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# Explaining Delinquent Behavior Among Adolescent Girls: Internal Social Control and Differential Association

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## ABSTRACT

Questionnaires were completed by ninety girls participating in a therapeutic wilderness program. Indexes were constructed of problems in school, sexual activities, drug and alcohol use, violent acts, major property offenses, minor property offenses, and miscellaneous misdemeanors. Measures of internal social control were of *attachment* to parents and to school, *commitment* to educational goals, *involvement* in homework, *beliefs* about drug use, and respect for the law. Differential association was measured by questions about *friends' behaviors*. The combined influence of internal social control as a barrier to deviance and differential association as a push toward deviance was examined. Theories used earlier to explain delinquency among boys generally worked well in identifying the correlates of deviant behavior among these adolescent girls, though results varied for the different types of deviance considered. Implications of results for program development are discussed.

Programs intended to address behavior problems among adolescents rest on assumptions about the causes of their behavior. Identifying and empirically testing assumed causes of targeted behavioral problems is an important step in developing and evaluating treatment programs. A variety of existing sociological perspectives claim to explain juvenile delinquency, for example, but relatively little has been published regarding how well these theories might actually work in guiding therapeutic interventions, especially in programs designed to assist female clients. A number of social-psychological theories which have predicted quite well delinquency among teenage boys, particularly the theories of internal social control and differential association, have not been widely used for studies of teenage girls. Meanwhile, the literature pursuing sex role orientation of girls as

a possible predictor of their delinquency involvement has not shown convincing results (e.g., Giordano and Cernkovich, 1979; Shover et al., 1979; Thornton and James, 1979).

Leaving aside debates about the impact of societal level changes in sex roles on girls' *rates* of delinquency (Adler, 1975; Simon, 1975; Klein, 1979; Steffensmeier and Steffensmeier, 1980; Austin, 1982; Siegal and Senna, 1988), we note that (1) girls are far more likely than boys to be incarcerated for status offenses rather than felonies and (2) family functioning has been regarded as particularly important in contributing to the genesis of female delinquency (Robey et al., 1964; Wattenberg and Sanders, 1954; Gibbons and Griswald, 1957; and Baxter and Adams, 1962). The number of teenage runaways in the U.S. has increased to over two million per year and one-fourth of all U.S. women are now pregnant by the age of nineteen, 80 percent outside of marriage (Robertson, 1987). Problems such as these, along with girls' increased involvement in criminal violations and drug use, often lead to referral into clinical intervention programs. Thus, a study of deviance among adolescent girls participating in a treatment and prevention program appears timely and informative.

By the term deviance we do not mean to imply individual pathology, but rather to describe behaviors that violate conventional expectations for appropriate conduct. For a variety of behaviors considered problematic by conventional authority figures in their lives, the girls we studied were referred to a therapeutic wilderness camping program for "troubled" teenage girls that also included a family counseling component. Detailed discussions of therapeutic wilderness camping programs are provided in Roberts (1987a,b), Behar and Stephens (1978), and Callahan (1985). Most important, "there have only been a handful of published follow-up studies describing the effectiveness of wilderness programs, and most of the existing data comes from studies conducted a decade or more ago" (Roberts, 1989b:213). Moreover, to our knowledge, none of the previous studies reported empirical data on girls.

In our study we decided to investigate whether several theoretical perspectives which have been used to explain male delinquency can also help to explain various types of deviant behavior/adjustment problems among adolescent girls. The two theories we focused on were Internal Social Control and Differential Association Theory. Very recently there has developed an intense debate among delinquency theorists concerning whether or not these traditionally distinct theories can—or even should—be combined into an "integrated" theory of delinquency (Messner, Krohn, and Liska, 1989). Some theorists such as Eve (1978) and Elliot (1985) have argued in favor of such an approach, while Hirschi (1989) has argued strongly against such a procedure. Still others, for example,

Swigert (1989) and Gibbs (1989), have argued that it is methodologically premature to attempt integrated theories. We believe that the argument is at least partially misguided, and that the answer depends on what the scholar or practitioner wishes to accomplish.

