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Delinquent-Oriented Attitudes Mediate the Relation Between Parental Inconsistent Discipline and Early Adolescent Behavior

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Abstract

Although substantial research supports the association between parental inconsistent discipline and early adolescent behaviors, less is understood on mechanisms underlying this relation. This study examined the mediating influence of delinquent-oriented attitudes in early adolescence. Using a longitudinal sample of 324 rural adolescents and their parents, findings revealed that inconsistent discipline in 6th grade predicted an increase in adolescent delinquent-oriented attitudes by 7th grade which, in turn, predicted both an increase in early adolescent antisocial behaviors and a decrease in socially competent behaviors by 8th grade. Therefore, it appears that accepting attitudes toward delinquency may in part develop from experiencing inconsistent discipline at home and may offer a possible explanation as to why early adolescents later engage in more antisocial and less socially competent behaviors. Findings may inform family-based preventive intervention programs that seek to decrease behavior problems and promote social competence in early adolescents.

Keywords

Inconsistent Discipline; Early Adolescence; Antisocial Behaviors; Social Competence; Attitudes

According to social learning theory, a major influence on adolescent behavior is parents' use of consistent or inconsistent discipline (Bandura & Walters, 1959). Inconsistent discipline has been defined as the lack of follow-through in maintaining and adhering to rules and standards of conduct for children's behavior (Melby et al., 1998). Substantial research exists supporting the association between parents' inconsistent discipline and increased risk of adolescents' antisocial behaviors (e.g., Edens, Skopp, & Cahill, 2008; Loeber, Green, Keenan, & Lahey, 1995; Patterson, 1982; Sampson & Laub, 1993; Simons, Wu, Conger, & Lorenz, 1994; Stouthamer-Loeber & Loeber, 1986).

Less is understood, however, on the impact inconsistent discipline has on adolescents' socially competent behaviors (Eisenberg & Valiente, 2002). While antisocial and prosocial

behaviors are often inversely correlated (Bandura, Barbaranelli, Caprara, & Pastorelli, 1996; Carlo, Crockett, Wilkinson, & Beal, 2011), it is important to differentiate between both forms of adolescent behaviors. Abstaining from deviant behaviors does not in itself indicate participation in socially competent behaviors, such as sharing, problem solving, and forming positive relationships (Caprara & Pastorelli, 1993; Johnson & Menard, 2012).

In addition, minimal research has examined whether socio-cognitive mechanisms such as adolescents' delinquent-oriented attitudes influence the relation between parental inconsistent discipline and adolescent behavior. According to social cognitive theory, adolescent behavior is regulated by two major sources of sanctions: social sanctions and self-sanctions. Adolescents refrain from antisocial behavior because they fear punishment and social censure, and because such behaviors may activate self-censure such as anticipatory guilt reactions. On the other hand, adolescents may enact prosocial behaviors because they have learned that these behaviors elicit positive social reinforcement and because they bring self-satisfaction and self-respect. Therefore, the overall consistency in which discipline is applied in the home may influence adolescents' development of social- and self-sanctions and hence, their attitudes and decisions to engage in antisocial or prosocial behavior (Bandura, 1986; Bandura et al., 1996).

Numerous studies on parental inconsistent discipline have used measures that combine items of parental inconsistency with items of parental harshness and/or rejection (e.g., Brody et al., 2003; Edens et al., 2008; Manongdo & Ramirez, 2011; Loeber & Dishion, 1983; Pfiffner, McBurnett, Rathouz, & Judice, 2005; Sampson & Laub, 1993; Simons, Chao, Conger, & Elder, 2001; Simons, Johnson, & Conger, 1994; Simons, Whitbeck, Beaman, & Conger, 1994), thereby making it difficult to differentiate between the influence of inconsistency on adolescent behavior from that of feelings of rejection from experiencing parental harshness. The coercion model, for example, developed by Patterson and colleagues (Patterson, 1976; 1982; 2008; Patterson, Reid, & Dishion, 1992; Snyder & Patterson, 1995), views deviancy in adolescence as behavior that has been reinforced and trained by erratic and harsh parents. The model describes a reinforcement trap or coercive cycle in which parents negatively reinforce adolescent aggression by withdrawing discipline or by attempting to match or out-match the child's aggression. In these escalating cycles, adolescent prosocial behavior is either ignored or responded to harshly by parents (Patterson, DeBaryshe, & Ramsey, 1989).

A socio-cognitive framework may offer an alternate perspective as to how inconsistent discipline influences adolescents' engagement in antisocial and socially competent behaviors. Using a longitudinal study of rural families, this study seeks to address gaps in the literature by exploring whether the relation between inconsistent discipline and delinquent-oriented attitudes influences antisocial and prosocial behaviors in early adolescence. The current study contributes to past research by: (a) attending to *both* prosocial behaviors and antisocial behaviors; (b) examining the role of adolescent attitudes in the relation between inconsistent discipline and adolescent behaviors; (c) using a refined measure of inconsistent discipline by excluding items on parental harshness and rejection; and (d) testing for the robustness of all findings from families with boys and families with girls. Findings may extend current understanding of family relationships, assist in early-identification of at-risk families, and advise family-based preventive intervention programs.

