and *I am just as good as other kids* (reverse coded) (the suicide item in the original scale was not included in the current study, resulting in a 26-item questionnaire). A mean score was computed, with higher scores reflecting elevated depressive symptoms, $\alpha_s = .82$ (pretest), $.87$ (24-month follow-up).

Plan of Analyses

We estimated latent growth curves within a structural equation modeling (SEM) framework to address our research questions. With longitudinal data, growth curves are often advantageous to traditional techniques such as repeated measures analysis of variance and lagged regression models by preserving within-individual change over time. In doing so, a trajectory (i.e., intercept and rate of change) specific to each unit of analysis is determined from which mean and variance trajectory parameter estimates are calculated for sample. Within an SEM approach, model extensions also permit trajectory parameters to be examined as predictors of other outcomes of interest.

Analyses were performed in two stages. First, unconditional multigroup latent growth curve models were run to identify trajectories of interparental conflict over 2 years for treatment and control families. Subsequent models with the slope parameter constrained to be equivalent across treatment and control groups were then conducted, with model fit compared between constrained and unconstrained models to test for differences in rates of change between groups.

Second, single group latent growth curve models were run with growth curve parameters examined as predictors of adolescent depressive symptoms, controlling for baseline levels of depressive symptoms, child age, and child gender (1 = *female*). These models identified the unique associations between trajectories of child exposure to interparental conflict (as reported by parents and by children) and adolescent adjustment. Within this second series of models, we also examined whether ProSAAF participation influenced youth adjustment directly or indirectly via effects on rate of change in youth exposure to interparental conflict. The IE was estimated using procedures described by Preacher and Hayes (2008).

Analyses were performed using Mplus 6.11 software (Muthén & Muthén, 2011) following intent-to-treat procedures, with all couples assigned to the treatment condition retained regardless of attendance levels. Missing data was handled via full information maximum likelihood (FIML). Analyses of missing data patterns for youth with and without 2-year child outcome data found no differences in missing data with respect to age, gender, grade in school, parents’ marital status, or low-income classification (classified as government assistance receipt). Significant differences were observed between youth respondents and nonrespondents with respect to treatment condition. As this variable was already included in SEM, missing data patterns assumed by FIML appeared to be met. To examine whether families experiencing more (or less) problems were less likely to be retained, we conducted missing data analyses for families with and without 2-year outcome data on baseline levels of interparental conflict (parent and child report) and depressive symptoms (child report). Marginally significant differences were evident for child (but not parent) report of interparental conflict, with adolescents without 2-year data reporting higher levels of interparental conflict at baseline. Significant differences in attrition did appear for depressive symptoms, yet in this case, adolescents without 2-year data reported less depressive symptoms at baseline. Thus, there was no clear indication that low- or high-functioning families dropped from the study.

¹ A fourth time point, corresponding to 3 months after pretest (and shortly after program completion for treatment families) was also collected from participants. Model fit indices for latent growth curves with this wave were poor for linear and quadratic models of parents’ conflict report. Given potential posttest response bias with this short-term assessment, as well as the current study’s focus on long-term (rather than short-term) outcomes, this wave was not included in the growth curve analyses.

² Some additional Wave 3 adolescent data ($n = 64$, 19% of original sample) was lost due to equipment failure.

³ Investigation also occurred into creating a single measure across all three reporters. Analyses using a latent variable with three indicators (father, mother, and youth) were not feasible as models did not converge. Standardizing each measure and then aggregating was not feasible as latent growth curves necessitate unstandardized values.

Results

Descriptive Statistics

Prior to latent growth curve modeling, preliminary analyses were conducted to assess for equivalence between treatment and control groups at pretest. As shown in Table 1, no significant baseline differences were evident between treatment and control groups on study variables, as well as various demographic measures. Table 2 presents the descriptive statistics and correlations among study variables.