The pushes toward deviance suggested by differential association theory and the barriers to deviance hypothesized by control theorists may both be operating, in practice, influencing conformity/deviance among adolescent girls. For example, high levels of internal social control can block or inhibit deviant behavior despite external pushes toward deviance (Eve, 1978). Conversely, external pressures may at times be strong enough to overcome internal barriers against participation in deviant behavior. Thus, one idea examined here is whether internal social control can effectively "block" the effects of differential association.

## Objectives

In this article we will first review the two social-psychological theories of internal social control and differential association. We will then describe our data collection procedures and characteristics of our sample. The measures used will be discussed at some length in order to provide readers with a clear idea of how the theories were translated into clinically relevant research instruments. We will outline the preliminary findings which led to construction and testing of an impact (intervention) model. Finally, we will review the implications for clinical practice and program development.

Our purpose is to demonstrate that sociological theories can be "successfully" applied to clinical samples. We expect operational indicators of concepts drawn from internal social control and differential association theory to be significantly related to deviant behaviors reported by the Girls' Adventure Trails (GAT) girls.

*Hypothesis I* Girls with lower internal social control levels will have higher rates of deviant behavior/adjustment problems.

*Hypothesis II* Girls with higher levels of association with delinquent peers will have higher rates of deviant behavior/adjustment problems.

We will test whether the theories explain variation in the deviant behaviors reported by adolescent girls in this treatment program and, if so, we will consider how the theories might be used to build an intervention model. Correspondingly, sociological theories may be shown to provide a foundation—empirically supported by actual client data—for developing more explicit and

valid impact/intervention models by which counselors or agency managers can design programs and evaluate program effectiveness.

For both theories, when obtaining information from girls in the program, questions were included that had been used in previous studies commonly cited in the research literature. While previous empirical evaluations tended to focus on only one dimension of internal control (e.g., beliefs) to the exclusion of others (e.g., commitment) or to examine some sources of conventional attachment (e.g., parents) and not others (e.g., school), the detailed self report instrument we used covered many dimensions. Likewise, a range of deviant behaviors were investigated, including drug use, minor as well as more serious criminal offenses, school problems and sexual behavior. The virtue of this approach is to capture the multidimensionality of both deviant behaviors and the theories which attempt to explain them.

### Theoretical Perspectives

As conceptualized and popularized by Travis Hirschi (1969), *social control theory* assumes that people are innately amoral, active, grasping, manipulating, and self-interested. Why, then, do people conform to social norms? One answer is found in sources of external social control (such as police, prisons, public surveillance systems, etc.). Additionally, socialization causes people to internalize the norms and values of their group. They will correspondingly feel anxiety if they act in ways which contradict their socialization. While control may initially have been external during early childhood, i.e., rewards or punishments received from one's caretakers, eventually the attitudes and values of these others become internalized. Society is seen by social control theory as advocating a single set of prosocial values which are assumed to be universally experienced. Thus, deviance is said to be the result of an absence or a failure of the socialization process within a given society. Individuals who are insufficiently connected to conventional beliefs, goals, activities, and relationships with others are expected to be more likely to engage in norm violating behaviors.

Hirschi (1969) described four aspects of socialization which he believes act as social-psychological barriers to deviance: "attachment"; "commitment"; "belief"; and "involvement." Social control theory suggests that the more one is emotionally *attached* to conventional socializing agents, such as parents or teachers, the more one will want to please these agents by adopting the prosocial patterns of behavior they advocate. The *commitment* dimension is based on the assumption that the more a person is rationally committed to conventional goals or conventional lines of action, the less likely he/she is to act in deviant ways.

With respect to the *belief* dimension, Hirschi and other control theorists have assumed that once one has internalized conventional beliefs, violation of these beliefs will result in anxiety or other distress. Thus, to the extent that youths give prosocial answers when asked to agree or disagree with items such as, "It's all right to break the law if you can get away with it," we may predict they are less likely to deviate. Finally, the *involvement* dimension reflects the suggestion by control theorists that to the extent a youth is involved in conventional activities (studying, church work, etc.) he/she will be less likely to get into trouble. Such involvement is also expected to increase levels of attachment, commitment, and internalization of conventional beliefs.