Inconsistent Discipline and Adolescent Behaviors

Social learning theory proposes that adolescents learn behaviors by experiencing, observing, and interacting with individuals in their environment. Parents, in particular, serve as important socializing agents for adolescents, especially in their role as disciplinarians. Through consistent use of reward and discipline, parents teach adolescents what behaviors

are considered acceptable versus unacceptable. Over time, adolescents who experience consistent parental discipline engage in acceptable prosocial behaviors because they develop the ability to foresee future consequences. If discipline is not applied consistently and adolescents perceive that there is a chance that parental punishment can be eluded, they may be more likely to engage in transgressive behaviors (Bandura, 1986; Stouthamer-Loeber & Loeber, 1986).

Using experimental designs, past research identifies a causal relation between inconsistent discipline and children's aggression (Acker & O'Leary, 1996; Bandura & Walters, 1959; Sampson & Laub, 1993; Sawin & Parke, 1979; Snyder & Patterson, 1995). Research continues to support the directionality of this relation by using longitudinal designs. Loeber et al. (1995) found that parents' use of inconsistent discipline when boys were 7–12 years old predicted conduct behavior problems six-years later. For both early- and late-onset delinquents, Simons, Wu, et al. (1994) found that ineffective parenting (which included items of inconsistent discipline) assessed when adolescents were in 7th grade, was indirectly associated with criminal justice system involvement three years later via its influence on deviant peer affiliation and oppositional conduct disorder. In their sample of Mexican American adolescents in high school, Manongdo and Ramirez (2011) found that adolescents' perceptions of inconsistent discipline predicted increases in their own externalizing behaviors one year later. Lastly, Tildesley and Andrews (2008) found that highly inconsistent parental discipline when children were in 1st grade predicted intentions to use alcohol when children were in 8th grade.

Comparatively less research has examined the association between inconsistent discipline and adolescent prosocial behavior (Eisenberg & Valiente, 2002). In European- and Mexican American families, Ruiz, Roosa, and Gonzales (2002) found a negative relation between maternal inconsistent discipline and adolescent self-esteem, which is often related to prosocial behavior. This relation, however, was evident in higher, but not lower, socio-economic families.

Inconsistent Discipline and Adolescent Attitudes

Social learning theory also contends that adolescent behavior is influenced by abstract modeling or standards of conduct that adolescents internalize from observing behaviors and their respective outcomes in the environment (Bandura, 1999). Adolescents observe which behaviors in their environment lead to reinforcement and punishment, and then use these observations as sources of information to help them abstract rules, develop their own standards of conduct, and set personal goals (Bandura, 1986). They then generalize these rules to other areas of their lives that govern their behavior (Bandura et al., 1996; Bandura, 1999; Bandura, Caprara, Barbaranelli, Pastorelli, & Regalia, 2001).

Because parents are often responsible for establishing and enforcing behavioral norms in the family, it follows that adolescents' personal standards of conduct may be influenced by observations and interactions with their parents. In the context of consistent discipline, adolescents are held responsible for their actions and may learn that there are consequences for misbehavior. If adolescents are held to high external standards of conduct, they may also internalize and espouse high personal standards of conduct. Over time, they may come to perceive themselves as individuals who respect and obey rules as a matter of principle and may rely less on parental limits to govern their behavior (Bandura et al., 1996; Bandura et al., 2001).

When discipline is not applied consistently, however, adolescents may view external standards of conduct as ambiguous or inconsequential and, as a result, may develop more accepting attitudes toward a range of antisocial behaviors (Bandura, 1999). Parents who do

not enforce rules consistently may relay the message to adolescents that rules or external standards of behavior are not essential and lack consequences. Thus, in this context, adolescents may adopt what they perceive to be their parents' accepting attitudes toward the participation of antisocial acts, and these standards may serve as guides for future action (Bandura et al., 1996).

Adolescent Attitudes and Adolescent Behavior

Adolescents' decision to participate in antisocial behaviors may also be explained by the concept of moral disengagement (Bandura et al., 1996). Moral disengagement is the ability to minimize the effects of one's detrimental conduct. If the harmful effect of a behavior can be minimized or ignored, the adolescent sees little reason for self-sanctions, such as guilt, to be activated. Thus, the ease in which adolescents can morally disengage from transgressive behaviors may explain high engagement in antisocial behavior and low engagement in socially-competent behavior.

Past research has assessed moral-disengagement according to the *attitudes* that adolescents hold toward various delinquent behaviors. Research has found that high-moral disengagers, who hold more accepting attitudes toward delinquent behaviors, feel less guilt over injurious conduct, participate in less socially competent behaviors, and display greater levels of violence, substance use, theft, and delinquency, than low-moral disengagers, who hold less accepting attitudes toward delinquent behaviors (Bandura, 1999; Bandura et al., 1996; Bandura et al., 2001; Shulman, Cauffman, Piquero, & Fagan, 2011). Wells et al. (1992) examined the influence that attitudes toward conventional norms, such as the acceptability of cheating at school, had on substance use in a sample of 5th graders. They found that, for most students, attitudes about the acceptability of cheating, stealing, and breaking the rules espoused in the beginning of the school year, affected the likelihood that they had initiated alcohol, tobacco, or marijuana use by the end of the school year.

Participation in prosocial behaviors may also be explained by theories of moral agency. Adolescents who have internalized high moral standards will refrain from behaving in ways that violate these standards because such behavior will bring self-censure and guilt. Engaging in prosocial behaviors may provide adolescents with satisfaction and a sense of self-worth because such conduct is in accordance with their internal moral standards (Bandura et al., 1996). Bandura et al. (1996) examined the association between moral disengagement and prosocial behaviors among early adolescents in 5th to 8th grade. Prosocial behaviors consisted of sharing, helping, and cooperating with others and were assessed across multiple reporters, including adolescents, peers, teachers, and parents. Across all reporters, the authors found a negative relation between moral disengagement and prosocial behavior. They also found that participants who were prosocially oriented tended to anticipate guilt reactions for detrimental acts and were less inclined to engage in deviant behavior.

