A RECONSIDERATION OF SOCIAL CONTROL AND DIFFERENTIAL ASSOCIATION THEORIES: AN EMPIRICAL INVESTIGATION OF PARENTAL AND PEER INFLUENCES ON DELINQUENCY

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Abstract

This paper presents an integrated framework of juvenile delinquency that includes variables from social control and differential association theories in addition to a reconceptualization of the role of parents as discussed in these theories. The reconceptualization reflects our argument for the need to consider how antisocial parents may serve to facilitate delinquency. A path model was developed for testing a set of hypotheses generated from the model. The predictor variables include parental conventionality, parental supervision, parental attachment, school commitment, delinquent peer association, and delinquent attitudes. We examined both the direct and indirect effects each of these had on delinquency. The data were obtained from a sample of 891 urban high school and junior high school students identified as early adolescent and late adolescent girls and boys. The path model is separately estimated for these four groups. Although the amount of variance our model explains for each of these groups is quite significant, we did discover some differences in the strength of the predictor variables across age groups. While parental influence proved to be more significant than peer association for early adolescents, we found the opposite to be true for late adolescents. Finally, our findings support our argument for a reconceptualization of the role of parents in influencing delinquency.

Keywords: delinquency, social change, differential socialization, parental influences

INTRODUCTION

Recent attempts to further the understanding and explanation of juvenile delinquent behavior have led various writers and scholars to develop substantially more integrated theoretical models of delinquency (Agnew 1993; Akers and Cochran 1985; Benda and DiBlasio 1991; Catalano and Hawkins 1996; Elliott, Huizinga, and Ageton 1985; Hawkins and Weis 1985). A perusal of the literature reveals that a majority of the models focus on integrating variables and theoretical constructs from social control theory and differential association theory. Specifically, the models provide a framework for identifying and empirically testing variables that intervene between delinquency and the social bond components specified by Hirschi (1969) as attachment and commitment to, and involvement in, conventional institutions such as family and school. Close inspection reveals that the most consistently examined intervening variable is delinquent peer association, which is directly borrowed from Sutherland's differential association theory (1947).

Hirschi (1969) posited a direct negative relationship between the bond components and delinquency, arguing that individuals with strong bonds to the institutions and strong beliefs in conventional values are less likely to become deviant than those with weak bonds. Hirschi (1969) postulates that when bond elements are weakened, constraints on the individual's inherent predisposition for antisocial conduct are also weakened, thus freeing the adolescent to pursue needs in the most expedient manner. Findings of various empirical studies investigating this relationship lend support to his argument (Brook et al. 1990; Brook et al. 1986; Kempf, 1993; Krohn and Massey 1980; Newcomb and Bentler 1988).

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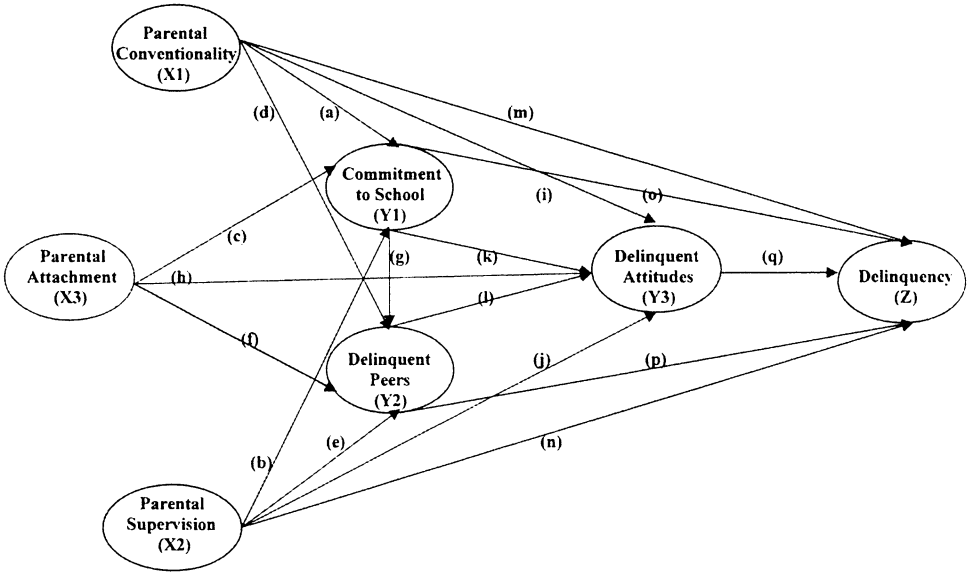
The integrated models, however, have challenged Hirschi's argument concerning the direct relationship and have suggested that delinquent peer association may act to mediate the relationships between family and school and delinquency. This position is found in differential association theory which emphasizes the influential role of delinquent peers in the learning of attitudes and motives which promote delinquent behavior and argues that deviant behavior is learned largely through associating with others whose behavior is deviant (Sutherland 1947). Proponents of differential association theory empirically have shown that when delinquent peer association is introduced as an intervening variable, the effects of parental influence either diminish or are mediated by this variable (Agnew 1991, 1993; Akers 1994; Benda, DiBlasio, and Kashner 1994; Aseltine 1995).

Following in this same tradition, we propose and empirically test a theory of juvenile delinquency that incorporates concepts and variables from both social control and differential association theories. We include Hirschi's bond components of family and school and examine whether direct relationships between these components and delinquency do exist. Nonetheless, we also examine the indirect effects of Hirschi's components on delinquency, and we include delinquent peer association as an intervening variable that may mediate the effects of Hirschi's components on delinquent behavior.

Moreover, we accept the argument of differential association theory that association with delinquent peers directly influences the learning of delinquent attitudes that are conducive to engaging in delinquent behavior. Thus, delinquent peer association has an indirect effect on delinquency. We, however, stress the need also to examine the direct effect that exposure to delinquent behavior through peer association may have on delinquency. Consequently, we examine both the direct and indirect effects of peer association on delinquency.

Finally, we reconceptualize the role of parents to include parental attitudes and behaviors. As Foshee and Bauman (1992) argue, parental attitudes and behavior traditionally have been excluded in social control theory and, we add, in differential association theory. We argue that early

Figure 1: A Path Model of Deliquency



experience with antisocial parents can promote delinquent attitudes that support delinquent behaviors while simultaneously providing an environment in which delinquent behavior can be directly learned. We suggest that the conventional/unconventional orientation on the part of parents should be examined and its effects on the adolescent's delinquent attitudes and behaviors be assessed. Therefore, although we retain Hirschi's dimensions of parental attachment and parental supervision, we add the variable "parental conventionality" into our integrated theoretical framework and examine the direct and indirect effects this variable has on delinquency.