Interparental Conflict Trajectory for Treatment and Control Groups

To identify the trajectory of child exposure to interparental conflict for treatment and control groups, we began by modeling multigroup unconditional latent growth curve models. In these models, two latent growth curves were simultaneously estimated for control and treatment groups. Intercept was set to be pretest, with factor loadings for the slope parameter equal to the time (in 12 month intervals) when each subsequent assessment was obtained (i.e., loadings of 0.00, 1.17, and 2.00 for the three waves). Separate models were run on the basis of parent- and child-report of interparental conflict.

Table 3 presents the parameter estimates and fit indices for parents' and child's report of youth exposure to interparental conflict. For the control group, the overall mean slope was non-significant in both parent ($B = 0.02, p = .28$) and child ($B = -0.02, p = .18$) models. For the treatment group, mean slope significantly declined, both as reported by parents ($B = -0.08, p < .01$) and children ($B = -0.05, p < .01$).

We then specifically tested whether rates of change were significantly different between treatment and control groups. Models in which the slope parameter for treatment and control groups were constrained to be equal demonstrated significantly worse fit for parents' report, $\Delta\chi^2(1) = 10.43, p < .01$, but not child's report, $\Delta\chi^2(1) = 1.42, p = .23$. Hence, parents in the treatment group reported a different 2-year trajectory in child exposure to interpa-

rental conflict than parents in the control group. Although mean levels of slope only demonstrated significant change over time for the treatment group in child report of conflict, the rate of change was not statistically different between youth whose parents were in the treatment or control condition.

Effects on Adolescent Well-Being

SEMs then tested the effect of trajectory parameters of child exposure to interparental conflict on youth adjustment at 24-month follow-up, controlling for pretest levels and child control variables. These models were also used to examine the direct and indirect effects of the intervention on adolescent internalizing symptoms. Single group measurement models demonstrated significant variability in slope ($\sigma^2 = .032, p < .05$ and $\sigma^2 = .032, p < .01$ for parent and child report, respectively), thus meeting latent growth curve requirements for further analyses investigating predictors of rates of change.

SEM results of parent- and child-report interparental conflict are summarized in Figure 1. Slope of child-report interparental conflict exposure was significantly associated with change in depressive symptoms over 2 years ($\beta = 0.30; p < .01$). The effect of parent-reported conflict slope on adolescent depression trended toward significance ($\beta = 0.46; p = .06$). In both instances, youth who were exposed to greater increases in interparental conflict during the 2-year study time frame reported higher levels of depressive symptoms at the end of the study, even after accounting for levels of depressive symptoms at pretest and child control variables (i.e., age, gender). In addition to rate of change, children's reports of higher initial levels of interparental conflict were also associated with elevated depressive symptoms 2 years later. The effect of treatment on interparental conflict was significant for parents' report of conflict, but not child's report (consistent with results from Table 3). The direct effect of treatment on depression was nonsignificant, indicating that youth whose parents participated in ProSAAF and those in the control conditions did not differ in levels of depressive symptoms.

Last, we examine a potential IE of treatment on depressive symptoms occurring through changes in interparental conflict. For

Table 1
Pretest Equivalence of Experimental and Control Conditions on Family Demographic Characteristics and Study Variables

Demographics and Study variables	Treatment (<i>n</i> = 164)		Control (<i>n</i> = 167)		<i>t</i>
	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>	
Marital status	0.87	0.34	0.90	0.30	0.35
Number of children in home	2.57	1.47	2.38	1.13	1.32
Father education	5.85	1.75	5.69	1.71	0.42
Mother education	6.35	1.59	6.33	1.75	0.91
Father income	1.56	1.73	1.65	1.47	0.41
Mother income	1.68	2.11	1.68	1.67	0.01
Father age	41.34	7.78	41.50	8.01	0.85
Mother age	39.49	6.44	39.98	7.33	0.52
Child age	12.64	2.02	12.55	1.95	0.41
Child grade in school	4.46	2.16	4.43	2.08	0.89
Child exposure to interparental conflict (parent report)	1.10	0.63	1.00	0.61	1.43
Child exposure to interparental conflict (child report)	1.72	0.35	1.74	0.38	0.45
Child depressive symptoms	1.33	0.34	1.34	0.31	0.47

