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Parental Behavioral Control as a Moderator between Close Friend Support and Conduct Problems

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Abstract

Objective: Potential moderating effects between parental control and close friend support on youth conduct problems have not been investigated. Goals of this study were to investigate for a possible curvilinear relationship between parental behavioral control and child conduct issues, as well as the potential that parental control will moderate the relationship between friend support and those behaviors.

Design: Surveyed 101 youth and their parents in a small Midwestern United States metropolitan area.

Results: Through hierarchical regression, the current study shows a curvilinear main effect for parent control on conduct problems. Additionally, close friend support is a protective agent only for those youth in families with high and medium levels of parental control, and a risk factor for children from families with low parental control.

Conclusion: Moderate levels of parental control are ideal and low levels of parental control are particularly problematic for youth who are highly engaged with peers.

Keywords: Conduct problems; Friend support; Parental control**Introduction**

People under the age of 18 commit 16.2% of reported violent crime and 26.1% of reported property crime (United States Department of Justice) [1]. Hence, there is a need to understand precursors to delinquency to inform early intervention/prevention. Delinquency can be conceptualized as engaging in conduct problems, consistent with the diagnostic criteria of conduct disorder (CD), according to the International Classification of Diseases (ICD-10; World Health Organization) [2]. The current study investigates the interactive effect of two previously studied protective factors against conduct problems: parental control and close friend support. Specifically, this study elaborates upon previous research by testing the existence of an optimal amount of parental control, defined as parental rule-setting [3,4], and its potential moderating influence on the protective benefits, commonly attributed to close friend support.

Conduct problems

The diagnostic criteria for all three subtypes of CD (Confined to the Family Context, Unsocialized, and Socialized) outlined in the ICD-10 [2], call for marked antisocial behavior such as: cruelty to others or animals, destruction of property, fire setting, stealing, repeated lying, running away from home and severe disobedience. The three subtypes are differentiated by the relationships in a child's life. CD Confined to the Family Context is characterized by conduct problems and disturbed relations at home only. Unsocialized CD is characterized by solitary conduct problems that occur in any environment other than solely at home, and are paired with poor quality friendships. Conversely, Socialized CD is characterized by conduct problems in the presence of meaningful friendships, often with peers who also engage in delinquent acts. Hence, CD exists in a variety of family and peer contexts that may influence the development of conduct problems. This differentiation among types of CD provides interesting clues into factors that may be associated with conduct problems.

Parental control

The present study borrows from the paradigm of parental control put forth by Rollins and Thomas [5]. This paradigm defines parental

control as the means implemented by a parent to adjust a child's behavior. This framework suggests a curvilinear relationship exists between parental control and child conduct problems, with high and low levels acting as risk factors for increased conduct problems and moderate parental control being a protective factor [5]. A recent meta-analysis showing the risks of negligence or excessive parental control supports such a relationship [3].

Parental control can include psychological and behavioral control mechanisms [3]. Psychological control is defined as interfering with a child's mental world (e.g. invalidating feelings, shaming, etc.), and is a significant predictor of elevated conduct problems [6]. Furthermore, psychological control moderates the protective effects that behavioral control can yield [6], and the effects of negative peer relations on adolescent problem behavior [7]. Behavioral control consists of parenting practices used to control a child's behavior, and has been operationalized as monitoring, discipline and rule-setting. As noted below, these forms of behavioral control can act as protective or risk factors for conduct problems, depending upon their dosage and other moderating variables.

Monitoring is any effort made by parents to track their child's behavior. Hoeve et al. [3] meta-analysis found monitoring to have the most significant protective effect against conduct problems of any form of behavioral control. However, as suggested by Rollins and Thomas [5], high levels of monitoring can also increase the risk that youth have drug-using friends [8]. In this case, the authors hypothesize the girls' antisocial associations to be a rebellion against what they may have

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perceived as “overly restrictive” parenting [8]. Next, discipline consists of the consequences that parents impose for problem behavior. While Hoeve et al. [3] found discipline to be a significant protective factor against conduct problems in general, it is also the most likely to lead to conduct problems when at high levels [9]. Additionally, Aunola and Nurmi [6] found the effects of discipline to be moderated by psychological control, with excessive discipline being a significant risk factor only in families with high reports of psychological control [6]. Finally, research conceptualizing behavioral control as rule-setting has also found a significant protective effect, overall [3]. However, similar to the other forms of behavioral control, it has also been shown to be a risk factor when at high levels [10]. The present study uses this form of behavioral control to assess outcomes at different levels of parental control to test the possibility of an optimum level, as theorized by Rollins and Thomas [5]. Furthermore, this study also assesses how this form of parental control affects the relationship between close friend support and conduct problems.