The Interplay among Parenting, Adolescent Attitudes, and Adolescent Behaviors

Few studies have focused on the interplay among parenting, adolescents' delinquent-oriented attitudes, and adolescents' behavior. White (2000) examined the relation between family socialization processes and adolescent moral judgment and found that positive parenting practices, such as communication, positively influenced adolescent moral decision-making. Also, Pelton, Gound, Forehand, and Brody (2004) examined whether moral disengagement mediated the relation between positive parenting (i.e., high monitoring, high structure, and high support) and preadolescent behavior in a large sample

of single-parent African American families. Consistent with social learning theory, they found that positive parenting was related to lower levels of moral disengagement among preadolescents, which in turn, was negatively related to delinquent behavior 15-months later.

The aim of this study is to examine whether adolescents' delinquent-oriented attitudes in 7th grade mediate the relation between parental inconsistent discipline in 6th grade and adolescent behavior in 8th grade. The study's goal is grounded in social learning theory, which stipulates that social influences operate through psychological mechanisms to produce behavior effects (Bandura, 1997). Therefore, based on social learning theory, we hypothesize that greater parental inconsistent discipline will be related to more accepting delinquent-oriented attitudes in adolescents. In turn, more accepting delinquent-oriented attitudes will be associated with greater adolescent participation in antisocial behaviors and less engagement in socially-competent behaviors.

Methods

Data for the current study are drawn from a randomized-control, six-year, longitudinal study titled PROSPER (PROmoting School-community-university Partnership to Enhance Resilience), in which 28 rural communities in Iowa and Pennsylvania were randomly assigned to either a treatment or comparison condition. Communities in the treatment condition received evidence-based programs for decreasing substance use, promoting positive youth development, and building community-capacity, whereas communities assigned to the comparison condition did not receive these additional evidence-based programs. Prior to randomization, communities were matched on school district size and geographic location. Communities in which half of the population was either employed by or attending a University were excluded, as were communities involved in other university-affiliated youth prevention programs (Spoth, Clair, Greenberg, Redmond, & Shin, 2007).

PROSPER collected self-report data in schools annually from two cohorts of adolescents starting in 6th grade and ending in 12th grade. A second cohort of communities was added one year after recruitment of the first cohort to examine robustness of intervention effects. Twenty-percent of the second cohort was invited to participate in additional home-based interviews with parents and adolescents. In the current study, we only examined data collected from the control condition of the second cohort. In so doing, we eliminate the influence of the intervention since the families included in this study did not reside in communities in which the intervention was delivered.

Sample

This study examined three time points of data on 324 adolescents and their parents who were assigned to the comparison condition of PROSPER and who participated in both the school and home interview portions of the study. At Time 1, adolescents were in the spring semester of 6th grade. At Time 2, adolescents were in the spring semester of 7th grade. At Time 3, students were in the spring semester of 8th grade. These time points were selected from the PROSPER data set because they reflect the developmental period of early adolescence, a critical period of time in which children experience a heightened sensitivity to social influences (Benson & Buehler, 2012; DeRose & Brooks-Gunn, 2006), and because limiting time points minimizes the effect that the transition to high school may have on study findings.

The retention rate in families across all three time points was 92.3%. Retention rate did not vary systematically by site or by any of the study's demographic characteristics.

Nevertheless, all analyses in this study controlled for the influences of site and demographic characteristics.

At Time 1, adolescents in the control group were on average 12.0-years old ($SD = .44$); 50% were female and 90% were European American. On average, parents completed one year of formal education beyond high school; 80% of parents were married, and combined family income was \$52,000 per year. About 61% of families lived in Iowa and 39% percent lived in Pennsylvania.

Procedure

Data were collected in the homes of families annually using paper-pencil surveys starting in 6th grade and ending in 9th grade. For less than 10% of the sample, interview questions were read by staff members to participants with lower literacy skills. To ensure confidentiality, adolescents and parents were asked to complete their surveys in different rooms and to turn in their surveys to the research assistant separately, without sharing or discussing their responses with each other. For their participation, mothers and fathers received a combined \$125 and adolescents received \$75. As the study neared completion, additional gift cards of \$20 were offered as bonus incentives.

Measures

Inconsistent discipline—At Time 1, when adolescents were in 6th grade, mothers and fathers reported via home interviews on their own use of inconsistent discipline (McGruder, Lorenz, Hoyt, Ge, & Ruth, 1992; Simons, Wu, et al., 1994; Spoth, Redmond, & Shin, 1998). The four items included: (1) “How often do you give up when you ask this child to do something, and he or she doesn’t do it right away?” (2) “Once a discipline has been decided, how often can he or she get out of it?” (3) “How often do you discipline this child for something at one time, and then at other times not discipline him or her for the same thing?” and (4) “When you discipline this child, how often does the kind of discipline you use depend on your mood?” Items were scored on a 5-point scale (1 = *always*, 5 = *never*). Scores for mothers and fathers were reverse coded and an average was calculated across parents. Cronbach’s alphas were .70 (combined mothers’ and fathers’ report), .69 (mothers’ report), and .65 (fathers’ report).