Table 2
Correlations, Means, and Standard Deviations for Study Variables

Study variable	1	2	3	4	5	6	7	8	9
1. Intervention ^a	—								
Parents' report ^b									
2. Youth exposure to interparental conflict (W1)	.076	—							
3. Youth exposure to interparental conflict (W2)	-.017	.717**	—						
4. Youth exposure to interparental conflict (W3)	-.072	.632**	.752**	—					
Child's report									
5. Youth exposure to interparental conflict (W1)	-.013	.468**	.344**	.346**	—				
6. Youth exposure to interparental conflict (W2)	-.079	.473**	.503**	.469**	.659**	—			
7. Youth exposure to interparental conflict (W3)	-.042	.436**	.486**	.468**	.573**	.739**	—		
8. Depressive symptoms (W1)	-.076	-0.085	-.142*	-0.036	.132*	.066	.067	—	
9. Depressive symptoms (W3)	-.001	-0.049	.078	0.103	.147*	.230**	.263**	.138*	—
<i>M</i>	0.50	1.04	0.98	0.99	1.73	1.65	1.64	1.34	1.31
<i>SD</i>		0.62	0.61	0.63	0.37	0.46	0.45	0.32	0.32
% missing	0.0	0.0	25.1	16.0	7.25	27.8	36.9	6.95	37.2

Note. Spearman correlation used for dichotomous variable. W1 = Wave 1; W2 = Wave 2; W3 = Wave 3.

^a 1 = Promoting Strong African American Families. ^b Average of father and mother reports.

* $p \leq .05$. ** $p \leq .01$ (two-tailed tests).

parents' report of conflict, the bias-corrected 95% confidence interval (CI) for this IE did not contain zero, $IE = -.11$, 95% CI = $[-.73, -.02]$, supporting the presence of an effect of the intervention on depressive symptoms through changes in youth exposure to interparental conflict. As indicated by the direction of path coefficients, treatment reduced parents' reports of child exposure to interparental conflict over a 2-year period in adolescence, which in turn was positively associated with changes in adolescents' reports of depressive symptoms. The IE for child report of interparental conflict was nonsignificant, attributable to the lack of treatment effect on child-reported rate of change.

Discussion

A robust literature has documented the contemporaneous and longitudinal effects of interparental conflict on children's maladjustment (Cummings & Davies, 2002). The current study advanced this area of research by investigating the effect of a couple-focused prevention program on reducing child exposure to interparental conflict during adolescence and the developmental implications of changes in interparental conflict for adolescent well-being. From a

sample of two-parent African American families, results from the current study demonstrated the effect that trajectories of interparental conflict have on African American youths' internalizing symptoms and the ability of a family-based prevention program to alter the trajectory of child exposure to interparental conflict.

Results from multigroup latent growth curve models comparing treatment and control families found significant treatment effects on 2-year slopes of child exposure to interparental conflict based on parents' report. In particular, mean slope estimates revealed exposure to interparental conflict significantly declined over time among treatment families, but remained stable within the control group. These findings corroborate with those from previous studies involving younger children, with respect to both the linear decline in levels of negative communication among parents participating in a coparenting intervention (Faircloth & Cummings, 2008) as well as the stable levels of children's exposure to interparental conflict among the general population, absent of intervention (Kouros, Cummings, & Davies, 2010).