One limitation of control theory is that it assumes a single set of prosocial, societywide values. *Differential association theory*, which also emphasizes the impact of socialization on individual behavior, recognizes that society is not, in fact, so uniform in values. Differential association theory assumes, instead, that society is characterized by more than one agreed-upon set of norms. Deviance, like conformity, is viewed as learned through interaction with others, but with others whose attitudes and behaviors are favorable to norm violation. Some criminologists, such as Sutherland and Cressey (1974), have argued that the lower class in general is organized around a set of values conducive to law breaking. Criminal behavior patterns are seen as the product of normal learning from one's associates in the lower segments of society. Sutherland and Cressey refer to this type of learning as being the result of "differential-association," resulting in individuals who have an "excess of definitions and attitudes favorable to law-breaking." In short, deviance is regarded from this perspective as the result of normal and effective socialization, but it is socialization within a group or class which has adopted norms and values that are unusually often criminal. Thus adolescents may associate with peers who promote drug use, sexual activity, cheating, or other behaviors viewed as deviant by the dominant culture.

### Sample

The girls who participated in this study were clients in a Girls' Adventure Trails (or, hereafter, GAT) program. Girls' Adventure Trails, located in Dallas, Texas, serves girls nine to fifteen years of age who are referred for a variety of adjustment problems, such as low self-esteem, poor grades, sexual promiscuity, running away from home, defiance of parental authority, drug use and other law breaking. The core service consists of a 26-day wilderness camping trip conducted by young adults with training in counseling as well as wilderness camping skills. The girls' parents are involved in weekly group meetings with

professional staff for four weeks during their daughters' trip and three following the trip to work on parenting skills. The entire family is also included in pre-trip slide shows, interviews, and evaluation conferences, and participates together in an overnight weekend camping experience. Following the core service, professional counseling is made available as needed, by request, for six months.

All girls who passed through the GAT program between November 1984 and November 1986 were asked to complete anonymous questionnaires. No girl refused to complete a questionnaire, although a few omitted some answers. The total number of girls in the present data set represent ten different camping trips. The girls were taken to the wilderness by bus. While on the bus they were asked to complete half of a 21-page questionnaire during the first day on the road and then were asked to complete the second half on the next day. Girls were assigned code numbers and were never asked to give their names. The questionnaires were administered by the trip counselors who are trained interviewers and counselors. The girls had met the trip counselors and interacted for several hours before the field trip actually began, so there was already generally good rapport between the counselors and the girls.

Between November 1984 and November 1986, ninety girls participated in the wilderness camping experience, in groups of six to twelve. The median age of the girls in the sample was thirteen. They came from many different junior high and upper elementary schools in Dallas, Texas and surrounding areas. Their religious background was predominantly Protestant. Eleven percent were the only child in their family, while the rest were equally likely to be oldest, middle, or youngest child. Their fathers' occupation ranged from laborer to professional-technical. Just over one-fifth of their mothers were not employed. Those working for wages outside the home had jobs from domestic to professional-technical, with the highest proportion in clerical. Seventy-eight percent of the girls in this sample were white, 13 percent black, and 7 percent Hispanic. The most common referral sources were school personnel (counselors, teachers, administrators), police juvenile departments or probation officers, and family or friends. Reasons for referral were most often truancy and failing grades, poor communication skills, rebelliousness at home, running away, stealing, shoplifting, and fighting. A deliberate effort is made by GAT to select girls who are having serious problems but do not yet appear to be "incorrigible."

### **Measures of Deviance**

The various measures of deviant behavior, which appeared in the final section of the questionnaire, were sorted into several categories of offenses: (1)

problems in school, (2) sexual behavior, (3) drug and alcohol use, and (4) criminal offenses. Criminal offenses were further divided into (a) violent acts, (b) major property offenses, (c) minor property offenses, and (d) "misconduct," which included a variety of misdemeanor acts not included in the other categories.<sup>1</sup> Indexes for each category of offense were created by summing responses across items in a given category. Measures were drawn from the Short and Nye (1958) delinquency inventory and a similar but more recent and more extensive inventory used by Hindelang, Hirschi, and Weiss (1980).