In assessing inconsistent discipline, we used a composite score that averaged across mothers’ and fathers’ reports of their use of inconsistent discipline. We did so because we believed it was important to capture reports from both parents rather than just one, as both mothers and fathers are likely engaging in discipline practices with their children. Thus, using an average score of parental inconsistent discipline may provide a more accurate measure of overall discipline than just using a score from one parent.

Delinquent-oriented attitudes—At Time 1 and 2, when adolescents were in 6th and 7th grades, adolescents reported via school interviews on their attitudes toward 14 delinquent behaviors (Wells et al., 1992). Specifically, they were asked, “How wrong do you think it is for someone your age to do the following things...?” Fourteen items followed such as shoplifting, lying to parents, cheating on a test, and skipping school. Items were scored on a 4-point scale (1 = *not at all wrong*, 4 = *very wrong*). Scores were reversed coded, and a mean was calculated. Higher mean scores represented more delinquent-oriented attitudes. Cronbach’s alphas were .89 (6th grade) and .91 (7th grade).

Deviant behaviors—At Time 1 and 3, when adolescents were in 6th and 8th grade, adolescents were asked via school interviews, “During the past 12 years, how many times have you...?” A list of 12 deviant behavior items followed such as stealing, carrying a

hidden weapon, throwing objects at others to scare them, and breaking into a building (Elliott, Huizinga, & Ageton, 1985; Simons, Wu, et al., 1994). Items were scored on a 5-point scale (1 = *never*, 5 = *five or more times*), and a mean score was computed. Cronbach's alphas were .85 (6th grade) and .89 (8th grade).

Substance initiation—At Time 1 and 3, adolescents also reported via school interviews on their substance initiation (Spoth, Redmond, & Shin, 2001). The four items included, (1) “Have you ever had a drink of alcohol?” (2) “Have you ever drunk more than just a few sips of alcohol?” (3) “Have you ever smoked a cigarette?” and (4) “Have you ever smoked marijuana (grass, pot) or hashish (hash)?” Items were scored on a dichotomous scale (0 = *no*, 1 = *yes*), and a mean was calculated. Cronbach's alphas were .61 (6th grade) and .73 (8th grade).

Problem solving—At Time 1 and 3, adolescents reported via school interviews on the frequency with which they participated in five problem solving behaviors (Bugen & Hawkins, 1991; 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*), and a mean score was computed. Cronbach's alphas were .93 (6th grade) and .94 (8th grade).

School adjustment and bonding—At Time 1 and 3, adolescents reported via school interviews on five positive school adjustment and bonding indicators (Simons, Whitbeck, Conger, & Conger, 1991; Oelsner, Lippold, & Greenberg, 2011): (1) “I try hard at school,” (2) “I get along well with my teachers,” (3) “I feel very close to at least one of my teachers,” (4) “Grades are important to me,” and (5) “I like school a lot.” Items were scored on a 5-point scale (1 = *never true*, 5 = *always true*). A mean score was computed. Cronbach's alphas were .76 (6th grade) and .78 (8th grade).

Results

Means, standard deviations, and correlations for principal study variables are presented in Table 1. All variables had normal distributions, except for deviant behaviors which was log transformed before being included in any analyses. Log transformation modestly reduced skewness (3.2 to 2.3) and kurtosis (11.1 to 5.6), but not sufficiently; hence, caution should be taken in interpreting results pertaining to this variable.

Plan of Analysis

Regression equations were estimated to test the hypotheses that adolescent delinquent-oriented attitudes mediated the relation between inconsistent discipline and adolescent antisocial behaviors (i.e., deviant behaviors and substance initiation) and between inconsistent discipline and adolescent socially competent behaviors (i.e., problem solving, and school adjustment and bonding). A conceptual diagram of these analyses is presented in Figure 1. Results of the analyses are summarized in Table 2. To achieve more precise estimates of the relations of interest, family income, parent education, parent marital status, adolescents' sex, and state of family residence were included as covariates in all regression equations. Before including adolescents' sex as a control variable, we tested the robustness of all relations across youth sex to determine whether the same pattern of relations applied for boys and girls and found no differences (all *ps* > .10).

First, in separate regression equations, each of the four adolescent outcomes in 8th grade (i.e., deviant behavior, substance initiation, problem solving, and school adjustment and bonding) was regressed on parental use of inconsistent discipline in 6th grade, the adolescent behavior/outcome measure in 6th grade, and the family demographic characteristics. Path C in Figure 1 is the standardized regression coefficient for inconsistent discipline from this equation. It represents the effect of parental use of inconsistent discipline on change in adolescents' behavior by 8th grade, controlling for initial levels of that behavior in 6th grade, as well as the family demographic characteristics.

Second, adolescent delinquent-oriented attitudes in 7th grade were regressed on parental use of inconsistent discipline in 6th grade, adolescent delinquent-oriented attitudes in 6th grade, a measure of the adolescent behavior/outcome variable in 6th grade, and the family demographic characteristics. Path A in the diagram is the standardized regression coefficient for inconsistent discipline from this equation. It represents the effect of parental use of inconsistent discipline on change in adolescents' delinquent-oriented attitudes by 7th grade, controlling for the level of adolescents' delinquent-oriented attitudes in 6th grade, as well as the adolescent behavior in 6th grade and the family demographic characteristics.