We develop a path model so that both the direct and indirect paths of the explanatory variables can be estimated. Specifically, our independent variables are (1) parental conventionality; (2) parental attachment; (3) parental supervision; (4) school commitment; (5) delinquent peer association; and (6) delinquent attitudes (see Figure 1). We develop a set of hypotheses to determine the empirical validity of our model. Finally, in order to examine if the model applies to all adolescents, we test it for different age groups and for both genders.

THEORETICAL FRAMEWORK FOR THE PATH MODEL

We begin with components of parental influence that we identify as parental conventionality, parental supervision, and parental attachment.

Parental Conventionality and Delinquency

Traditionally, the family has been regarded as a conventional institution, thus obviating the need to include the role of parental attitudes and behaviors into the complex of variables that explain delinquency. As Agnew (1993:248) points out, "empirical studies of the differential association approach tend to focus on the adolescent peer group as the primary source of deviant learning and, for the most part, neither the family nor the school are believed to create a framework by which deviant behavior is learned." Jensen (1972) comments, however, that this theory is not limited to peer influence but rather may be extended to include significant others such as parents. Similarly, Catalano and Hawkins (1996:431) note that "children learn patterns of behavior whether prosocial or antisocial from socializing agents of family, school, religious institutions, and their peers." This is consistent with Sutherland and Cressey (1978) who argue that delinquency results from interaction in primary social groups where favorable definitions of delinquency are learned. We therefore, conclude that since parents act as a primary group, it is necessary to investigate how parents may directly and indirectly influence delinquency.

Concerning the direct effects of parents' attitudes and behaviors on delinquency, empirical studies reveal that parents may negatively affect their child's behavior if they engage in delinquent activities themselves and expose their children to these behaviors (Cernkovich and Giordano 1992; McCord 1991; Thompson, Mitchell, and Dodder 1991). For example, evidence on adolescent tobacco and alcohol use shows that parent's own use of alcohol and tobacco led to adolescent drug-use behavior consistent with parent's use (Foshee and Bauman 1992).

Turning to the indirect effects, unconventional parents may indirectly affect delinquency by inadvertently influencing the adolescent's formation of delinquent friendships. Warr (1993) points out that although parents may subscribe to a value orientation which does not respect the law and may themselves violate the law, they may not condone delinquent behavior on the part of their children. The adolescent, therefore, may seek a tolerant delinquent peer culture in which delinquent attitudes learned in the home can be expressed and reinforced through delinquent behaviors.

Unconventional parents also may influence their child's school commitment and performance, and in this way may have an indirect effect on delinquency. Adolescents

who are exposed to unconventional attitudes and behavior may be negatively affected in their interest in school and in their motivation to succeed in the conventional academic environment, thereby increasing the chances of delinquency. In summary, our hypothesis regarding the relationship between parental conventionality and delinquency is formulated as follows:

> Hypothesis 1: Parental conventionality affects delinquency directly and also indirectly through influencing the child's delinquent attitudes, delinquent peer association, and school commitment.

Parental Supervision and Delinquency

According to social control theory, parents provide an important function in the supervision of the child's behavior (Rankin and Kern 1994). Research has revealed a direct effect of supervision on delinquency, arguing that a lack of supervision may positively reinforce delinquent behavior (Patterson, Reid, and Dishion 1992). Quite simply, adolescents whose behavior is not monitored and who have no restrictions placed on their activities are much freer to engage in delinquent behavior than adolescents whose parents actively supervise their behavior. The impact of supervision is found particularly important during the early adolescent's life stage (see Jang and Smith 1997).

Parental supervision also affects delinquency indirectly through influencing delinquent peer association. According to the peer influence model, ineffective supervision "leads to association with deviant friends which, in turn, leads to delinquency" (Vitaro et al. 1997:676). Similarly, Elliott, Huizinga, and Menard (1989) state that quality of parenting exerts an indirect influence on delinquency by freeing the adolescent to associate with delinquent peers. Therefore, parents who do not actively regulate their child's friendships by screening out delinquent companions unwittingly remove the access barriers to delinquent peers.

Moreover, the negative consequences of poor parental supervision also may extend to the child's school performance. Unsupervised, the adolescent is much freer to drift from school responsibilities and to violate school rules and expectations, subsequently weakening the bond with and commitment to school which ultimately may result in delinquent behavior. To summarize, our hypothesis regarding the relationship between parental supervision and delinquency is thus stated:

> Hypothesis 3: Parental supervision affects delinquency directly as well as indirectly by providing opportunities for association with delinquent peers and also by affecting the adolescent's commitment to school.

Parental Attachment and Delinquency

Social control theory (Hirschi 1969) argues that the family as a conventional institution socializes the child into the conventional norms of society to which the child is expected to conform. A strong parent-child bond facilitates this conformity, for as Hirschi (1969) explains, the adolescent, out of fear of jeopardizing the bond, may be dissuaded from engaging in behavior that violates the norms. Following this line of argument, a direct relationship has been established between parental attachment and delinquency. We contend, however, as others have, that parental attachment has an indirect effect on delinquency (Hagan, Simpson, and Gillis 1988; Jang and Smith 1997; Heimer and Matsueda 1994; Heimer 1996).

We propose that parental attachment as manifested by the parent-child bond, open communication, and parental identification, will enhance the child's willingness to discuss thoughts and share problems with the parents, thus facilitating the parent's opportunities to directly become involved in the child's life. Consequently, when problems arise in school or in social relationships in general, the child will turn to the parent for advice and support. The chances of dropping out of school and losing the approval of the parents or seeking support in a delinquent peer group will then be greatly reduced. Our hypothesis

concerning this effect, thus is specified as follows:

> Hypothesis 4: Parental attachment has indirect effects on delinquency through the mediating variables of school commitment, delinquent peer association, and delinquent attitudes.

School Commitment and Delinquency

A weak bond to school, as social control theory postulates, is a critical link in the causal chain leading to delinquency (Hirschi 1969). A major factor leading to a lack of school bond is school failure (Hirschi 1969). As Cernkovich and Giordano (1992) explain, school failure which leads to a lack of interest in homework and grades, low aspirations for the future, no desire to be in school, a lack of attachment to teachers, and a weakening of the school bond, ultimately may lead to delinquency. A direct relationship between school bond and delinquency thus is established by social control theory.

Low school commitment also may affect delinquency indirectly through delinquent peer association. Students who fail academically may develop perceptions of themselves as incompetent and thus may experience feelings of insecurity and alienation in this environment. In an attempt to enhance their feelings of self-worth and identity, they are more likely than successful students to be attracted to a delinquent peer group. This process is clarified by Elliott and Voss (1974) who suggest that failure to achieve academically leads to a decrease in school commitment which ultimately increases the influence of delinquent peers on adolescent behavior. To summarize, we formulate the following hypothesis:

> Hypothesis 5: A weak bond and commitment to school will directly and indirectly affect delinquent behavior.