### **Measures of Internal Social Control**

Each of the four aspects of internal social control are themselves multi-dimensional. Attachment may be to various persons, commitment may be to a variety of conventional goals, beliefs may pertain to a range of issues, and involvement may be across different types of conventional activities.

#### *1. Attachment Dimension.*

Our questionnaire included items on attachment to parents and to school. The specific questions used concerned whether a girl respected her mother (father), wanted to be like her mother (father), shared thoughts and feelings with mother (father) and so on. The index of school attachment consisted of four items which asked how much the respondent liked or disliked school, how many of her current teachers she liked, and whether she cared what her teachers think of her (two phrasings). Attachment to school was found to be independent of attachment to parents.

#### *2. Commitment Dimension.*

Commitment was measured in terms of educational goals. The index of educational commitment consisted of five items: the importance to the respondent of learning as much as possible in school; importance of grades to her own satisfaction; whether getting good grades really means a lot to her; her decision to go to college; and, how far she wanted to go with her education. Commitment to educational goals was positively related to school attachment ( $r=.51$ ,  $p=.001$ ) but not significantly related to attachment to either parent.

#### *3. Involvement Dimension.*

Involvement in conventional activities was measured by two related items concerning how often a girl finished her homework and the number of hours a day she spent doing homework. Involvement in conventional activities was correlated with educational commitment ( $r=.56$ ) and with school attachment



( $r=.35$ ). Like educational commitment, involvement in conventional educational activities was not related to attachment to mother or father for girls in this sample.

#### 4. *Belief Dimension.*

Internalized conventional beliefs were measured with reference to the girls' attitudes toward drug use and other criminal behavior. Conventional beliefs about drug use included questions about how strongly a girl approved or disapproved of people her age smoking, drinking, taking amphetamines ("speed"), marijuana, LSD, "hard drugs" such as cocaine, and tranquilizers. Other beliefs which might serve as a barrier to criminal behavior, beliefs pertaining to respect for the law, were addressed by asking respondents their level of approval or disapproval concerning the following types of statements: "I have a lot of respect for the police," "It is all right to get around the law if you can get away with it," "People who break the law are almost always caught and punished," and "To get ahead, you have to do some things that are not right."

#### Measures of Differential Association

As a measure of differential association, we attempted to establish the extent to which respondents held certain definitions favorable to law breaking. Additionally, respondents were asked to describe their perceptions of some of the attitudes and behaviors of their friends. We were looking for the possible connection between a girl's own beliefs about the desirability or undesirability of selected behaviors, her perception of her friends' beliefs and behaviors, and her actual involvement in these behaviors.

Girls in the GAT program were asked specifically how often (from "never" to "very often") their friends used amphetamines, barbiturates, cocaine, LSD, and heroin. Summing responses across these five items produced a reliable index of friends' use of drugs. Girls were also asked how much their friends drank alcohol and how often they cheated on tests, were suspended from school, and were involved in sexual activity. Additionally, for most of these behaviors the GAT girls were asked about their own beliefs.

#### Findings on Internal Social Control

In short, the suggested overall effect of *attachment to conventional socializing agents* was that it might be serving as a modest, but consistent (for mother, father, and teachers), barrier to criminal behaviors and school adjustment problems. Attachment to conventional socializing agents did not appear to deter

sexual activity, and only attachment to teachers/school was possibly inhibiting drug use. *Commitment to educational goals* was not significantly related to criminal behaviors other than drug use though it had modest inverse relationships with drug use, sexual activity, and school adjustment problems. *Involvement in conventional activities*, specifically homework, was moderately, inversely, related to criminal behaviors and school adjustment problems, somewhat related to less use of drugs and not significantly related to sexual activity. *Internalized conventional beliefs* were most strikingly related to deviant behavior in this sample of girls. Disapproval of drug use was strongly related to reporting not actually using drugs and to less sexual involvement, as well as being consistently (modestly) related to lesser involvement in criminal behavior and school adjustment problems. Prosocial beliefs reflecting respect for the law and disapproval of criminal behavior were strongly related to reduced involvement in violent crime, property crimes, miscellaneous conduct offenses, and school adjustment problems. Prosocial beliefs were also associated with reduced involvement in drug use and, to a lesser extent, sexual activity.

