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Parent–Child Recurring Conflict: A Mediator between Parental Anger Management and Adolescent Behavior

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Guided by social learning theory, this longitudinal study examined whether parent–child recurring conflict mediated the association between parental anger management, an understudied antecedent to parent–child recurring conflict, and adolescent deviant and problem-solving behaviors in 415 rural families. Parental use of anger management in 6th grade was associated with less parent–child recurring conflict in 9th grade, which was associated with more adolescent problem-solving behavior in 11th grade. Family practitioners seeking to promote adolescent problem-solving behaviors may consider teaching families strategies for reducing parent–child recurring conflict and fostering parental anger management.

Keywords: *parental anger management; parent–child recurring conflict; problem-solving; deviant behavior*

Parent–child recurring conflict refers to frequent, serious arguments between parents and children on the same topics with no resolution (Conger et al., 2011). From a social learning perspective, children learn behaviors through observation and interaction with parents, which later generalizes to their interactions with others (Bandura & National Institute of Mental Health, 1986; Staats et al., 2017). In contexts of high parent–child recurring conflict, children may learn and engage in maladaptive conflict resolution skills such as more deviant (e.g., breaking an item) and less problem-solving (e.g., considering consequences; Staats et al., 2017; Van Doorn, Branje, & Meeus, 2011) behaviors. Adolescents who experience low parent–child conflict may observe and model parents' conflict resolution or problem-solving strategies such as compromising (Conger et al., 2011; Goddard et al., 2004). Less understood, however, are parental antecedents to parent–child recurring conflict, which may inform family

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[Corrections made on 22 Aug 2022, after first online publication: The affiliation for author Linda Halgunseth has been updated from University of Connecticut to Michigan State University.]

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interventions seeking to reduce parent–child recurring conflict and promote positive conflict resolution behaviors in adolescents.

An understudied antecedent to parent–child recurring conflict is parental anger management. Research suggests that parents who have difficulty managing their anger often engage in conflict with adolescents who then model poor conflict resolution strategies (Staats et al., 2017; Van Doorn, Branje, & Meeus, 2011). Parental anger management differs from parent emotion regulation in that research on the latter has included a wide range of both positive (e.g., excitement) and negative (e.g., sadness) emotions (Gross & John, 2003). Anger management seeks to reduce feelings and expressions of anger in interpersonal relationships such as parent–child relationships (American Psychological Association, 2017; Short, 2016).

Adolescence is a critical developmental period to examine the link between parental anger management and parent–child recurring conflict. During adolescence, children seek autonomy from parental expectations and may experience fluctuations in mood and emotions (Kerig et al., 2012), which may induce greater opportunities for parent–child recurring conflict (Benner et al., 2017). Increases occur in the intensity of parent–child conflict as adolescents transition to high school or 9th grade (Benner et al., 2017; Marceau et al., 2014). Thus, it is important that parents utilize anger management strategies pertinent to the teenage years. Compared to parents of younger children, fewer studies have examined how parental anger management is associated with adolescents' maladaptive (i.e., deviant) and adaptive (i.e., problem-solving) conflict resolution behaviors.

Using data from a longitudinal study of rural families, this study seeks to address gaps in the literature by investigating whether parent–child recurring conflict in 9th grade mediates the association between parental anger management in 6th grade and adolescent behavior in 11th grade. We focused on adolescents because they are particularly susceptible to how conflicts are managed within the family (Staats et al., 2017). Time points were chosen because parent–child conflict peaks during the transition to high school as adolescents seek autonomy (Benner et al., 2017; Marceau et al., 2014).

According to family systems theory, parent–child recurring conflict and parental anger expressions within the family may involve more than one parent simultaneously (Bortz et al., 2019; Mandak et al., 2017). Thus, we used a composite score that averages across mothers' and fathers' reports of parental anger management and parent–child recurring conflict. Like others before us (Fosco et al., 2014; Halgunseth et al., 2013; Yang et al., 2021), we aimed to capture adolescents' overall parental experiences in the family context, in which adolescents observe, learn, and later generalize conflict management styles such as problem-solving or deviant behaviors (Parke & Buriel, 2006; Staats et al., 2017; Van Doorn, Branje, & Meeus, 2011).