Third, in separate regression equations, each of the four adolescent outcomes in 8th grade (i.e., delinquent behavior, substance initiation, problem solving behaviors, and school adjustment and bonding) was regressed on delinquent-oriented attitudes in 7th grade, parental use of inconsistent discipline in 6th grade, as well as the control variables which include the adolescent behavior/outcome measure in 6th grade, delinquent-oriented attitudes in 6th grade, and the family demographic characteristics. Path B in the diagram is the standardized regression coefficient for delinquent-oriented attitudes in 7th grade from this equation. It represents the unique effect of change in delinquent-oriented attitudes by 7th grade on change in adolescent behaviors by 8th grade, controlling for the initial levels of both delinquent-oriented attitudes and adolescent behaviors in 6th grade as well as parental use of inconsistent discipline and the family demographic characteristics. Path C¹ also comes from this final regression equation. It now represents the residual effect of parental use of inconsistent discipline on adolescents' behavior in 8th grade after accounting for our mediator (i.e., delinquent attitudes in 7th grade) and a host of control variables such as initial levels of that behavior in 6th grade, adolescents' delinquent-oriented attitudes in 6th grade, and the family demographic characteristics.

Fourth, the statistical significance of the indirect or mediated effect was tested. The mediation of the relation between inconsistent discipline and adolescent behavior by delinquent-oriented attitudes is mathematically equivalent to the difference between Path C and Path C¹ or the product of Path A and Path B. The statistical significance of this mediated effect (Sobel, 1982) was assessed with the PRODCLIN program (Tofighi & MacKinnon, 2011), which constructs asymmetric confidence intervals for the mediated effect based on the distribution of the Path A * Path B product. In contrast to Baron and Kenny (1986), Mackinnon and Fairchild (2009) argued that significant mediation may exist despite there being no significant relation between the independent predictor and distal outcome, which is depicted as Path C in Figure 1. Thus, in this study, mediation was tested regardless of the statistical significance of that relation.

Tests of Hypothesis

There was no statistically significant direct relation between parental use of inconsistent discipline in 6th grade and adolescents' deviant behaviors in 8th grade ($\beta = .04$, $SE = .05$). However, there was a small, but statistically significant relation between parental use of inconsistent discipline in 6th grade and adolescents' delinquent-oriented attitudes in 7th grade, ($\beta = .15$, $SE = .06$, $p < .01$). In addition, there was a moderate and statistically

significant relation between adolescents' delinquent-oriented attitudes in 7th grade, and their deviant behavior in 8th grade, ($\beta = .28, SE = .05, p < .001$). The indirect effect of parental use of inconsistent discipline on adolescents' deviant behaviors through adolescents' delinquent-oriented attitudes was statistically significant ($p < .05$) with a lower and upper confidence limit between .01 and .08.

Similarly, there was no statistically significant direct relation between parental use of inconsistent discipline in 6th grade and adolescents' substance use initiation in 8th grade, ($\beta = .07, SE = .10$), but there was a statistically significant relation between parental use of inconsistent discipline in 6th grade and adolescents' delinquent-oriented attitudes in 7th grade, ($\beta = .14, SE = .06, p < .05$). In addition, there was a statistically significant relation between adolescents' delinquent-oriented attitudes in 7th grade and their substance use initiation in 8th grade ($\beta = .41, SE = .11, p < .001$). The indirect effect of parental use of inconsistent discipline on adolescents' substance use initiation through adolescents' delinquent-oriented behaviors was also statistically significant ($p < .05$) with a lower and upper confidence limit between .01 and .12.

There was also no statistically significant direct relation between parental use of inconsistent discipline in 6th grade and adolescents' problem solving behaviors in 8th grade ($\beta = -.04, SE = .06$). Again, however, there was a statistically significant relation between parental use of inconsistent discipline in 6th grade and adolescents' delinquent-oriented attitudes in 7th grade, ($\beta = .19, SE = .06, p < .01$). And, as expected, there was a statistically significant and negative relation between adolescents' delinquent-oriented attitudes in 7th grade and their problem solving behaviors in 8th grade ($\beta = -.18, SE = .07, p < .001$). The indirect effect of parental use of inconsistent discipline on adolescents' problem solving behaviors was also statistically significant ($p < .05$) with a lower and upper confidence limit between $-.07$ and $-.01$.

Finally, a trend existed between parental use of inconsistent discipline in 6th grade and adolescents' school adjustment and bonding in 8th grade, ($\beta = -.11, SE = .06, p < .10$). There was a statistically significant relation between parental use of inconsistent discipline in 6th grade and adolescents' delinquent-oriented attitudes in 7th grade, ($\beta = .18, SE = .06, p < .01$). And, as expected, there was a statistically significant and negative relation between adolescents' delinquent-oriented attitudes in 7th grade and their school adjustment and bonding in 8th grade, ($\beta = -.22, SE = .07, p < .01$). The indirect effect of parental use of inconsistent discipline on adolescents' school adjustment and bonding was statistically significant ($p < .05$) with a lower and upper confidence limit between $-.08$ and $-.01$.

In addition to testing the composite measure of inconsistent discipline across both parents, we also examined inconsistent discipline separately for mothers and fathers. However, there were no significant relations between inconsistent discipline for mothers or fathers and any other measures in the study. Thus, tests of mediation could not be conducted separately for mother or fathers (Mackinnon & Fairchild, 2009).