Delinquent Peer Association and Delinquency

A majority of studies testing differential association theory have traditionally focused on how delinquency is learned via delinquent peer associations. Through these associations, attitudes favorable to the violation of the law are acquired, thus increasing the probability for delinquent behavior (Elliott, Huizinga, and Ageton 1985; Jensen 1972; Johnson 1979).

McCarthy (1996) criticizes these studies for their exclusive attention on delinquent attitudes and for their failure to investigate the direct effects of peer association on delinquency. We concur and therefore stress the relevance of examining the direct influence of peer association on delinquency. Moreover, this is consistent with McCarthy's interpretation of Sutherland's theory in which he asserts that "Sutherland's notes on the origins of differential association affirm the importance of criminal contact as a means for learning how to offend (1996: 138)." McCarthy (1996) further agues that this position is reflected in all of Sutherland's works.

Empirical research has confirmed a direct link between delinquent peer association and delinquency net of delinquent attitudes (Agnew 1993; Brian and Piliavin 1965; Elliot et al. 1985; Heimer and Matsueda 1994; Short and Strodtbeck 1965; Warr and Stafford 1991). Warr and Stafford (1991) for example, challenge the belief that delinquency is primarily a consequence of attitudes acquired from peers and assert that delinquency is a more a result of social learning mechanisms such as imitation or from group pressures to conform.

The emphasis on peers' behavioral patterns also is present in the social learning theory of deviant behavior that integrates differential association with ideas from modern learning theory (Akers 1977). Social learning theory argues that "social behavior (including deviant behavior) is acquired through both direct conditioning and through imitation or modeling of others' behavior (Akers et al.1979:638)." In an empirical study testing this position, Agnew (1991) reported that association with delinquent peers may lead to the internalization of delinquent definitions

and, likewise, in line with social learning theory, adolescents imitate delinquent behavior modeled by their peers. On the basis of these arguments, we formulate the following hypothesis:

> Hypothesis 6: Delinquent peer association both directly and indirectly increases the chances of delinquency.

DATA, MODEL, AND MEASURES

Sample and Data

The data were collected in a Midwestern city school system between May and June 1997. Students from high-crime areas of the city were sampled on the premise that adolescents residing in these communities are exposed to more crime and delinquent opportunities and thus are at a greater risk for delinquency. The sample was drawn from 7th and 8th grade students in all five junior high schools and from 12th grade students in all four high schools within the school system.

Prior to the survey, informed consent forms were obtained from the city board of education, principals, parents, and students. A questionnaire consisting of 130 items for junior high school students and 103 items for high school students was administered to students in their English classes. All students participated except those whose parents declined to give permission and those who were absent when the questionnaire was administered. This yielded a sample of 479 junior high school students and 412 high school students. The gender make-up of the junior high sample is 54% female and 46% male. The high school sample is composed of 55% female and 45% male. The racial make-up of the junior high school sample is 12% white, 73% black, and 15% other minority groups. For the high school sample, the racial composition is 33%, 57%, and 10% respectively. An over representation of African-American youth prevented the sample from being representative of the population of teens in general. In addition, the percentage of African-American youth in the junior high school sample is higher than that of the high school sample. This may also affect the comparability of these two groups. The racial composition of the sample, however, is representative of the study population. The mean age of the junior high students is 13.4 and 17.9 for the high school students. The sample is divided into four groups: early adolescent boys and girls and late adolescent boys and girls. We separately estimated our model for each of these groups. Our argument for the validity of the model is partially based on the findings for these four groups.

Variables, Measures, and the Model

Figure 1 specifies a theoretical model for estimating the direct and indirect paths from the measures of the predictor variables to delinquency. The model contains seven theoretical constructs that generate the empirical data: (1) parental conventionality; (2) parental supervision; (3) parental attachment; (4) school commitment; (5) delinquent peers; (6) delinquent attitudes; and (7) delinquency.

All predictor variables in the hypothesized model are latent constructs, each measured by several items. Descriptions of measures of these constructs and the scale alphas appear in Appendix A. Responses to these items, except delinquency, were coded on a 4-point scale (1 = never; 2 = sometime; 3 = usually; 4 = always). The value of each construct is the mean score of all items that measure the construct

Parental conventionality is measured by two items concerning parent's attitudes and behaviors toward the law as perceived by the adolescent. Parental supervision is measured by two items reflecting the extent of parental supervision on the adolescent's selection of friends and the activities with them. Parental attachment is measured by seven items concerning parental affection, parental identification, and parent-child communication. School commitment includes six items measuring the student's attitudes towards schooling and their relationships with their teachers. Delinquent peers is measured by six items concerning peers' delinquent behaviors.

Table 1. Standardized Coefficients for the Direct and Total Effects of Predictor Variables on Endogenous Variables: Early and Late Adolescent Boys and Girls

Dependent Variable	Independent Variables	Early Adolescent Boys (1) Direct Effect	Early Adolescent Boys (2) Total Effects	Late Adolescent Boys (3) Direct Effect	Late Adolescent Boys (4) Total Effects	Early Adolescent Girls (5) Direct Effect	Early Adolescent Girls (6) Total Effects	Late Adolescent Girls (7) Direct Effect	Late Adolescent Girls (8) Total Effects
BLOCK 1									
Delinquency	(1) Parental Con-	-.138*	-.281**	-.038	-.220**	-.244**	-.356**	-.027	-.233**
R2 = .350 (EB)	ventionality								
R2 = .465 (LB)	(2) Parental	-.177**	-.320**	-.165*	-.262**	-.304**	-.361**	-.097	-.273**
R2 = .397 (EG)	Supervision								
R2 = .500 (LG)	(3) Parental	---	-.159*	---	-.114	---	-.085	---	-.019
	Attachment								
	(4) School	-.048	-.220**	-.152*	-.308**	-.056	-.208**	-.081	-.254**
	Commitment								
	(5) Delinquent	.040	.183*	.229**	.301**	.091	.228**	.188**	.279**
	Peers								
	(6) Delinquent	.494**	.494**	.238**	.238**	.322**	.322**	.396**	.396**
	Attitudes								
BLOCK 2									
Delinquent	(1) Parental	-.180**	-.263**	-.178**	-.345**	-.193**	-.296**	-.248**	-.378**
Attitudes	Conventionality	-							
R2 = .285 (EB)	(2) Parental	.127	-.246**	.016	-.099	-.110	-.184*	-.184*	-.311**
R2 = .365 (LB)	Supervision								
R2 = .265 (EG)	(3) Parental	.116	.001	.101	-.020	-.009	-.123	-.031	-.042
R2 = .430 (LG)	Attachment								
	(4) School	-.217**	-.320**	-.358**	-.429**	-.186**	-.238**	-.237**	-.322**
	Commitment								
	(5) Delinquent	.289**	.289**	.303**	.303**	.229**	.229**	.226**	.226**
	Peers								
BLOCK 3									
Delinquent	(1) Parental	-.197**	-.226**	-.251**	-.301**	-.215**	-.268**	-.238**	-.324**
Peers	Conventionality								
R2 = .256 (EB)	(2) Parental	-.166*	-.245**	-.137	-.177*	-.251**	-.266**	-.142**	-.253**
R2 = .237 (LB)	Supervision								
R2 = .292 (EG)	(3) Parental	.077	-.066	-.041	-.100	-.097	-.152	-.001	-.013
R2 = .327 (LG)	Attachment								
	(4) School	-.357**	-.357**	-.235**	-.235**	-.226**	-.226**	-.378**	-.378**
	Commitment								
BLOCK 4									
School	(1) Parental	.081	.081	.211**	.211**	.234**	.234**	.228**	.228**
Commitment	Conventionalit	.							
R2 = .333 (EB)	(2) Parental	.221**	.221	.170**	.170**	.068	.068	.294**	.294**
R2 = .229 (LB)	Supervision								
R2 = .169 (EG)	(3) Parental	.400**	.400**	.253**	.253**	.244**	.244**	.033	.033
R2 = .178 (LG)	Attachment								