Parental Anger Management

Parental anger management occurs when a parent regulates their arousal and expression of anger in front of their child (American Psychological Association, 2017; Short, 2016). As previously mentioned, parental anger management differs from parental emotion regulation in that the former focuses solely on reducing the expression of anger as opposed to the broader concept of

emotion regulation, which encompasses controlling a wide array of both positive and negative emotions (Gross & John, 2003). Theories of social cognition explain that parents who experience high levels of dysregulated anger are more likely to have negative attributions, distorted beliefs, or unrealistic expectations of adolescent's behavior; and hence, are more likely to enact punitive parenting behaviors with adolescents than parents experiencing low levels or regulated anger (Crouch et al., 2017; Sanders et al., 2004). Thus, parents with dysregulated anger may model negative strategies for resolving conflict to their adolescents.

The Role of Parent–Child Recurring Conflict

Although parent–child conflict is considered a normative experience during adolescence (Smetana et al., 2006), parent–child recurring conflict is distinct in severity, frequency, and repetition. High recurring conflict represents frequent, serious arguments between parents and adolescents on the same topic without resolution (Conger et al., 2011). Thus, it follows that in the context of high parent–child recurring conflict, parents may model poor conflict resolution skills with adolescents (Branje et al., 2009), and this may be particularly true of parents with dysregulated anger (Staats et al., 2017).

Social learning theory contends that social influences operate through psychological mechanisms to produce behavioral effects. Adolescents may internalize abstract mental representations of conflict resolution styles from observing the behaviors of parental role models in contexts of high conflict. Parents are influential socializing agents for adolescents because they are often perceived as both powerful and nurturing, responsible for establishing and enforcing behavioral norms in the family, and because adolescents have ample opportunities to observe them (Bandura & National Institute of Mental Health, 1986; Grusec & Kuczynski, 1997). Several studies have examined the association between high parent–child recurring conflict and adolescent deviant behaviors (Fosco et al., 2019; Klahr et al., 2011; Tucker et al., 2003). Dutch early and middle adolescents who reported high levels of parent–child recurring conflict and the use of a negative conflict resolution style (e.g., anger, verbal abuse) were more likely to exhibit aggressive behaviors (Branje et al., 2009). Thus, parents who mismanage their anger may model poor conflict resolution skills to adolescents thereby perpetuating high parent–child recurring conflict. In turn, adolescents observe, learn, and later generalize negative conflict resolution skills (i.e., more deviant behaviors, less problem-solving behaviors) to contexts outside of the family, such as with peers.

Relatively fewer studies have examined the association between high parent–child recurring conflict and adolescent problem-solving behaviors such as negotiation, perspective taking, and compromising (Branje et al., 2009; Staats et al., 2017). Social learning theory explains that when faced with conflict, adolescents undergo a process of constructing and applying mental representations of problems to find solutions (Jonassen & Hung, 2012). However, the main context for adolescents to observe, learn, and practice effective conflict management skills, such as problem-solving behaviors, is within the family context with parents who model these skills during conflict (Bandura & National Institute of Mental Health, 1986; Parke & Buriel, 2006; Reese-Weber & Kahn, 2005). Research finds that adolescents' problem-solving skills, once learned, generalize to other relationships such as with peers or

romantic partners (Staats et al., 2017; Van Doorn, Branje, VanderValk, et al., 2011) and are associated with low levels of parent–child recurring conflict and less adjustment problems in adolescents (Branje et al., 2009).

Current Study

Grounded in social learning theory, we hypothesize that: (a) less use of parental anger management will be associated with greater parent–child recurring conflict, and (b) greater parent–child recurring conflict will be associated with more adolescent deviant behaviors and less adolescent problem-solving. As parental anger management literature has primarily focused on early childhood years, this study builds on the current knowledge of these issues during adolescence, and in particular, the transition to high school, a time when parent–child conflict is salient (Branje et al., 2009; Fosco et al., 2019; Staats et al., 2017).