Discussion

Although substantial research exists supporting the association between inconsistent discipline and adolescent behaviors, less is known about the role adolescent attitudes play in this relation. Using a longitudinal design, this study found that adolescents' delinquent-oriented attitudes mediated the relation between inconsistent discipline and adolescents' antisocial and socially competent behaviors. Specifically, parents who reported more inconsistent use of discipline when adolescents were in 6th grade were likely to have adolescents with increasingly accepting attitudes towards delinquency by 7th grade. In turn,

adolescents who reported more delinquent-oriented attitudes in 7th grade were likely to engage in more antisocial behavior (i.e., deviant behavior and substance initiation) and less socially competent behavior (i.e., problem solving and school adjustment and bonding) by 8th grade.

In our analyses, we controlled for initial levels of adolescents' delinquent-oriented attitudes and initial levels of the outcome measure of interest. This increases the likelihood that the hypothesized direction of effects among constructs in our statistical models was correct (Cole & Maxwell, 2003; MacKinnon, 2008). Thus, parental use of inconsistent discipline precedes changes in adolescents' delinquent-oriented attitudes between 6th and 7th grades, and those changes in adolescents' delinquent-oriented attitudes precede changes in adolescent behavior between 6th and 8th grades.

Unlike past research, this study found no significant direct relation between inconsistent discipline and adolescent behaviors. The lack of associations may be due to our assessment of inconsistent discipline. Past research that has found significant direct effects between inconsistent discipline and adolescent behavior combined items of inconsistency with items of harshness, rejection, and/or low warmth. For example, Edens et al. (2008) measured inconsistent discipline using both inconsistent (e.g., *parent soon forgets a rule they have made*) and rejection (e.g., *parent has beaten me up*)-oriented parenting items and found that higher inconsistent discipline was related to increased antisocial behaviors among juvenile offenders with low affective deficits. Also, Brody et al. (2003) measured harsh-inconsistent parenting using 10-items that assessed both parental harshness (e.g., *how often does your parent shout or hit*) and inconsistency (e.g., *how often do your parents punish a misbehavior at one time but not another*) and found that harsh-inconsistent parenting and low-levels of nurturant-involved parenting were associated with younger siblings' conduct disorder symptoms, and older siblings' problematic attitudes and behavior in a sample of African American families. Similarly, Sampson and Laub (1993) measured erratic/harsh discipline according to the degree to which parents used both inconsistent discipline and harsh/threatening behavior and found that erratic/harsh discipline was positively associated with adolescent delinquency. Lastly, Simons and colleagues have conducted several studies in which scales of inconsistent discipline were combined with other parenting scales such as warmth and harshness to develop a broader parenting construct such as parenting quality, parent involvement, or inept parenting (e.g., Simons, Chao, et al. 2001; Simons, Johnson, et al., 1994; Simons, Whitbeck, et al., 1994). In each of these studies, the broad parenting construct predicted antisocial behaviors among early adolescents. Thus, unlike previous studies, our measure of inconsistent discipline only included items directly relating to inconsistency of discipline (see Method section). Therefore, it is possible that the combination of inconsistent and harsh parenting may be directly related to adolescent behaviors, whereas inconsistent discipline alone affects adolescent behavior indirectly through socio-cognitive mechanisms such as adolescent attitudes.

An alternative explanation for the lack of direct relations comes from Mackinnon (2008) and MacKinnon and Fairchild (2009) who explain that mediation can exist in the absence of a significant relation for several reasons. They explain that it is common in social science for the statistical test of the direct relation to have less power than the test of the links in the mediation model, especially when examining relations across larger periods of time. Stronger effects may have been found if measures were spaced more closely in time. In addition, coercion theory suggests that families may have been already engaging in coercive cycles by the time children had reached 6th grade (Patterson, Reid, & Dishion, 1992). Because we controlled for baseline levels of the dependent variables in this study, findings reflect whether inconsistent discipline predicted residual change in antisocial behavior. Thus, it is possible that stronger direct effects may have existed earlier in the parent-child

relationship. Lastly, small direct effects may be due to inconsistent mediation in which the mediated effect may differ in direction depending on various unidentified subgroups (MacKinnon, 2008; MacKinnon & Fairchild, 2009).

Social learning Theory and Adolescent Antisocial Attitudes

Findings from this study are consistent with social learning theory, which proposes that adolescent learning is shaped primarily by their interactions with and observations of the environment. Perhaps when parental discipline is consistently applied, adolescents learn that there are consequences for misbehavior. When parental discipline is not consistently applied, however, children may begin to perceive standards of conduct as ambiguous (Piffner et al., 2005) and develop tolerant attitudes toward a wide range of antisocial behaviors. In sum, adolescents may be more likely to develop accepting attitudes toward antisocial behaviors if they come from homes in which guidelines for appropriate behaviors are not consistently reinforced.

Findings may also correspond with theories of moral agency (Bandura, 1999; Bandura et al., 1996). In this study, adolescents who had engaged in prosocial behavior and refrained from participating in antisocial behavior may have done so because they had internalized society's standards of conduct and were striving to avoid both external sanctions (e.g., punishment) and self-imposed or internal sanctions (e.g., guilt). Research has found that prosocially-oriented adolescents are more likely to endorse societal norms, rate lower on moral disengagement, and experience anticipatory guilt toward deviant behaviors compared to adolescents with antisocial tendencies (Bandura et al., 1996; Eisenberg, Carlo, Murphy, & Van Houten, 1995).