EB: Early Adolescent Boys; LB: Late Adolescent Boys; EG: Early Adolescent Girls; LG: Late Adolescent Girls.
* p<.05; ** p<.01.

Delinquent attitudes is measured by four items centered on the adolescent's attitudes toward the law and law enforcement. The outcome variable, delinquency, is measured using a 24-item scale of self-reported offending. Following Elliott et al. (1985), these include violent offenses, property offenses, drug selling, drug use, marijuana use, alcohol use, and arrest.

The causal ordering of these predictors is based on our hypotheses of the causes of delinquency. The path model begins with three parental constructs - parental conventionality, supervision, and attachment. Based on our hypotheses, parental conventionality and supervision will exert direct negative effects on delinquency and also indirect effects through the mediating variables school commitment, delinquent peers and delinquent attitudes. Parental attachment will affect delinquency only indirectly through the mediating variables school commitment, delinquent peers, and delinquent attitudes. School commitment also will have negative indirect effects on delinquency through the mediating variables delinquent peer association and delinquent attitudes. Delinquent peer association should have positive effects on delinquency both directly and indirectly through the mediating variable delinquent attitudes. Delinquent attitudes should have a direct positive effect on delinquency.

To summarize, we predict that the parental and school variables will have negative effects on delinquency, whereas delinquent peers and delinquent attitudes will have positive effects on delinquency. All predictor variables except parental attachment will have direct effects on delinquency.

RESULTS

The substantive model presented in figure 1 is estimated using the path-diagram method (Chen 1983; Duncan, Featherman, and Duncan 1972; McClendon 1994) for decomposing the direct, indirect, and total effects of the causal variables on delinquency. In our analysis, a recursive model is specified and the parameters are estimated with ordinary least squares. The model fits the data well for all four groups in our study. The amount of variance explained