METHODOLOGY

Sample and Data Collection

The current study examined three time points of data on 415 adolescents and their parents. Adolescents were in the spring semesters of 6th, 9th, and 11th grade at Time 1, 2, and 3, respectively. At Time 1, adolescents were on average 11.9-years old ($SD = .47$; range = 10-to-13 years old), 49.7% were female, and 90% were European American. At Time 1, parents were on average 39.7-years old ($SD = 6.24$, range = 26.5–61 years old). On average, parents completed one year of education beyond high school; 62.2% of parents indicated that they were married or in a married-like relationship; and household income was about \$51,000 per year. About 62.7% of families lived in Iowa and 37.3% percent lived in Pennsylvania.

Data for this study were drawn from a larger, randomized-control, longitudinal project titled PROSPER [PROMoting School-community-university Partnership to Enhance Resilience] (Spoth et al., 2004) and were collected from 2002 to 2012 via in-school and in-home oral surveys in which interviewers asked families survey questions and recorded the answers for them. Institutional Review Board (IRB) approval, parental consent, and adolescent assent was gained before starting data collection for the current study. Youth received \$50 for participating in the survey data collection. Each parent participating in the survey data collection received \$50. Only families who were assigned to the control group were examined in this study.

Measures

Parental anger management. When adolescents were in 6th grade (Time 1), mothers and fathers reported via home oral surveys their own use of anger management in response to interactions with their child (Conger et al., 2011). The four anger management items included: (1) “When my child and I have disagreements, I avoid placing all of the blame on him or her,” (2) “I am able to remain calm when my child does something that makes me angry,” (3) “I take time to cool off when I am really angry with my child, before I proceed with

discipline," and (4) "I can recognize when a misbehavior is relatively minor and deserves only a small penalty or consequences". Participants rated items on a 5-point scale (1 = *Never true*, 5 = *Always true*). Mothers' and fathers' total sum of the four items were averaged ($\alpha = .69$) in order to capture the overall parenting experiences in the family system (Bortz et al., 2019; Mandak et al., 2017) and in line with past studies (Fosco et al., 2014; Halgunseth et al., 2013; Yang et al., 2021). Higher mean scores reflected greater combined parental anger management.

Parent-child recurring conflict. When adolescents were in 6th and 9th grades (Times 1 and 2), both parents reported during home oral surveys the rate of recurring conflict between parents and adolescents (Conger et al., 2011). Three recurring conflict items included: (1) "During an average week, how often do you and this child have serious arguments?" (2) How often do the same problems between you and this child come up again and again and never seem to get solved?" (3) "When you and this child have a problem, how often can the two of you figure out how to deal with it?" Items were scored on a 5-point scale (1 = *Always*, 5 = *Never*). Items one and two were reverse scored. Mothers' and fathers' total sum of the three items were averaged for a combined parent rating of recurring conflict ($\alpha = .76$ at Time 1 and $\alpha = .74$ at Time 2). Higher mean scores reflected higher engagement in parent-child recurring conflict.

Deviant behaviors. When adolescents were in 6th and 11th grade (Time 1 and 3), they reported during in-school oral surveys the frequency with which they participated in 12 different deviant behaviors (adapted from Elliot et al., 1983; e.g., stealing, carrying a hidden weapon, breaking into a building, skipping school or classes, etc.). Twelve-items were scored on a 5-point scale (1 = *Never*, 5 = *Five or more times*), where higher mean scores reflected higher adolescent engagement in deviant behaviors (6th grade $\alpha = .85$; 11th grade $\alpha = .89$).