### Findings on Differential Association

Our data were also consistent with a differential association interpretation of the GAT girls' adjustment problems. Cheating in school, drinking, and use of illegal drugs were strongly related both to *friends' involvement in the same behavior* and to *internalized definitions (beliefs) favorable to these behaviors*. The greater the number of close friends who had been suspended from school, the more likely a girl was to have been suspended herself ( $r=.75$ ). Forty-five percent of the girls had skipped school with friends "many times." To a lesser extent, when friends were perceived as more involved in sexual activity, girls were more likely to "make out" with boyfriends ( $r=.47$ ) and "go all the way" ( $r=.30$ ). Although the questionnaire did not ask about friends' criminal behavior, recall that beliefs favorable to law breaking were strongly related to the girls' involvement in various types of criminal activity/conduct offenses.

In applying differential association theory to the case of the GAT girls, it was still unclear whether association with peers who engage in deviant acts is directly related to a girl's behavior or whether this effect is mediated by her beliefs. Partial correlations were used to examine relationships among these three variables. The weakest link was the association between friends' behavior and a girl's own beliefs. For example, if we controlled for a girl's own drinking behavior, having friends involved in drinking was not significantly related to her beliefs about drinking. Her behavior, however, was related to her friends' behavior (controlling for her own beliefs) and to her own beliefs (controlling

for friends' behavior). Even if she did not personally favor drinking, she was more likely to drink if her friends drank, and, if she favored drinking she was more likely to drink regardless of whether her friends drink.

**Impact of Differential Association and Internal Social Control on Various Types of Deviant Behavior**

The most complex question, finally, is about the manner in which internal social control and differential association jointly influence the GAT girls' degree of involvement in deviant behaviors. Figure 1 outlines the causal model underlying this discussion.

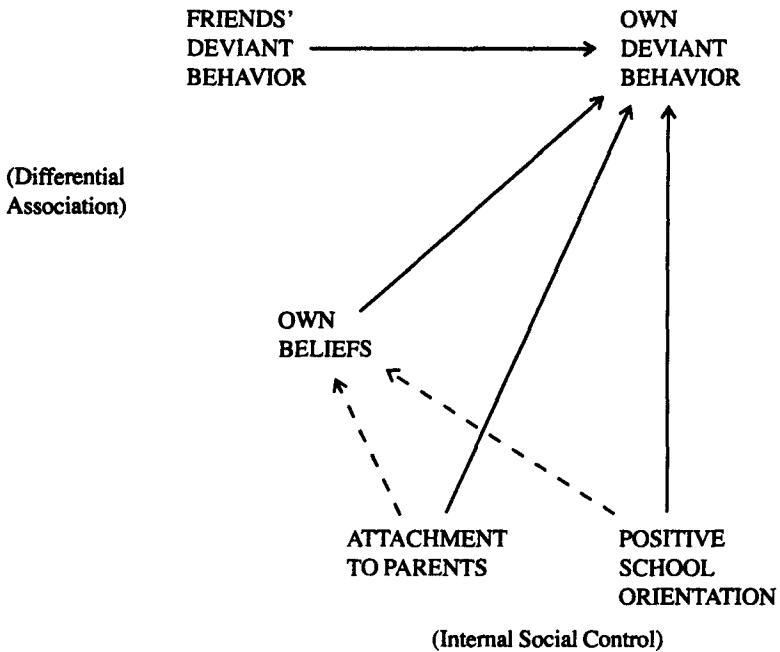


Figure 1. Selected Factors Influencing Delinquency (suggested by Differential Association and Internal Social Control Theories)

Three preliminary points:

1. *School and family appeared to be separate domains within which the GAT girls were more or less "connected" to conventional social institutions. For girls in this sample, attachment to parents (e.g., respecting them, wanting to be like them, feeling understood and wanted by them) did not necessarily*

lead to, nor did it preclude, caring what teachers think of them, aspiring to college, or spending time on homework. To continue the analysis, therefore, we combined measures of school attachment, commitment, and involvement to obtain an index of general positive orientation toward school and combined the measures of attachment to mother and father to create an index of positive orientation toward parents. These appear in Figure 1 as two institutional sources of internal social control.