Figure 2: A Path Model of Delinquency, Early Adolescent Boys

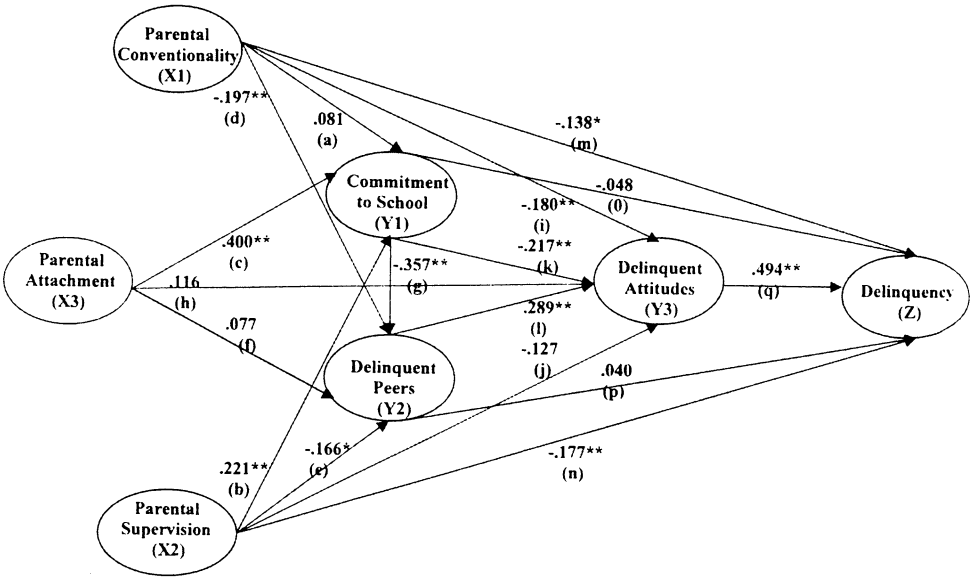


Figure 3: A Path Model of Delinquency, Late Adolescent Boys

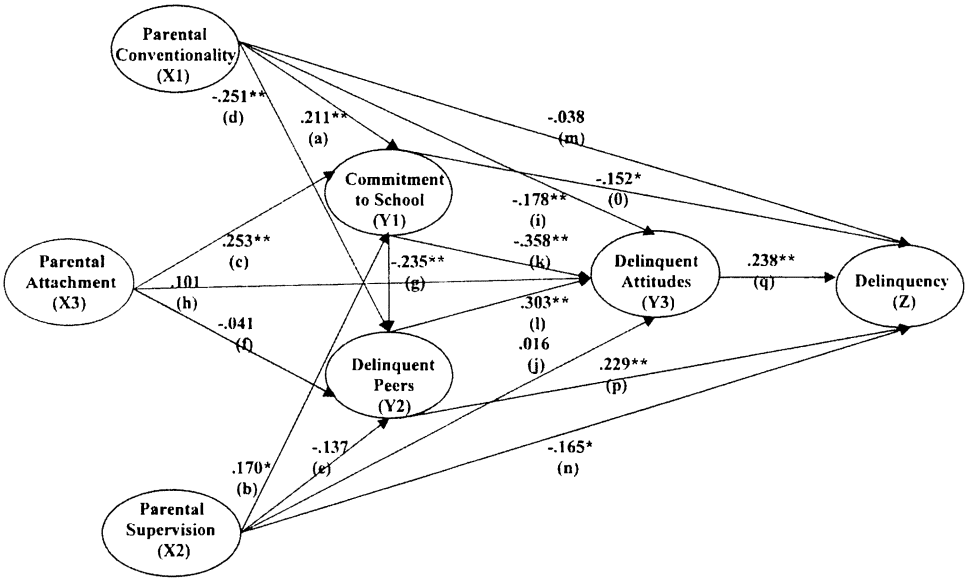


Figure 4: A Path Model of Delinquency, Early Adolescent Girls

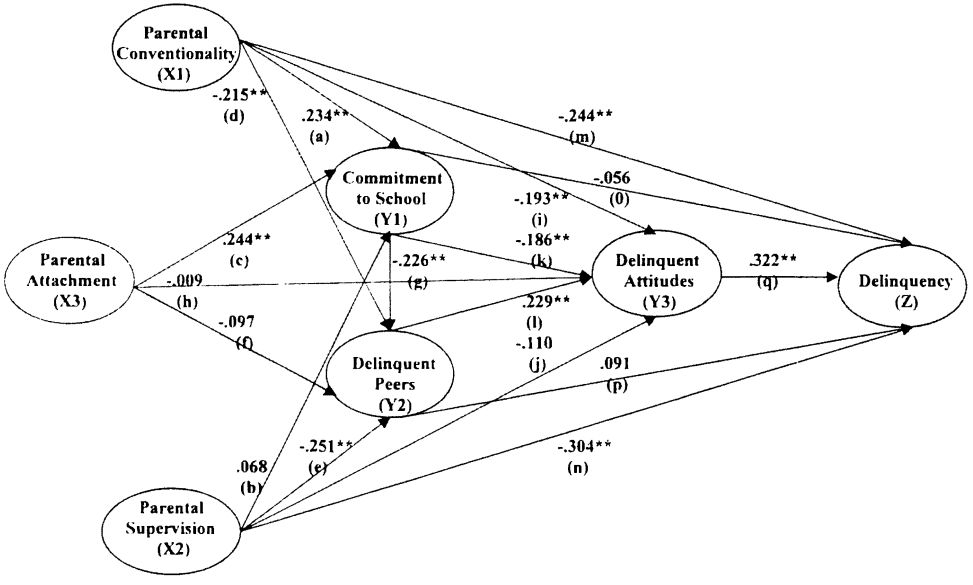


Figure 5: A Path Model of Delinquency, Late Adolescent Girls

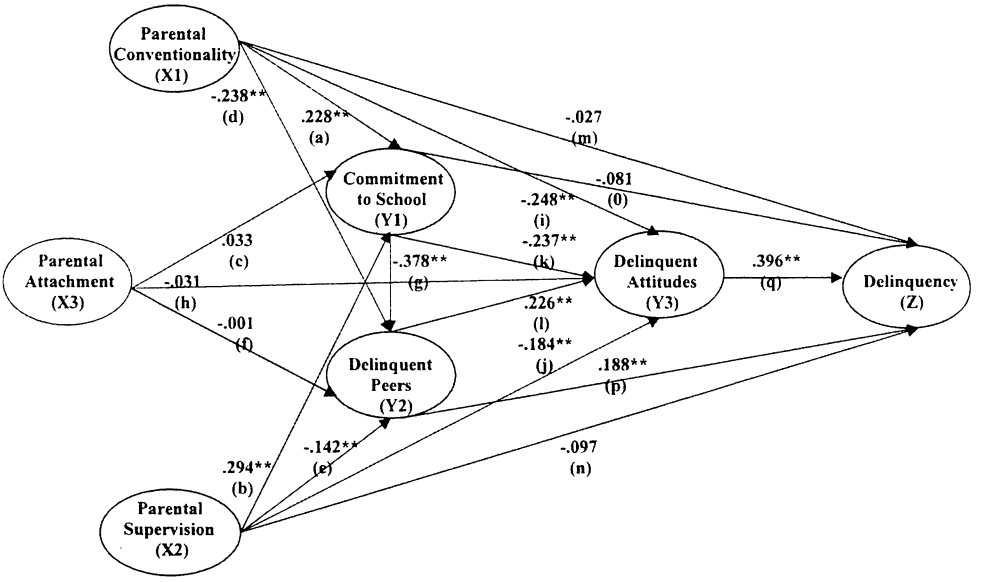


Table 2. Frequency Distribution of Parental Conventionality: Early and Late Adolescent Boys and Girls

Parental Conventionality	Early Adolescent Boys (%) (N = 218)	Late Adolescent Boys (%) (N = 185)	Early Adolescent Girls (%) (N = 250)	Late Adolescent Girls (%) (N = 226)
Never/sometimes	15.6	17.3	14.8	9.3
Usually/always	84.4	82.7	85.2	90.7
Total	100.0	100	100	100

Table 3. Frequency Distribution of Parental Supervision: Early and Late Adolescent Boys and Girls

Parental Supervision	Early Adolescent Boys (%) (N = 219)	Late Adolescent Boys (%) (N = 185)	Early Adolescent Girls (%) (N = 251)	Late Adolescent Girls (%) (N = 225)
Never/sometimes	37.4	50.8	23.5	29.3
Usually/always	62.6	49.2	76.5	70.7
Total	100.0	100	100	100

for the dependent variable delinquency is 47% for early adolescent boys, 35% for late adolescent boys, 50% for early adolescent girls, and 40% for late adolescent girls (see Table 1, Block 1, R Square). The amount of variance explained for each of the three other dependent variables - delinquent attitudes, delinquent peers, and school commitment - is also reported in Table 1, Blocks 2, 3, and 4 respectively.

Figures 2, 3, 4, and 5 depict path models for the four groups. The path coefficients, betas, indicate the estimates of the standardized effects. A positive beta represents a positive effect, whereas a negative beta represents a negative effect. The estimates of the direct and total effects on delinquency are reported in Table 1, Block 1. Our findings reveal these effects bear directly on our hypotheses. We begin our

discussion with the influence of parental variables on delinquency.

Effects of Parental Variables

Our results show there are variations in parental conventionality (see Table 2) and parental supervision (see Table 3). For example, 15.6% of the early adolescent boys, 17.3% of the late adolescent boys, 14.8% of the early adolescent girls, and 9.3% of the late adolescent girls report that their parents are either never or only sometimes conventional. Similarly, 37.4% of the early adolescent boys, 50.8% of the late adolescent boys, 23.5% of the early adolescent girls, and 29.3% of the late adolescent girls report that their parents either never or only sometimes provide supervision. We report these findings to substantiate our earlier argument stressing the need to include parental conventionality and supervision as predictor variables in a model explaining delinquency.

Our findings give partial support to Hypothesis 1 that argues for both direct and indirect negative relationships between conventionality and delinquency. For the early adolescent boys, parental conventionality exerts both direct and indirect effects on delinquency (direct effect beta = -.138, $p<.05$, see Table 1, Block 1, Column 1, Row 1). For the late adolescent boys, however, parental conventionality only exerts indirect effects. The direct effect is negligible (beta = -.038, see Table 1, Block 1, Column 3, Row 1). The total effect is also slightly higher for the early adolescent boys (beta = -.281, $p<.01$, see Table 1, Block 1, Column 2, Row 1) than for the late adolescent boys (beta = -.220, $p<.01$, see Table 1, Block 1, Column 4, Row 1). This pattern also exists for the early and late adolescent girls; parental conventionality has both direct and indirect effects for the early adolescent girls (direct effect beta = -.244, $p<.01$, see Table 1, Block 1, Column 5, Row 1). For the late adolescent girls, however, parental conventionality only exerts indirect effects. The direct effect is negligible (beta = -.027, see Table 1, Block 1, Column 7, Row 1). The total effect is also higher for the early adolescent girls (beta = -.356, $p<.01$, see Table 1, Block 1, Column 6, Row 1) than for the late adolescent girls (beta = -.233, $p<.01$, see Table 1, Block 1, Column 8, Row 1).