Problem-solving. When they were in 6th and 11th grade (Time 1 and 3), adolescents reported during in-school oral surveys the frequency with which they participated in five problem-solving behaviors (Bugen & Hawkins, 1981; Wills, 1986): (1) "Get information that is needed to deal with the problem," (2) "Compromise to get something positive from the situation," (3) "Think about the risks of the different ways to deal with the problem," (4) "Think about the consequences of each choice," and (5) "Think about which of the choices is best." Items were scored on a 5-point scale (1 = *Never*, 5 = *Always*). Higher mean scores reflected higher adolescent engagement in problem-solving behavior (6th grade $\alpha = .93$; and 11th grade $\alpha = .95$).

Plan of Analysis

The current study excluded families whose adolescents did not provide information on both dependent variables. Of families who were included ($N = 415$), missing data on study and control variables were accounted for by using multiple imputation. Analyses controlled for the influence of gender, parental education, geographic location, and Time 1 of the dependent variables. Multiple regression equations were used to test our hypotheses that parent-child recurring conflict mediated the relationship between parental anger management and adolescent outcomes. Mother and father responses for variables of parental anger management and parent-child recurring conflict were averaged in order to capture the overall parenting of adolescents within the family systems (Bortz

et al., 2019; Mandak et al., 2017). Previous scholars have averaged mothers' and fathers' parenting scores within a family context (Fosco et al., 2014; Halgunseth et al., 2013; Yang et al., 2021).

Our first step included regressing the 11th grade dependent variables (adolescent deviant and problem-solving behaviors) on parental anger management in 6th grade, as well as the control variables, which included the adolescent outcome measure in 6th grade, and the family demographic variables. Our second step included regressing parent-child recurring conflict in 9th grade on parental anger management in 6th grade, recurring conflict in 6th grade, and the family demographic variables. Our third step included regressing the 11th grade dependent variables (adolescent deviant and problem-solving behaviors) on parent-child recurring conflict in 9th grade, as well as the control variables, which included the adolescent outcome measure in 6th grade, parental anger management in 6th grade, and the family demographic variables. Our fourth step included conducting the Sobel test. The Sobel test examines the statistical significance of the mediated effect for each equation (Sobel, 1982). Unstandardized regression coefficients and standard error terms from the regression equations were used to calculate the critical ratio in the Sobel test equation to test whether the indirect effect of parental anger management during 6th grade on adolescent deviant and problem-solving behaviors in 11th grade via parent-child recurring conflict in 9th grade was significantly different from zero (MacKinnon et al., 1995). See Figure 1 for the model guiding analyses in the current study.

RESULTS

Correlations, means, and standard deviations for principle study variables are presented in Table 1. Study variables were normally distributed (Hair et al., 2010). There were no significant associations between parental use of anger management in 6th grade and adolescents' deviant behaviors in 11th grade or between parent-child recurring conflict in 9th grade and adolescent deviant behaviors in 11th grade. Recent research has suggested that mediation analysis does not require significant direct effects between independent and dependent variables to confirm a mediation effect, as this may prematurely end the testing of theoretically based models and is considered "unnecessarily restrictive" and "a hindrance to theory building" (Memon et al., 2018, p. vi; O'Rourke & MacKinnon, 2017). Therefore, we continued with our plan of analysis to test for

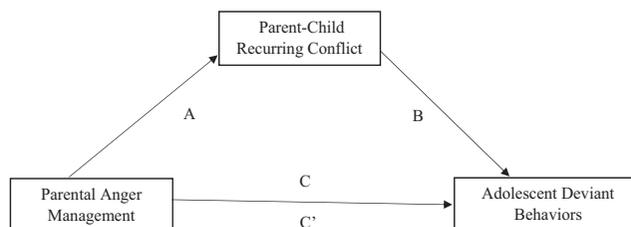


Figure 1: Conceptual figure corresponds with values in Table 1 and demonstrates the mediation effect of parental anger management on adolescent behaviors by parent-child recurring conflict. Control variables include parental education, geographic location, child gender, 6th Grade adolescent delinquent behavior and 6th Grade adolescent problem-solving behavior.

mediation (results are included in Figure 2). There was a significant and negative relation between parental use of anger management in 6th grade and parent-child recurring conflict in 9th grade ($\beta = -.235$, $SE = .097$, $p = .016$). The indirect effect of parental anger management in 6th grade on adolescents' deviant behaviors in 11th grade through parent-child recurring conflict in 9th grade was not significant.