On the other hand, adolescents in this study who had engaged in antisocial behaviors may have been able to circumvent internal sanctions by morally disengaging, applying self-exonerating justifications, and reconstructing antisocial acts in ways that made them seem less wrong or not wrong at all (Shulman et al., 2011). In their longitudinal study, Shulman et al. (2011) found that adolescent offenders who demonstrated a greater acceptance of moral violations were more likely to engage in antisocial behavior over time than their peers who demonstrated less tolerance for moral violations.

Implications for Family-Based Preventive Intervention Programs

Findings from this study support socio-cognitive theory and imply that the consistency in which discipline is applied at home may influence the development of adolescents' delinquent-oriented attitudes that then guide engagement in later antisocial and socially competent behavior. Thus, preventive intervention programs may seek to identify adolescents with accepting delinquent-oriented attitudes and target parenting resources with their families. Counselors, for example, may focus on increasing the use of parental consistent discipline in the homes of these families. This may include role-playing or providing concrete strategies that foster parents' regular enforcement of reasonable rules and routines. Pelton et al. (2004) explained that rules of behavior must be specified and presented in clear and consistent ways to the adolescent in order to be most effective. Thus, strategies provided to parents should help them to explicitly layout clear and appropriate rules of behavior for their adolescents and link those behaviors with corresponding rewards and punishments. Family counselors may also help parents identify reasons for their inconsistency, such as being tired or lacking confidence, in order to address these obstacles and to implement mutually rewarding patterns of behavior in families.

Existing family-based preventive intervention programs that seek to enhance parental use of consistent discipline practices with children in middle childhood or early adolescence

(Dishion & Stormshak, 2009; Kumpfer, Alvarado, Whiteside, & Tout, 2005) may consider including a component to their programs that promotes adolescents' development of social and internal sanctions. For example, programs may seek to increase youth exposure to environments in which positive conventional norms are consistently reinforced or to role models such as program staff members, community volunteers, family counselors, teachers or peers who can support adolescents' internalization of prosocial values by modeling high standards of moral conduct and providing clear consequences for violations of these standards. Thus, adults other than parents may be able to counteract the development of accepting attitudes toward antisocial behavior that may, in part, arise from experience with inconsistent parental discipline.

In addition, programs may seek to implement exercises that strengthen early-adolescents perspective-taking and empathic skills. Bandura and colleagues have found that adolescents are less likely to conduct injurious behaviors, even under high instigation to do so, if they humanize the recipients of their behaviors (Bandura et al., 1996; Bandura, Underwood, & Fromson, 1975). Thus, early detection and early reinforcement of empathic and perspective skills may promote the development of self-sanctions, which may in turn promote prosocial behavior and decrease antisocial behavior in early adolescence.

Strengths and Limitations

The current study contributes to the literature on parenting and adolescent behavior in several ways. First, although several studies exist on the relation between adolescent attitudes and behaviors, this study may be one of the first to identify the association between parental inconsistent discipline and adolescent delinquent-oriented attitudes, and how this relation affects subsequent adolescent behaviors. These findings may offer a possible partial explanation as to *why* adolescents who experience inconsistent discipline in the home later engage in more antisocial and less socially competent behaviors. Second, the study's attention to adolescent social competence is rare in research on inconsistent discipline and addresses an important gap in the literature. Third, the study's operationalization of inconsistent discipline does not include items of parenting harshness; therefore, it does not confound the two constructs. This specificity allows for clearer understanding of the effects of parental inconsistency on adolescent behavior. Fourth, the study's emphasis on underlying *processes* highlights a critical set of adolescent attitudes that could assist in early identification, as well as in family-based preventive intervention programs seeking to reduce behavior problems and increase social competence in adolescents. Finally, the longitudinal design of this study strengthened our ability to examine how behaviors changed over time by controlling for initial levels of delinquent-oriented attitudes and early-adolescents' behaviors.

As with any study, however, this one is not without limitations. First, all measures included in this study were based on parents' and youths' reports. It would have been preferable to include more objective data from other sources. Second, the families participating in this study were predominately European American living in rural communities. It is unclear how much the relations examined in this study were affected by the particular characteristics of those families. Third, all of the relations examined in this study were small in magnitude. Clearly other factors than those included here must contribute to adolescents' delinquent-oriented attitudes and behaviors. Fourth, the small, non-significant direct paths between inconsistent discipline and our measures of adolescent behavior indicate that more research is needed to understand the effects of inconsistent discipline on adolescent social functioning. The lack of significant associations may be due to other unidentified mechanisms or the presence of moderation by subgroup membership. Although we found that the relations examined in this study were comparable for families with boys and

families with girls, these relations might differ for other subgroups within our sample that we did not investigate or in a larger, more representative sample.

Conclusions

Consistent with social learning theory, findings from this study highlight the role adolescent delinquent-oriented attitudes have on the relation between inconsistent discipline and adolescent behavior. Parents who were inconsistent in their discipline were more likely to have adolescents who espoused accepting attitudes toward delinquent behaviors. In turn, these accepting attitudes were associated with more antisocial and less socially competent behavior among adolescents in the following years. Thus, family-based preventive intervention programs that focus on decreasing the use of inconsistent discipline in the home, as well as decreasing adolescent's accepting attitudes toward delinquent-oriented behaviors may be particularly effective in promoting positive development in youth. By making such programs more widely available to all families, we may achieve greater success in reducing antisocial behavior and promoting social competence in early adolescents.