We contend that these findings provide support for our argument stressing the need to include parental conventionality as a predictor variable in a model explaining delinquency. In particular, parents as a primary group influence delinquency by conveying their own antisocial attitudes and behaviors to the child. This influence is stronger and more direct for early adolescent boys and girls.

The results of parental supervision are in agreement with Hypothesis 2 that postulates both direct and indirect relationships between supervision and delinquency. The results reveal that for all groups except the late adolescent girls, parental supervision has both direct and indirect negative effects on delinquency. Parental supervision also has the largest total effect on delinquency among all three index-variables measuring parental influence (see Table 1, Block 1, Columns 2, 4, 6, and 8, Rows 1 to 3). Our findings for the direct effects provide support for Hirschi's (1969) social control theory which argues that parental supervision directly deters delinquent behavior. These findings also are consistent with empirical findings that reveal this variable to be the most important among all variables measuring family bond (Junger and Marshal 1997; Wells and Rankin 1988).

The results for parental attachment provide only partial support for Hypothesis 3 which predicts that parental attachment affects delinquency indirectly through school commitment, delinquent peer association, and delinquent attitudes. We contend the reason for this is primarily due to the insignificant relationships found between parental attachment and delinquent peer association. Our findings reveal that although there is a significant relationship between attachment and school com-

mitment for all groups except late adolescent girls groups (beta = .400, .253, .244, and .033 respectively, p<.01 for the first three betas, see Table 1, Block 4, Columns 1, 3, 5, and 7, Row 3), there is no relationship between attachment and peer association for any of these groups (beta = .077, -.041, -.097, and -.001 respectively, see Table 1, Block 3, Columns 1, 3, 5, and 7, Row 3). Moreover, for all four groups, parental attachment does not exert a statistically significant effect on delinquent attitude and, furthermore, the betas for the early and late adolescents are in the wrong direction (beta = .116 and .101 respectively, see Table 1, Block 2, Columns 1 and 3, Row 3).

Although social control theory posits that parental attachment has a direct effect on delinquency, our results reveal no such relationship for any of our groups. Nonetheless, our zero order correlation analysis reveals evidence for a significant correlation between attachment and delinquency (see Table 4, Column 7, Rows 9-12). The correlation, however, appears spurious in the presence of the other parental influence variables, conventionality and supervision.

School Commitment

The results provide evidence for Hypothesis 4 which states that alienation from school affects delinquency indirectly by increasing the chances of delinquent peer association where delinquent attitudes that promote delinquency are learned. Our findings show this to be true for all groups. A close inspection of the indirect effects of school commitment on delinquency reveals that for both groups of boys, school commitment has the greatest total effect on delinquent attitudes (beta = -.320 and -.429 respectively, p<01, see Table 1, Block 2, Columns 2 and 4, Row 4). Furthermore, for both groups of girls, school commitment has the second largest effect on attitudes (beta = -.238 and -.322 respectively, p<.01, see Table 1, Block 2, Columns 6 and 8, Rows 4) preceded by parental conventionality. For all groups, school commitment also exerts fairly strong direct effects on delinquent peer association in comparison with other variables (beta = -.357, -.235, -.226, and -.378 respectively, p<.01, see Table 1, Block 3, Columns 1, 3, 5, and 7, Rows 1 to 4). These findings are in agreement with differential association theory and differential social control theory (Heimer and Matsueda 1994) which argue that since commitment to education reduces the likelihood of affiliation with delinquent peers and hence the adoption of delinquent attitudes, it therefore indirectly reduces the risk of delinquent behaviors.

On the other hand, a weak yet statistically significant direct effect was found only for the late adolescent boys (beta = -.152, p<.05, see Table 1, Block 1, Columns 1 - 8, Row 4). Therefor our findings fail to provide support for social control theory that posits direct effects of conventional activities in restraining delinquency.

Delinquent Peer Association

Hypothesis 5 predicts that delinquent peer association affects delinquency both directly and indirectly. Our results reveal this to be true for both late adolescent boys and girls (direct effect beta = .229 and .188 respectively, total effect beta = .301 and .279 respectively, p<.01, see Table 1, Block 1, Columns 3, 4, 7, and 8, Row 5). For early adolescent boys and girls, however, the direct effect is weak and insignificant (beta = .040 and .091 respectively, see Table 1, Block 1, Columns 1 and 5, Row 5). Consequently, the total effects for these two groups are weaker than those reported for the late adolescent groups. These findings indicate that delinquent peers have greater effects for older adolescents than for early adolescents.

The overall findings lend support to differential association theory which argues that association with deviant peers facilitates the transmission of delinquent attitudes that promote delinquent behavior. Thus, delinquent peer association has an

Table 4. Zero-Order Correlation of Causal Variables and Delinquency: Early and Late Adolescent Boys and Girls

		Parental Conventionality (1)	Parental Supervision (2)	Parental Attachment (3)	School Commitment (4)	Delinquent Peers (5)	Delinquent Attitude (6)	Delinquency (7)
Parental Conventionality	(1)	-----	.301**	.377**	.299**	-.323**	-.322**	-.366**
	(2)	-----	.281**	.295**	.333**	-.377**	-.375**	-.298**
	(3)	-----	.207**	.275**	.315**	-.367**	-.357**	-.444**
	(4)	-----	.203**	.345**	.300**	-.387**	-.407**	-.308**
Parental Supervision	(5)	-----	-----	.466**	.429** -	.335**	-.312**	-.401**
	(6)	-----	-----	.468**	.348**	-.302**	-.203**	-.340**
	(7)	-----	-----	.347**	.191**	-.380**	-.287**	-.462**
	(8)	-----	-----	.372**	.352**	-.321**	-.405**	-.334**
Parental Attachment	(9)	-----	-----	-----	.529**	-.272**	-.225**	-.301**
	(10)	-----	-----	-----	.394**	-.271**	-.161**	-.281**
	(11)	-----	-----	-----	.338**	-.326**	-.241**	-.250**
	(12)	-----	-----	-----	.221**	-.226**	-.260**	-.178**z
School Commitment	(13)	-----	-----	-----	-----	-.435**	-.370**	-.379**
	(14)	-----	-----	-----	-----	-.379**	-.489**	-.407**
	(15)	-----	-----	-----	-----	-.378**	-.352**	-.258**
	(16)	-----	-----	-----	-----	-.502**	-.525**	-.405**
Delinquent Peers	(17)	-----	-----	-----	-----	-----	.444**	.377**
	(18)	-----	-----	-----	-----	-----	.474**	.462**
	(19)	-----	-----	-----	-----	-----	.417**	.442**
	(20)	-----	-----	-----	-----	-----	.507**	.452**
Delinquent Attitude	(21)	-----	-----	-----	-----	-----	-----	.619**
	(22)	-----	-----	-----	-----	-----	-----	.457**
	(23)	-----	-----	-----	-----	-----	-----	.526**
	(24)	-----	-----	-----	-----	-----	-----	.594**
Delinquency	(25)	-----	-----	-----	-----	-----	-----	-----
	(26)	-----	-----	-----	-----	-----	-----	-----
	(27)	-----	-----	-----	-----	-----	-----	-----
	(28)	-----	-----	----	-----	-----	-----	-----