There was no significant direct relation between parental use of anger management in 6th grade and adolescents' problem-solving behaviors in 11th grade. There was a significant and negative relation between parent-child recurring conflict in 9th grade and adolescents' problem-solving behaviors in 11th grade ($\beta = -.287$, $SE = .083$, $p = .001$). The indirect effect of parental anger management in 6th grade on adolescents' problem-solving behaviors in 11th grade through parent-child recurring conflict in 9th grade was significant ($\beta = -1.984$, $SE = .034$, $p = .04$).

DISCUSSION

Guided by social learning theory, this longitudinal study examined the mediating effect of parent-child recurring conflict in 9th grade with parental anger management in 6th grade and adolescent behaviors in 11th grade. Although ample research exists on the negative effects of parent-child recurring conflict on younger children (Latham et al., 2017; Lunkenheimer et al., 2016; Smith et al., 2014), fewer studies have examined its parenting antecedents and their relation to adolescent behavior. Thus, findings from this study advanced research by: (a) documenting the effects of parental anger management, an understudied but critical antecedent to parent-child recurring conflict; (b) revealing the unique role parent-child recurring conflict plays in the link between parental anger management and adolescent problem-solving behavior; and (c) highlighting the importance of including both positive and negative adolescent behaviors in research.

A strength of the current study includes its longitudinal design, which allowed us to control for baseline levels of parent-child recurring conflict and adolescents' deviant and problem-solving behaviors. Controlling for these variables at earlier time points increased the internal validity of our findings or likelihood that the hypothesized direction of effects among constructs of interest in our statistical model were accurate (Cole & Maxwell, 2003; MacKinnon, 2008). In addition, this study included multiple perspectives of

TABLE 1: Means, Standard Deviations, and Bivariate Correlations of Study Variables

	1	2	3	4
1. Parental Anger Management (Grade 6)		-.315**	-.072	-.003
2. Parent-Child Recurring Conflict (Grade 9)			.025	-.226**
3. Adolescent Deviant Behaviors (Grade 11)				-.282**
4. Adolescent Problem-solving Behaviors (Grade 11)				
<i>M</i>	3.69	5.22	1.24	3.64
<i>SD</i>	.43	.87	.49	1.16