Close friend support

Research assessing the relationship between close friend support and conduct problems is varied. Youth with conduct disorder have been shown to have weak friendships [11,12], and supportive friendships [13]. Friendship support has also predicted conduct problems [14]. Perhaps these varied results are in part explained by research, showing a youths’ view of friendship attachment serving to moderate the protective effects of close friend support on conduct problems. McElhaney et al. [15] found youth who sought out attachment and considered it a salient aspect in a relationship had close friendships, that predicted decreased conduct problems. Conversely, youth who reported close friendships in the presence of elevated rates of conduct problems viewed attachment as unimportant [15]. Similarly, another study found adolescents who expressed a *willingness* to utilize friends as support resources, to be less likely to engage in conduct problems; however, those who actually reported drawing support from friends were more likely to engage in conduct problems [16]. In sum, close friend support may act to protect or expose youth to the risk of engaging in conduct problems, while friendship orientation can moderate this effect. The present study poses a yet unanswered question of how these relationships interact, with parenting behaviors to affect conduct problems.

Parental control and close friend support

Research on parental control and peer behavior reinforce the importance of the present study. For instance, research has shown a pathway where decreased parental monitoring predicts increased youth conduct problems, which subsequently predicts increased best friend conduct problems [17]. Moreover, Vitaro et al. [18] found best friend conduct problems to marginally predict increased child conduct problems at high levels of monitoring, and significantly predict them at low parental monitoring, illustrating the potential risks of too much or too little parental control. Unfortunately, these studies’ dichotomization of parental control is insensitive to any potential curvilinear relationship with conduct problems. The current study builds on this research by using an in-depth measure of close friend support and three levels of parental control, thereby illustrating the effect of close friend support at various levels of parental control and highlighting any curvilinearity existent between levels (i.e. a consistent functional relationship between variables, such that conduct problems are lowest at moderate amounts of control and higher at low and high amounts of control). The authors predict that parental control will show a curvilinear functional relationship with conduct problems, and

the relationship between close friend support and conduct problems will be moderated by amount of parental control, consistent with the subtypes of conduct disorder (WHO) [2], and the theories of Rollins and Thomas [5]. That is, it is expected that the results will identify higher rates of conduct problems in youth with Socialized CD (high peer support), CD Confined to the Family Context (high levels of parental control indicative of problems in the family), and Unsocialized CD (low friend support).

Methods

Participants

Child participants’ (N=101) age ranged between 7 to 15 years ($M=10.1$ years). Most child participants were girls (52.5%) and Caucasian (94.1%). This sample also included a small number of multiracial (5.0%) and Native-American children (1.0%). Household incomes ranged from \$10,000 to \$300,000, with a median of \$65,000. The majority of participating parents were mothers (85.1%). The majority of families (67.7%) reported mothers and fathers living in the home, and 18.5% included only one parent in the home, 10.8% reported a parent and a step-parent in the home, and 3.1% reported a parent and one other adult living in the home.

Procedure

Flyers were sent home with students in public schools in a small Midwestern metropolitan area. Those interested returned the flyers with their contact information, and appointments were set up at the child’s school or a local university. One parent for each child completed questionnaires about demographics, family environment and child’s behavioral and emotional functioning. Children completed questionnaires about perceived social support. After parents gave informed consent, children went to another room. A research assistant read all items to children younger than 12. If children 12 or older were able to read the assent form aloud with little trouble, they answered questionnaires independently. Parents were given five dollars compensation.

Measures

Conduct problems were measured using the Behavior Assessment System for Children, Second Edition (BASC-2; Reynolds and Kamphaus [19]), using the form appropriate to the child’s age (BASC-2, PRS-C for ages 7-11 and BASC-2, PRS-A for ages 12-15). Both versions have 14 subscales, and either 160 items (PRS-C) or 150 items (PRS-A), with nine (PRS-C) to fourteen (PRS-A) age-specific items comprising the conduct problems subscale. Both have good internal consistency (Cronbach’s $\alpha=.87$ [PRS-C]; $.88$ [PRS-A]), test-retest reliability (Both scales, $r=.85$), inter-rater reliability ($r=.65$ [PRS-C]; $.79$ [PRS-C]), and are highly correlated with the parental report of externalizing problems subscale of Achenbach’s System of Empirically Based Assessment (ASBEA; Achenbach and Resorla, 2001; [PRS-C] $r=.69$; [PRS-A] $r=.73$; Reynolds and Kamphaus [19]).