p<.05, ** p<.01. For each pair of correlation, the first row is Early Adolescent Boys, followed by Late Adolescent Boys, Early Adolescent Girls, and Late Adolescent Girls.

indirect effect on delinquency mediated by delinquent attitudes. The findings reported for the older adolescent groups, however, also lend support to differential social control theory (Heimer and Matsueda 1994) which stipulates both direct and indirect effects of delinquent peers on delinquency.

Delinquent Attitudes

The results show delinquent attitudes affect delinquency directly. As predicted by Hypothesis 6, adolescents who report attitudes favoring rule and law violation are more likely than others to engage in delinquent activities. Indeed, among the predictor variables in our model, delinquent attitudes exert the strongest direct effects on delinquency for all four groups (beta = .494, .238, .322, and .396 respectively, $p<.01$, see Table 1, Block 1, Columns 1, 3, 5, and 7, Row 6). These results also represent a total effect greater than any other predictor variables in the model for all groups except the late adolescent boys (see Table 1, Block 1, Columns 2, 4, 6, and 8, Rows 1 to 6). These findings lend support to differential association theory which emphasizes the critical role of delinquent attitudes in affecting delinquent behavior. These findings also are in agreement with social control theory that views belief in conventional norms as a means for directly controlling delinquency.

CONCLUSIONS

The principal aim of this study was to introduce an integrated model of juvenile delinquency which reflects modifications of social control and differential association theories. The path model we developed grants us the opportunity to empirically test the hypotheses derived from this model. The hypotheses include those which traditionally originate from social control and differential association theories in addition to a new set of hypotheses obtained from our modifications.

As reported, on several occasions direct paths from Hirschi's bond components and delinquency did achieve statistical significance, hence, we cannot argue for a total rejection of social control theory. These direct causal paths, however, are limited and indeed are secondary to mediating influences. We discovered, for example, that paths between the bond components and deviant behavior actually are more mediated by several intervening variables including delinquent peer association, thus clearly giving support to the underlying premise of differential association theory. Differential association theory, however, traditionally has focused on the indirect relationship between peer association and delinquency. Our findings, nonetheless, reveal significant direct effects of peer association on delinquency for our late adolescent sample, thereby lending some support to our argument concerning the direct effect of peer association on delinquency.

The main contributions our model makes to the understanding of juvenile delinquency, however, are reflected in the findings regarding Hypotheses 1 that reflects our proposed modifications. These findings have implications for both the development of an integrated framework explaining juvenile delinquency and also for empirical research directed at delinquency.

Hypothesis 1 reflects our argument for a theoretical framework that examines the relationship between parent's unconventional attitudes and behavior and juvenile delinquency. Our findings indeed do lend support to our argument. As reported, except for a few occasions, not only does parental conventionality have both direct and indirect effects on juvenile delinquent behavior, but also it is related to all other variables in our model.

Although we did not discover any direct effects of parental conventionality on delinquency for our late adolescent groups (male and female), the total effects of this variable are significant for all age and gender groups. Furthermore, the directs effects for early adolescent boys and girls persisted net of the mediating effects of deviant peer association. In other words, the anti-

social attitudes and behaviors of the parents directly affect deviant behavior on the part of the young adolescents. Parental conventionality also has a greater direct influence on this group than does delinquent peer association. Conversely, delinquent peer association had a much greater impact on delinquent behavior for our late adolescents than did parental conventionality. We posit, therefore, that the antisocial behavior and attitudes of parents may be more significant in fostering early introduction to delinquent attitudes and behavior, while peers become the predominant influence for late adolescents.

The findings of our study illuminate the consequences for youth being raised by antisocial parents, yet our literature review reveals the major theories of delinquency avoid any consideration of parent's attitudes and behaviors. Social control theories view the family as a conventional agent of socialization wherein social values and socially appropriate behavior are observed and learned, and thus it examines the family as the primary source of attachment in preventing delinquency. Differential association theory, on the other hand, which is concerned with factors that facilitate delinquent behavior, exclusively focuses on the role of delinquent peers in this process. As far as parental influence is concerned, they argue that this variable is mediated by exposure to delinquent peers where positive definitions of deviant behavior are learned. Research thus, according to Liska and Reed (1985:548) "sees parents as an unconditional source of conventional control, whereas peers can be a source of either conventional or unconventional social influence."

We argue, however, that it is erroneous to assume that all families provide a conventional environment for their youth. With this caution, we contend that since the family is the first primary group with whom the individual interacts, the need for studies to theoretically include and empirically examine the family as an arena in which delinquent attitudes and behaviors can be learned becomes even more imperative.

We propose, therefore, that including the role of unconventional parents into an integrated social control and differential association framework would expand the explanatory power of the theory. First of all, this addition would add another dimension to parental influence as contained within social control theory. Secondly, since differential association theory deals with the role of primary groups in the learning of attitudes and behavior, including the family as a primary group into this framework would be very natural. Finally, reconceptualizing the role of primary groups to include parents would necessitate a reassessment and reexamination of the role of delinquent peers as discussed in this theory. It is this last point that deserves elaboration.

Our findings reveal delinquent peers mediate the relationship between unconventional parents and delinquency for all age and gender groups. The regression coefficients in our path model indicate that being raised by unconventional parents may lead some youth to seek out a peer group with similar antisocial attitudes and behaviors and that such association further encourages deviant behavior. We propose, therefore, that we cannot simply state that delinquent peer association directly causes delinquency, rather consideration also should be given to the mediating effects deviant peer association has on delinquency.

Our study contains several limitations that must be considered. The causal ordering established in our path model did not consider the likelihood of reciprocal relationships between our variables, in particular, the possibility of a reciprocal relationship between delinquent peer association and delinquency. The ordering of the relationship between these variables has traditionally been presented as unidirectional from association to delinquency, and little attention is given to the effects of delinquency on peer association. Our findings provide us with enough evidence to

propose that the relationship between these variables may indeed be reciprocal. For example, we argued that adolescents growing up with antisocial parents might seek out a delinquent peer group. The rewards and reinforcement for behavior that are gained from membership in the group may serve to perpetuate association with the group, thereby facilitating further involvement in deviant behavior. We thus concur with Aseltine (1995:116) when he argues that "a more fruitful approach to deviant research would explicitly consider the ways in which individuals select environment and social contexts, shape and change those environments, and are indeed acted upon by their social environment."