The diverging linear trajectories between treatment and control groups indicate that this intervention effect increased, rather than

Table 3
Latent Growth Curves for Child Exposure to Interparental Conflict

	Control ($n = 167$)		Treatment ($n = 164$)		Model fit indices
	Intercept	Slope	Intercept	Slope	
Parents' report ^a					$\chi^2(2) = 1.38$
<i>M</i>	0.991**	0.023	1.097**	-0.079**	RMSEA = 0.00
Variance	0.261**	0.020	0.334**	0.038	CFI/TLI = 1.00/1.01
Child's report					$\chi^2(3) = 3.66$
<i>M</i>	1.746**	-0.021	1.714**	-0.051**	RMSEA = 0.04
Variance	0.136**	0.019	0.095**	0.032**	CFI/TLI = 1.00

Note. Wave 3 variance of child report of interparental conflict fixed to zero, given negative residual variance. Differences in variance were not statistically significant between treatment and control groups, parents' report: $\Delta\chi^2(1) = 2.54$, $p = ns$; child's report: $\Delta\chi^2(1) = 0.58$, $p = ns$. RMSEA = root-mean-square error of approximation; CFI = comparative fit index; TLI = Tucker-Lewis index.

^a Average of father and mother reports.

** $p \leq .01$ (two-tailed tests).

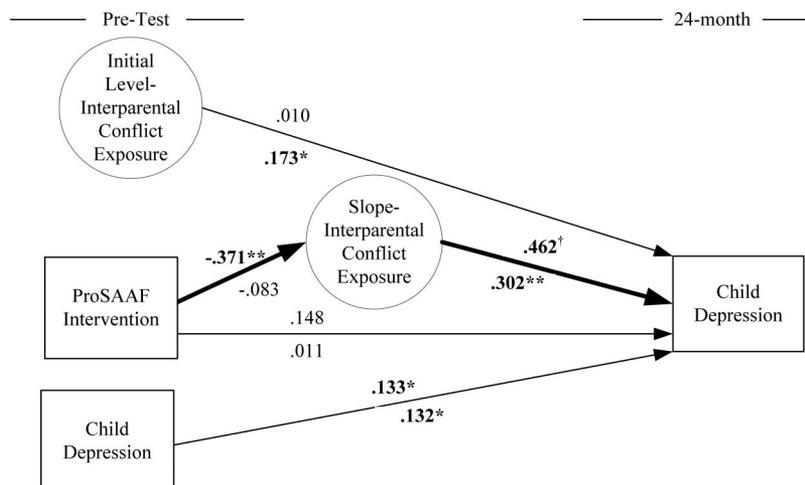


Figure 1. Path models predicting adolescent depression. Path coefficients are standardized parameter estimates. Result from path model using parents' report of interparental conflict exposure is shown above pathway arrows. Result from model using child's report of interparental conflict exposure is shown below pathway arrows. Paths from control variables of child age and gender (all $p > .05$) are not shown for clarity purposes. Indirect effects calculated from 1,000 bootstrapped samples. Parent report: Model fit, $\chi^2(14) = 14.54$, $p = .41$. Root-mean-square error of approximation (RMSEA) = .01. comparative fit index (CFI) = 1.00. Tucker-Lewis index (TLI) = 1.00. Bolded path indirect effect = -0.11 ; 95% confidence interval (CI) $[-.73, -.02]$. Child report: Model fit, $\chi^2(14) = 13.71$, $p = .47$. RMSEA = .00. CFI = 1.00. TLI = 1.00. Bolded path indirect effect = -0.02 ; 95% CI $[-.07, .01]$. ProSAAF = Promoting Strong African American Families. † $p \leq .10$. * $p \leq .05$. ** $p \leq .01$.

attenuated, over time. That treatment effects became more pronounced over time suggests the current intervention successfully produced more systemic changes in family functioning that were able to be retained and enacted over time. Thus, adding to longitudinal results from previous studies of prevention programs for parents of newborns and young children (Cowan et al., 2011; Cummings, Faircloth, Mitchell, Cummings, & Schermerhorn, 2008; Feinberg et al., 2010), current results document the long-term efficacy of a small-scale, well-attended program targeting the interparental relationship as a means to promote positive family functioning for parents of adolescents as well.