Parental control was measured with the Family Environment Scale (FES; Moos and Moos, [4]), a scale including ten, 9-item subscales, one measuring parental control. The control subscale has adequate internal consistency (Cronbach’s $\alpha=.67$) and good test-retest reliability at a 2-month ($r=.77$) and 4-month follow-up ($r=.78$; Moos and Moos, [4]). Furthermore, differences between parent and child reports of parental control have been found to be non-significant (Parent’s $M=4.97$, $SD=1.89$; Child’s $M=4.87$, $SD=2.10$), validating the use of parental report [4].

Close friend support was measured using the Social Support Scale for Children (SSSC; Harter [20]). The SSSC has 24-items, including a 6-item close friend subscale that assesses the extent to which children believe that they have a close friend who listens, cares, and understands them. This scale has shown good to good internal consistency (Cronbach's $\alpha=.73$ (children); $.80$ (adolescents)).

Results

Distribution of scores of variables and correlations among variables are included in Table 1. All variables were centered by subtracting the mean from each individual value [21]. Then, hierarchical multiple regression was used to determine whether parental control and close friend support predicted conduct problems independently (main effects model), and in concert (interaction model). The first model tested in the hierarchical regression used parental control and close friend support to predict conduct problems (Table 2). The overall model was significant, $R^2=.04$, $F(2,98)=3.26$, $p<.05$, with close friend support the lone significant predictor. The second model included the interaction term for parental control and close friend support, and significantly improved the overall model, $R^2=.13$, $F(3,97)=4.72$, $p<.01$, the interaction term, being the only significant predictor of conduct problems.

To probe the significant interaction post hoc, conditional moderator variables were computed by calculating High Parental Control (one standard deviation above the mean) and Low Parental Control (one standard deviation below the mean). Then, hierarchical multiple regressions were run again, one with High Parental Control, Close Friend Support, and the interaction between the two, and one with Low Parental Control, Close Friend Support, and the interaction between the two [20]. Results again indicated a significant main effect for Close Friend Support ($R^2=.06$, $F(2,98)=3.26$, $p<.05$), but not for High Parental Control (Table 2). The interaction term also remained significant ($R^2=.13$, $F(3,97)=4.72$, $p<.01$). The regression with Low Parental Control yielded similar results. There was a significant main effect for Close Friend Support ($R^2=.06$, $F(2,98)=3.26$, $p<.05$), but not for High Parental Control. The interaction term also remained significant ($R^2=.13$, $F(3,97)=4.72$, $p<.01$).

Discussion

Results indicated a main effect for close friend support, and an interaction between close friend support and parental control significantly predicted conduct problems. This held true in post hoc analyses, looking at high and low control separately. These results did not support the first hypothesis of parental control, having a curvilinear relationship with conduct problems as the main effects model indicate significant results for close friend support only, contrary to Rollins and Thomas [5] theory.

The second hypothesis is supported with the effects of close friend support being moderated by parental control at all levels of parental control (Figure 1), consistent with research showing close friend support to be a risk factor [13]. Although the hypothesized relationships between these variables are found within the current dataset, the severity of conduct problems achieved clinical significance, as defined by Reynolds and Kamphaus [19], in only high parental control/low close friend support youth (Unsocialized Conduct Disorder), and at-risk levels in low parental control/high close friend support youth (Socialized Conduct Disorder). This is likely due to sample being derived from the general community, rather than a clinical or even high-risk population. Future research would do well in attempting to replicate the current findings with larger, more diverse, and more clinically significant samples.

The results suggest that youth highly engaged with peers are at particular risk in low-control families, a fact that parents and professionals should be aware of. Youth who fit this profile but have not yet developed clinically significant levels of conduct disturbance, would be ideal candidates for prevention efforts. Such efforts should look to increase parental control to moderate levels, as peer support can be a positive influence when parental control is not lacking.