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

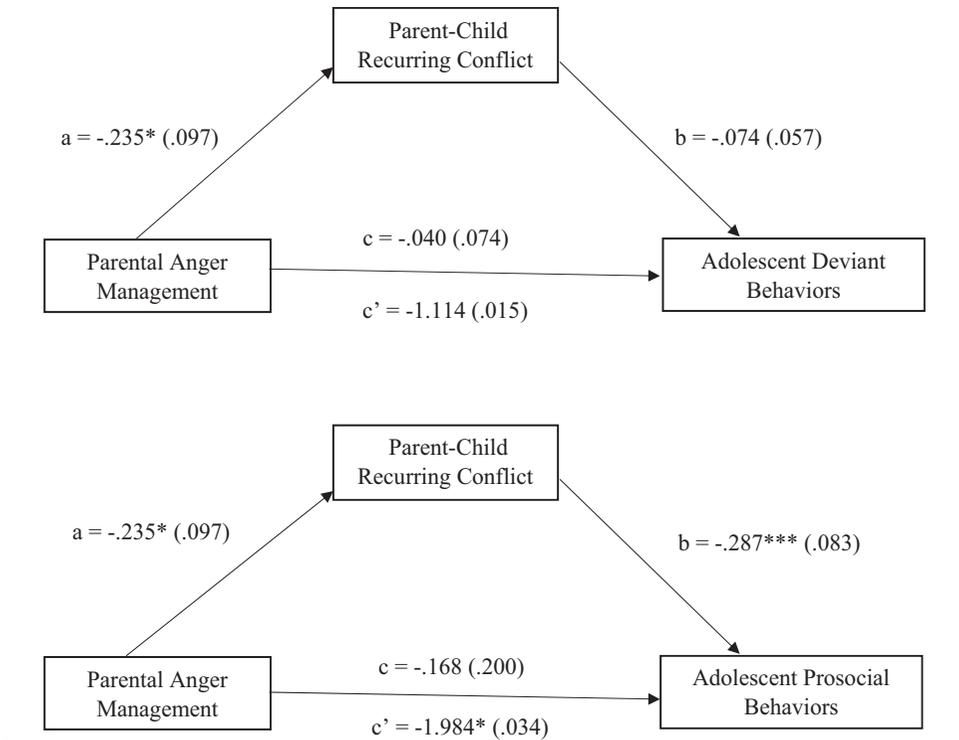


Figure 2: Mediation model results correspond with values in Table 2 and demonstrates the mediation effect of parental anger management on adolescent behaviors by parent-child recurring conflict. Values represent unstandardized regression coefficients; values in parentheses are standard errors. Control variables include parental education, geographic location, child gender, 6th Grade adolescent delinquent behavior and 6th Grade adolescent problem-solving behavior. * $p < .05$. * $p = .001$.**

family members in an effort to account for shared method and reporter variance that often exists in studies that rely on one single parent reporter (Tesheen et al., 2017).

Parental Anger Management

This study highlights the importance of parental anger management during early adolescence in decreasing parent-child recurring conflict later as they transition into high school. Findings revealed that parents who reported greater use of anger management when adolescents were in 6th grade were more likely to report lower levels of parent-child recurring conflict when adolescents were in 9th grade. This finding is consistent with social learning theory and past research explaining that when parents of adolescents model effective emotion regulation strategies as opposed to emotionally dysregulated behaviors, adolescents may learn effective anger and emotion management strategies (Buckholdt et al., 2014; Klimes-Dougan et al., 2007; Shortt et al., 2010), which in turn may lessen parent-child recurring conflict because both parent and child have stronger control over their emotional functioning. Prevention and intervention programs that aim to reduce family conflict should include a strong

parental anger management component for parents of early adolescents (Goddard et al., 2004).

Contrary to our hypothesis, this study found no significant direct association between parental anger management and adolescent deviant or problem-solving behaviors. A lack of a main effect points to the importance of considering underlying processes between parental behaviors and adolescent outcomes, in addition to those examined in this study. Future studies should continue to examine other mediating processes such as adolescents' perceptions of parental rejection (Ibrahim et al., 2015) that may help explain the ways in which parenting is associated with adolescent problem behaviors to inform clinicians who work with families.

The Role of Recurring Parent–Child Conflict

As expected, findings revealed that parent–child recurring conflict mediated the association between parental anger management and adolescent problem-solving behaviors. We found that parents who reported greater use of anger management when adolescents were in 6th grade were likely to report less parent–child recurring conflict when adolescents were in 9th grade. In turn, parents who reported less parent–child recurring conflict in 9th grade were more likely to have adolescents who reported engaging in greater problem-solving behaviors in 11th grade. These findings are consistent with social learning theory and previous research suggesting that when parents use successful anger management strategies, parent–child conflict reduces, and adolescent problem-solving increases because heightened negative emotions such as anger or emotional dysregulation are not interfering with their ability to think and behave in rational ways (Bandura & National Institute of Mental Health, 1986; Schore, 2003; Short, 2016).

Based on study findings, it is recommended that practitioners assist in early identification of at-risk families and in teaching parents perspective taking and empathy in interactions with their adolescents (Diamond et al., 2016; Fetsch et al., 2008; Sanders et al., 2004). It is possible that introducing these strategies as an intervention for parents who struggle to manage anger may reduce parent–child recurring conflict and promote the modeling of positive problem-solving behavior in adolescent children within the family context.