For the African American youth in this study, escalated rates of change in interparental conflict predicted higher levels of youth depression. This was most evident in child reports of interparental conflict and approached significance based on parents' report of conflict. These findings add to previous literature that has also examined growth curve trajectory parameters of interparental conflict as predictors of youth maladjustment (Faircloth & Cummings, 2008; Kouros et al., 2010). Notably, across all three studies, children's negative outcomes were more commonly accounted for by rates of change in interparental conflict, but not intercept. Thus, even though previous studies have emphasized single-time point assessments for diagnosing families with problematic conflict patterns (Habib et al., 2014), these results indicate that the degree of change, and not merely level, of child exposure to interparental conflict also warrants attention when considering and diagnosing problematic levels that influence youth well-being.

Direct effects of the intervention were not evident for youth depression. Although an IE emerged through changes in parents' report of interparental conflict, the lack of a direct effect on

depression may stem from changes in other factors (e.g., peer, school, and neighborhood context) that simultaneously affected youths' depression levels over the 2-year period. Thus, programs designed to influence adolescents' mental health directly may require youth participation in the intervention and expanded content addressing youth competencies and contextual factors affecting their development. The associations between rates of change in interparental conflict (particularly child report) and changes in youth depressive symptoms suggest that family-based programs for promoting African American youth competencies, which historically have focused only on the parent-child relationship (e.g., Brody et al., 2006), may increase their impact on youth outcomes by including aspects of interparental relationship functioning in the program.

The multi-informant approach used in the present study found treatment effects on rates of change with respect to parent, but not child, report of interparental conflict. Differences also appeared for the associations between trajectory parameters and changes in the depression between parent and child report. This difference between reporters may be partially attributable to parents and children completing different measures that assessed similar, but not exactly equivalent, aspects of interparental conflict. Additionally, current and previous (Cui & Donnellan, 2009) results indicate adolescent appraisals of interparental conflict to be positively, but only moderately, correlated with parent report. Given the salience that children's perceptions and cognitive appraisals of interparental conflict have on their subsequent well-being (Gerard et al., 2005; Grych, Fincham, Jouriles, & McDonald, 2000), further research appears needed to examine (a) factors that influence the degree to which youth reports of interparental conflict converge or

diverge with parents' reports of child exposure to interparental conflict and (b) the ability of couple-focused interventions to affect child perceptions of interparental conflict, stability, and other aspects influencing children's emotional security and development.

Despite its various substantive and methodological strengths, the current study also has limitations. Previous studies (e.g., Shanahan et al., 2007) have observed changes in family interactions associated with the oldest child's entry into adolescence to be more pronounced than with subsequent children, and we lacked birth order data to consider whether trajectories of interparental conflict varied based on this characteristic. As previous mentioned, measures from parents and children on child exposure to interparental conflict were not identical, and future research involving uniform measures across all participants appears warranted. Adolescent reports of their adjustment and well-being were only obtained with respect of internalizing behaviors, precluding further analyses of other significant dimensions of adolescent functioning as reported by youth. Depressive symptoms demonstrated low stability over the 2-year period, which may be attributable to the wide age range of youth comprising the sample and further account for the lack of direct program effects on adolescent depression. The control group differed from the treatment in terms of delivery modality and personalized attention and hence cannot be considered an attention control group. Last, differential attrition appeared between conditions, introducing the possibility that observed differences are attributable to differential attrition rather than treatment effects.

These limitations notwithstanding, results from the current study extend developmental and prevention research focused on interparental conflict during adolescence. Our results highlight the importance of research focused on the developmental trajectory of interparental conflict, not only as a means to identify the unique effect of growth parameters on child outcomes, but also to examine the ability of interventions to produce enduring changes in family processes. Future research can continue to investigate multimethod approaches into the nature and effect of interparental conflict on adolescents, as well as refine program content and delivery to exhibit a more direct effect on child outcomes over time.

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