The current study shows that close friend support can yield detrimental effects on youth outcomes. Future studies can build upon this finding by probing further into familial contexts that breed risky friendships, as well as by identifying other moderating influences on close friend support. Additionally, future research should investigate factors influencing the curvilinear relationship between parental control and conduct problems. One possibility is to further explore

| Variable | 1 | 2 | n | M | SD | Potential Range | Actual Range |
|-------------------------|-------|--------|-----|-------|------|-----------------|--------------|
| 1. Parental Control | | | 103 | 56.85 | 9.37 | 27-76 | 32-76 |
| 2. Close Friend Support | -.113 | | 102 | 3.60 | .53 | 1.00-4.00 | 1.67-4.00 |
| 3. Conduct Problems | .011 | -.249* | 101 | 50.31 | 9.85 | 34-120 | 37-101 |

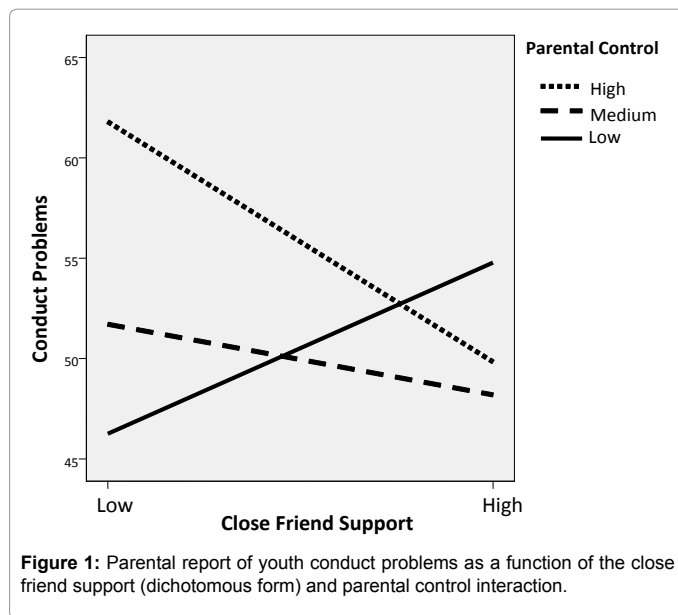
* $p<.05$

Table 1: Descriptive statistics for and correlation among study variables.

| Predictor | Original Model | | High Control | | Low Control | |
|----------------------|----------------|---------|--------------|----------|--------------|---------|
| | ΔR^2 | β | ΔR^2 | β | ΔR^2 | β |
| Step 1 | .04* | | .06* | | .06* | |
| Parental Control | | -.017 | | -.017 | | -.017 |
| Close Friend Support | | -.25* | | -.251* | | -.251* |
| Step 2 | .13** | | .07** | | .07* | |
| Parental Control | | -.033 | | -.033 | | -.03 |
| Close Friend Support | | -.17 | | -.453*** | | .12 |
| Control×Support | | -.27** | | -.324** | | -.45** |
| Total R^2 | .17 | | .13** | | .13** | |
| n | 100 | | 100 | | 100 | |

* $p<.05$. ** $p<.01$, *** $p<.001$

Table 2: Summary of hierarchical regression analysis for variables predicting conduct problems and post hoc probe of interaction effects.



the moderating influence of psychological control on behavioral control [6]. Research also can be expanded to include evaluations of intervention programs that seek to help parents engage in moderate levels of control.

Future research also should seek to address some limitations of the current study. All of the data on family environment and conduct problems was parental report and on friend support was child report, introducing the possibility of reporter bias. Future research should include multiple reporters, and/or observation for all variables. Additionally, the generalizability of the current study is limited by the population from which the sample was drawn. Future research should include multiple sites with diverse populations.

Future research should use a longitudinal design as this study is cross-sectional, so causal inferences cannot be made. That is, the directional relationship between parental control/close friend support and conduct problems cannot be inferred from this study. Theoretically, both factors have been found to cause and result from conduct problems.

Other limitations in this study include the fact that the sample represents a broad range of ages and development influences the variables under investigation. However, there were not enough participants to examine the data separately by age. Future research with larger samples would allow such analyses.

In sum, the current study reconciles contradictory research on the effects of friend support and parental control on conduct problems, by using the framework of the subtypes of conduct disorder (WHO, [2]), and the theories of Rollins and Thomas [5]. The current study reconciles these bodies of literature by showing the curvilinear effects of parental control, and parental control as a moderator of close friend support. By defining the parental contexts that affect close friend support, this study adds to both parental control and close friend support literature,

provides empirically-based suggestions for parents and professionals who work with families, and provides avenues for future research.

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