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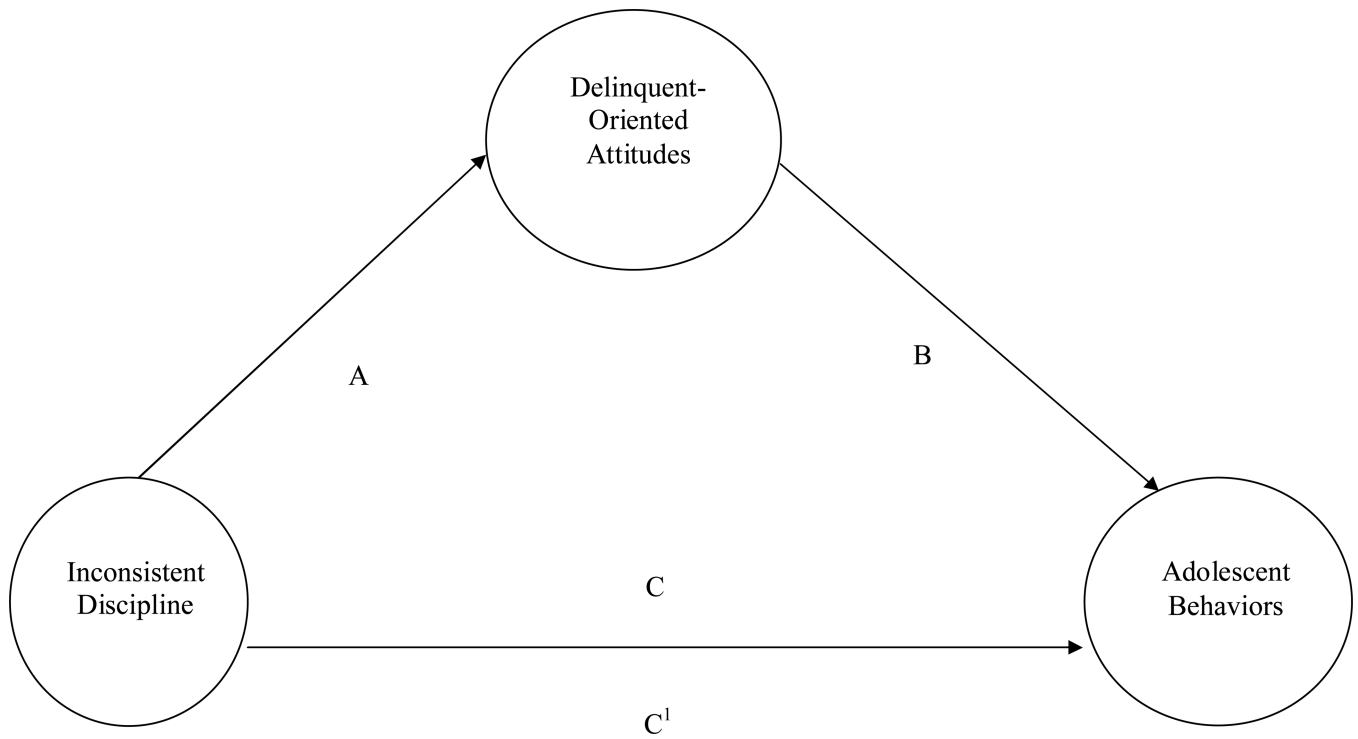


Figure 1. Conceptual figure corresponds with values in Table 2 and demonstrates the mediation effect of parental inconsistent discipline on adolescent behaviors by adolescent delinquent attitudes. Control variables include parental education, marital status, treatment status, location, child gender, Time 1 of delinquent attitudes, and Time 1 of respective dependent variables.

Table 1

Means, standard deviations, and zero-order correlations of study variables

	1	2	3	4	5	6
1. Inconsistent Discipline (T1)		.20**	.18**	.23**	-.13*	-.22*
2. Delinquent-Oriented Attitudes (T2)			.47***	.44***	-.18**	-.33***
3. Deviant Behavior (T3)				.52***	-.28***	-.36***
4. Substance Initiation (T3)					-.31***	-.32***
5. Problem Solving (T3)						.51***
6. School Adjustment and Bonding (T3)						
<i>Mean</i>	5.08	3.63	1.17	1.21	3.67	3.98
<i>SD</i>	.68	.48	.35	1.28	1.08	.84

+ $p < .10$.

* $p < .05$.

** $p < .01$.

*** $p < .001$.

Table 2

Relations Among Parental Use of Inconsistent Discipline, Adolescents' Delinquent-Oriented Attitudes, and Adolescents' Behaviors Corresponding to Figure 1.

	Path A	Path B	Path C	Path C¹
Deviant Behavior	.15** (.06)	.28*** (.05)	.04 (.05)	.01 (.05)
Substance Initiation	.14* (.06)	.41*** (.11)	.07 (.10)	.03 (.09)
Problem Solving	.19** (.06)	-.18** (.07)	-.04 (.06)	-.03 (.06)
School Adjustment and Bonding	.18** (.06)	-.22** (.07)	-.11 ⁺ (.06)	-.07 (.06)

Note:

⁺ $p < .10$.

* $p < .05$.

** $p < .01$.

*** $p < .001$.

Values represent standardized regression coefficients; values in parentheses are standard errors. Control variables include parental education, marital status, treatment status, location, child gender, delinquent-oriented attitudes in 6th grade, and adolescent behavior/outcome measure in 6th grade.