Contrary to our hypothesis, there was no significant direct relation between parent–child recurring conflict in 9th grade and adolescent deviant behavior in 11th grade. Also, the indirect effect of parental anger management in 6th grade on adolescents' deviant behaviors in 11th grade through parent–child recurring conflict in 9th grade was not significant. The lack of associations may be due to our use of parent self-report on recurring conflict. Past research has found direct associations between parent–child conflict and adolescent aggression and alcohol use when parent–child conflict was rated by adolescents (Smokowski et al., 2013, 2017).

Limitations

The current study is not without limitations. First, study measures included reports of parents and adolescent children. Although all respondents offer

important information, a more objective approach would have included a third-party source, such as high school teachers. Second, data was not collected anonymously, as an “interviewer” was gathering the information from family members. This might lead some participants to not be as truthful as they would be on an anonymous, independently completed survey. Third, findings should be interpreted with caution given that mother and father responses for variables of parental anger management and parent-child recurring conflict were combined as opposed to being considered separately. Both family systems theory and previous research guided our decision to capture adolescents’ overall experiences with both parents within the family (Bortz et al., 2019; Mandak et al., 2017). Previous scholars have averaged mothers’ and fathers’ parenting scores within a family context (Fosco et al., 2014; Halgunseth et al., 2013; Yang et al., 2021). However, future research should consider analyzing mothers and fathers scores separately on these variables, which might provide nuanced findings. Fourth, families participating in the study were predominantly European American living in rural areas. Thus, findings cannot be generalized to more diverse populations. Fifth, results yielded small effect sizes (see Table 2). This suggests that factors other than those included in the current study should be examined, such as the influence of peers. Sixth, small non-significant paths between parental anger management and adolescent outcome variables may indicate that additional research is needed to better understand the effects of parental anger management on adolescent behaviors. In the current study, the lack of significant associations may be due to other mechanisms not identified in this study or the presence of moderation by subgroup membership, which this study did not examine. Seventh, although the longitudinal study design allowed for the examination of these issues over time, we did not examine bidirectional associations of influence within this longitudinal dataset. While adolescents may be the most accurate reporters of their own deviant behavior because they may not share this information with their parents (Damour, 2017), another limitation to this study is the potential of social desirability (Ranjan & George, 2014). Future studies should consider having parents report on adolescent’s problem-solving behaviors and adolescent’s reporting on parents’ anger management behaviors to reduce the social desirability bias. A final limitation of the current study is that we did not account for other factors (e.g., temperament, genetics, environmental factors, sources of familial stress) that might increase emotion dysregulation for both adolescents and their parents.

TABLE 2: Relations Among Parental Anger Management, Parent-Child Recurring Conflict, and Adolescents’ Behaviors Corresponding to Figure 1

	<i>Path A</i>	<i>Path B</i>	<i>Path C</i>	<i>Path C'</i>
Deviant behavior	-.235 (.097)*	-.074 (.057)	-.040 (.074)	-1.144 (.015)
Problem-solving behavior	-.235 (.097)*	-.287 (.083)***	-.168 (.200)	-1.984 (.034)*

NOTE: Values represent unstandardized regression coefficients; values in parentheses are standard errors. Control variables include parental education, geographic location, child gender, 6th Grade adolescent delinquent behavior and 6th Grade adolescent problem-solving behavior. * $p < .05$. *** $p = .001$.

CONCLUSION

Guided by social learning theory, this study provides initial evidence suggesting that parental use of anger management during early adolescence decreases parent-child recurring conflict and promotes adolescent problem-solving behaviors during adolescent years. Based on the results of the current study, parenting programs may consider teaching parents of adolescents strategies for managing feelings and expressions of anger, as well as teaching both parents and adolescents skills for reducing recurring conflict at home. Future studies are needed to identify effective and useful strategies for reducing parental anger and parent-child recurring conflict, as well as explore alternate mechanisms that may explain the association between parental anger management and adolescent deviant behaviors.

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AUTHOR CONTRIBUTIONS

The first author conducted the data analysis and wrote the article for publication. The second author planned and supervised the data analysis and contributed to revising the article for publication. The third author supervised data analysis and revised the article for publication. The fourth author revised the article for publication.

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