This brings us to a methodological issue that we believe must be addressed. Although there are those who stress the need for longitudinal studies to more clearly understand the development of delinquency (Thornberry et al. 1994), we employed the cross sectional method in our study. The findings generated from our hypotheses reflecting both social control and differential association theories, however, are very consistent with those discovered in longitudinal studies testing these theories. Nonetheless, since our study contained several modifications to these theories that have not yet been examined, we cannot extrapolate that a longitudinal analysis would produce results similar to our own. We cannot justifiably conclude that once youths are introduced to delinquent attitudes and behavior in the family, they are then led to gravitate to or become a member of a delinquent peer group. Consideration of this active role of the adolescent, as Aseltine (1995) emphasizes and as we concur, requires a longitudinal analysis to adequately test the trajectory of such a process. We suggest, therefore, that future research testing our model and employing the longitudinal method is needed to examine this process.

Despite these limitations, our findings clearly emphasize the need to separate adolescent groups according to age when examining the causes of delinquent behavior. Much of the current literature on juvenile delinquency generally collapses all adolescent age groups into one sample group, implying that the influences on delinquency do not vary according to age. We, however, highlight our findings that reveal differences in the significance of the variables for age groups and methodologically suggest the need for research on juvenile delinquency to acknowledge these differences. Nevertheless, the amount of variance our model explained for both gender groups indicates our model is applicable for both boys and girls.

In conclusion, the modifications we proposed concerning the influence of parents on delinquency can readily be integrated into Sutherland's differential association theory. Undoubtedly, differential association theory has contributed much to our understanding of delinquent behavior. Nonetheless, we believe the modifications proposed in this study would greatly enhance those contributions. Rather than exclusively attending to the role of the delinquent peer group in explaining delinquency, we contend the basic premises and theoretical constructs which comprise this theory are very conducive to including unconventional parents as a primary group which influences delinquent behavior. By reconceptualizing the role of parents in the explanation of delinquent behavior, this work contributes to theory and research in the field of juvenile delinquency.

APPENDIX A: DESCRIPTION OF VARIABLES

Variable	Alpha	Description
Parental Conventionality		Agreement with the following statements, coded as
early adolescent boy	.6266	1 = never; 2 = sometimes; 3 = usually; 4 = always:
late adolescent boy	.5222	(1) My parents try to obey the law and stay out of trouble.
early adolescent girl	.6122	(2) My parents respect the police.
late adolescent girl	.6346	
Parental Supervision		Agreement with the following statements, coded as
early adolescent boy	.7050	1 = never; 2 = sometimes; 3 = usually; 4 = always:
late adolescent boy	.7901	(1) My parents know who I am with when I am away from home.
early adolescent girl	.6962	
late adolescent girl	.7216	(2) My parents know where I am when I am away from home.
Parental Attachment		Agreement with the following statements, coded as
early adolescent boy	.7608	1 = never; 2 = sometimes; 3 = usually; 4 = always:
late adolescent boy	.7942	(1) My parents want to help me.
early adolescent girl	.7617	(2) My parents know what is best for me.
late adolescent girl	.8220	(3) My parents explain their feelings.
		(4) My parents explain their rules.
		(5) My parents talk to me over my future plans.
		(6) I can share my thoughts and feelings with my parents.
		(7) I want to be the kind of person my parent is.
School Commitment		Agreement with the following statements, coded as
early adolescent boy	.7864	1 = never; 2 = sometimes; 3 = usually; 4 = always:
late adolescent boy	.7924	(1) I try hard in school.
early adolescent girl	.7361	(2) I like school.
late adolescent girl	.7797	(3) Getting good grades is important to me.
		(4) School attendance is important to me.
		(5) I read and write at home.
		(6) The things I do in school are worthwhile and meaningful to me.
		(7) My teachers know what is best for me.
		(8) My teachers want to help me.
		(9) I can share my thoughts and feelings with my teachers.
		(10) I would like to be the kind of person my parent is.
Delinquent Peers		Agreement with the following statements, coded as
early adolescent boy	.6961	1 = never; 2 = sometimes; 3 = usually; 4 = always:
late adolescent boy	.7020	(1) My close friends tend to follow the rules.
early adolescent girl	.7013	(2) My close friends respect the local police.
late adolescent girl	.7741	(3) My close friends) tend to get into trouble with the police.
		(4) My close friends tend to get into trouble with their parents.
		(5) My close friends tend to get into trouble with their teachers.
		(6) My close friends tend to get into trouble at school.

(continued on next page)

(Appendix A continued)

Variable	Alpha	Description
Delinquent		Attitudes Agreement with the following statements, coded as
Early adolescent boy	.6994	1 = never; 2 = sometimes; 3 = usually; 4 = always:
Late adolescent boy	.6826	(1) It is alright to get around the law if you can get away with it.
Early adolescent girl	.7082	(2) To get ahead, you have to do some things which are not right.
Late adolescent girl	.6279	(3) I can't seem to stay out of trouble no matter how hard I try.
		(4) "Suckers" deserve to be taken advantage of.
Delinquency		Answer to the following questions, coded as: 1 = not at all;
Early adolescent boy	.9457	2 = once; 3 = twice; 4 = 3 or 4 times; 5 = 5 or more times:
Late adolescent boy	.9002	In the past year, have you ever
Early adolescent girl	.9065	(1) skipped school?
Late adolescent girl	.8700	(2) hit either of your parents?
		(3) hit a teacher?
		(4) gotten into a serious fight in school or at work?
		(5) take part in a fight where a group of your friends were against another group?
		(6) hurt someone badly enough to need bandages or a doctor?
		(7) used a knife, gun, or some other thing (like a club) to get something from a person?
		(8) carried a weapon?
		(9) taken something not belonging to you worth under $50?
		(10) taken something not belonging to you worth over $50?
		(11) taken something from a store without paying for it?
		(12) taken a car without permission of the owner?
		(13) taken part of a car without the permission of the owner?
		(14) gone into some house or building when you were not suppose to be there?
		(15) set fire to someone's property on purpose?
		(16) damaged property at school or work on purpose?
		(17) smoked marijuana?
		(18) used alcoholic beverages (beer, wine, hard liquor)?
		(19) used other drugs (cocaine, speed, acid, uppers)?
		(20) sold any drugs?
		(21) gotten into trouble with police (picked up or arrested) because of something you did?
		(22) had sexual relations with a person against her/his will?
		(23) been suspended or expelled from school?
		(24) run away from home?

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