2. *The concept of beliefs is embedded in both social control (the "belief dimension") and differential association ("excess of definitions favorable to law breaking") explanations of deviance.* As noted earlier, beliefs were the strongest correlate of the GAT girls' involvement in a variety of deviant behaviors/adjustment problems. Beliefs were therefore treated in Figure 1 as a separate factor relevant to both theoretical perspectives.

3. *Findings varied with the type of deviant behavior being considered.* School adjustment problems and crimes, for example, were significantly related to (lack of) attachment to parents, while drug use and sexual activity were not. Commitment to educational goals was not significantly related to extent of criminal involvement but was modestly related to better school adjustment and less drug use. Most consistent across different types of deviant behavior was the strong inverse relationship with conventional beliefs.

Multiple regression was the statistical procedure we used to analyze the relationships between a given type of deviant behavior and the set of predictor variables suggested in Figure 1. Here, we were considering measures of internal social control and differential association together, to examine the relative effect of each controlling for the other.

Separate items on the questionnaire addressed consumption of alcohol and use of illegal drugs, yet the pattern of results for both sets of items was similar. Multiple  $R^2$  was .72 and .55, respectively. These high values confirm the importance of variables identified in the model for explaining the GAT girls' alcohol and other drug use. Within the model, however, positive school orientation and attachment to parents did *not* contribute significantly, since variance in the girls' behavior was almost entirely explained by friends' use of alcohol/illegal drugs and the girls' own beliefs about drinking and drug use.

The questionnaire did not include a direct measure of beliefs about sex but did include an item on friends' sexual involvement as well as the girls' attachment to parents and school orientation. The most influential factor was friends' sexual involvement. This time the  $R^2$  was down to .23 but the F value was still statistically significant. Most striking, regressing sexual involvement exclusively on school orientation and attachment to parents produced an  $R^2$  of .01: no effect. By contrast, introducing drug use to the original model boosted  $R^2$

to .44 and essentially eliminated the significant contribution of friends' sexual involvement.

For cheating in school,  $R^2$  was .46 and, again, most influential were friends who cheated on tests and a girl's own beliefs about cheating. Apart from her own attitude toward cheating and the influence of friends' cheating, neither positive school orientation nor attachment to parents had a significant effect.

For crimes, recall that we had a measure of prosocial beliefs but no measure of friends' criminal involvement. Also, we noted earlier that the strongest associations with internal social control items had been for criminal behaviors other than drug use. The regression analysis produced an  $R^2$  of .49 and the most balanced contribution of variables from internal social control and differential association theory. ( $R^2$  for regression only on criminal beliefs was .35, identical to the  $R^2$  for regression on school orientation and attachment to parents—in which both variables made a significant contribution to variance explained in criminal involvement.)

### **Sociological Theory, Research and Clinical Practice**

Arguments concerning which of several competing theoretical perspectives is valid appear to be misguided. Differential association and social control theory are frequently treated as mutually exclusive explanations, yet despite fundamentally different starting assumptions they overlap conceptually in the area of beliefs. Since endorsement of prosocial beliefs was inversely related to all types of deviant behavior considered in this paper, each perspective is successful in calling attention to a key variable for understanding variation in the extent of deviant behavior among girls in this sample. Moreover, other measures of both differential association and internal social control were found to be significantly related to various adjustment problems among the adolescents we studied.

We found in this study that theories used earlier to explain delinquency among boys seemed to work quite well in identifying correlates of most types of deviant behavior reported by adolescent girls in the GAT program. The traditional explanations for male delinquency we examined told us least, though, about the motivations behind these teenage girls' participation in sexual activities. This makes sense, considering the sex role bias involved in defining girls' sexual activity as deviant behavior (not so for boys). If preventing premature sexual involvements, unwanted pregnancy, and sexually transmitted diseases is a program goal, a better model is needed. Involvement in drugs, which was clearly associated with greater likelihood of sexual activity, might be included in such a model.

For intervention applications it should also be remembered that different types of problems may respond better to treatments based on one theory rather than another. For example, contrary to popular opinion, attachment to parents did not deter involvement in drugs for these girls. Producing better family relationships is a valuable goal in itself, but may be an ineffective strategy for a program mainly striving to reduce drug use. From the evidence examined in this analysis, efforts would be better spent in dealing directly with girls' attitudes toward drug use, examining the behavior of their peers, and helping them establish new friendships with more conventional girls.

In a detailed empirical analysis of data from a national youth survey, Elliott, Huizinga and, Ageton (1985:145) also concluded, "There is no evidence here that weak conventional bonding leads to delinquency or drug use in the absence of involvement with delinquent peers"; association with delinquent peers "led to some delinquency for all youths whether conventional bonding was weak or strong." Reviewing earlier studies, they noted that attachment to delinquent peers was the strongest correlate of delinquency—whether theft, violence, drug use, or status offenses (p. 75).

With respect to criminal offenses other than drug use, the degree of attachment reported toward parents was clearly an important factor. Greater attachment was related to more prosocial beliefs and to lesser involvement in criminal behavior. Again, Elliott, Huizinga, and Ageton's (1985) findings are germane. They found that the *extent* of involvement in delinquency was dependent on the level of conventional bonding. If associating with delinquent peers, the risk of increased involvement in delinquency was greater for youths with weak conventional attachments. Prosocial attachment attenuates delinquency participation. There is an interaction of influences operating such that rate of delinquency is boosted when there is low conventional bonding in conjunction with involvement with delinquent peers. Conventional bonds were also found to somewhat decrease the likelihood of involvement with delinquent peers.

Neither theory alone was "best" at explaining all types of deviance. Integrated prediction models combining theoretical perspectives can successfully increase "variance explained" (Eve, 1978), and thus are useful in identifying adolescents who are likely to get into some kind of trouble, but this approach obscures differences among clients in treatment programs. No one program using one approach can be successful for all types of girls with different kinds of problems. Effective interventions require a diversity of approaches within a particular program and/or prescreening to select individuals who will best benefit from the particular kind of services offered. Sensitivity to the pushes and the pulls toward deviance/conformity, and how they interact, will be useful.

Additionally, more research to clarify what types of causal variables are most readily subject to manipulation (e.g., *how* to build emotional attachment, commitment to conventional goals, involvement in conventional activities, and associations with others who do not hold definitions favorable to law breaking) would help practitioners apply the insights of theories like differential association and social control in their efforts at individual and social change. Systematic evaluation of actual program effectiveness is also important to ensure that limited resources are used in the most efficient way to accomplish specific goals. Impact models are a useful tool for this purpose.

Rossi and Freeman (1985:60) define an impact model as "the set of guiding hypotheses underlying the planning and implementation of a program." The causal hypotheses of an impact model specify the "influence of one or more processes or determinants on the behavior or condition the program seeks to modify" (Rossi and Freeman, 1985:72). Often programs operate from no more than loose assumptions—untested notions based on practice intuition or on previous studies with questionable generalizability to their own client base. We have demonstrated as an alternative the feasibility of research designed to apply sociological theories to particular client populations. The result for program managers/service providers is a clearer picture of determinants of a variety of problems among their clients—in this case, adolescent girls in a delinquency treatment and prevention program.

## NOTES

1. A detailed list of specific items used, with response frequencies, is available from the authors on request. The following sample items will give readers a sense of questionnaire content: *school adjustment* — failed a course, cheated on a test, skipped school; *sexual behavior* — "made out" on a date, had intercourse with boyfriend; *drug use* — smoked marijuana, took amphetamines, used heroin; *violent acts* — beat someone up, carried a weapon, committed robbery; *major property offenses* — took a car without permission, broken into a house, set fire to a building; *minor property offenses* — lifted a wallet, kept money collected for charity, took things from someone else's locker; *miscellaneous misdemeanors* — withheld information about a crime, deliberately broke a street lamp, ran away overnight.

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