REFERENCES


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Adolescence: Psychopathology, Normality, and Creativity

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The problem behaviors of adolescents create some of the most burdensome and perplexing social issues faced by our society. Problems, such as juvenile crime, school dropout, drug abuse, and teenage pregnancy, occur with discouraging regularity and enormous costs. Although adolescents comprise only 13% of the population, they commit 41% of the serious crimes tracked each year by the FBI.24 In Teenage pregnancies are estimated to cost society $10,000 per pregnancy in Federal assistance programs alone,25 in addition to leading to lower levels of parental lifetime earnings and less favorable developmental outcomes for children.26 Each year’s class of school dropouts will, over their lifetime, cost the nation $590 billion in lost earnings and tax revenues.27 Similar statistics could be cited to illustrate the costs of other adolescent problem behaviors such as substance abuse, dropout, and running away from home. These financial costs do not, however, capture the social and emotional costs that accompany serious problem behaviors in adolescence.

An enormous amount of literature examines causal models explaining the problem behaviors mentioned above. This review integrates some of the most promising aspects of this literature by focusing on the developmental processes that lead to serious adolescent prol
DEFINING PROBLEMATIC BEHAVIORS IN ADOLESCENCE

Researchers, clinicians, parents and adolescents disagree as to exactly what constitutes problematic behavior in adolescence. In part, this controversy reflects the complex value choices inherent in any research related to social competence. In particular, this controversy is exacerbated in research on adolescence because discrepancies between the values of the adolescents and those of adults is an almost normative occurrence. This paper focuses on those adolescent behaviors that are widely (although not universally) considered problematic. These include moderate to high levels of delinquency and drug use, school dropout, teenage pregnancy, and related problems. These behaviors share the characteristics that they may both create immediate difficulties for the adolescent and leave him or her at high risk for future problems in social adaptation. We recognize that this focus involves value judgments; by making these judgments explicit, however, we hope to at least permit others to agree or disagree with them.

Various problem behaviors of adolescence have been studied over the past 30 years, and although each problem existed in isolation. Recently, however, there has been growing recognition that these problem behaviors frequently co-occur and may be considered components of a single syndrome of problematic behaviors. This growing has been illustrated most clearly in work by Donovan, Jessor, and associates,12 who found such a syndrome of problem behaviors, including delinquent activities, drug use, and precarious sexual experiences, occurring among both junior and senior high school students. Similarly, data from retrospective reports have suggested that engaging in one problem behavior increases the probability of other problematic behaviors beginning within the following year.16 This research does not mean that problem behaviors are all identical, each

* This approach excludes several important areas of research into the causes of adolescent problem behaviors, such as cognitive-developmental and biopsychosocial lines of research. This is not meant to minimize the importance of these areas, only to allow a more full exposition of the potential value of the social developmental approach discussed.

behavior serving the same functions as the next. However, it does suggest that individual problem behaviors may result from a variety of factors including: patterns of difficulties in social development, rather than serving simply as responses to the unique rewards of a given behavior.

Recognizing the frequent co-occurrence of problem behaviors in adolescence helps reduce preoccupation with single behaviors (e.g., drug use) while suggesting the need to focus on the underlying developmental correlates of multiple problem behaviors. Developmental risk researchers note that the best way to predict developmentally relevant behaviors (such as adolescent delinquency) may be to focus on patterns of development and not just patterns of symptoms.17 Similarly, Bell19 distinguishes between "age-specific manifestations of risk" and the "underlying bases for enduring risk status." He notes that although age-specific manifestations may change (school problems at age 12 might "turn into" delinquency at age 16), the underlying bases for risk (e.g., lack of perceived self-efficacy) often remain stable. If we are truly to understand specific problem behaviors in adolescence, we need to examine not just the behaviors, but the central developmental tasks that, if unmet, create a strong and enduring risk of problematic behavior.

ADOLESCENTS' MODELS OF SELF IN RELATIONSHIPS

Among the most consistent correlates of adolescent problem behaviors are characteristics of the family of the child or adolescent.12,13 50, 56, 71 Although parental criminal behavior has some predictive value,21,22,23,24 the most consistent predictors of later delinquency are parental disinterest in the child and poor family management practices, such as providing inconsistent discipline to the child or adolescent.11,70,72 Maternal depression has also been related to conduct disorders in children.90 Significantly, one study reports that aggressiveness of punishment in the home did not predict aggressiveness in youth as well as environmental turmoil did.73

These findings suggest a complex relationship in which family interactions predict adolescent problem behaviors, though not necessarily in a direct way. Attachment theory offers a model that potentially accounts for much of this relationship and suggests how family characteristics influence the problem behaviors of adolescents. A central premise of attachment theory is that children form internal working models of themselves in relation to others.12,73 These models are presumed to exist largely outside of consciousness but to influence behavior in new relationships.74 Specifically, features of attachment models assessed in 1 year olds have been found to predict social competence at age 5. In adulthood, features of attachment models correlate with an individual's social competence and with his or her capacity to form secure attachment relationships with his or her own children.15,52,84

68,71 These findings suggest that individual models of attachment
relationships may mediate the link between family interactions in childhood and social competence across the lifespan.

Most importantly for the purposes of this paper, attachment theory suggests an explanation of hostile and antisocial behavior that directly fits much of the available data on the correlates of adolescent problem behaviors. Within attachment theory, anger is considered a response of children to actual separation and loss of parental figures or to the loss that occurs with real or perceived parental rejection. When parental behaviors are unpredictably inconsistent or rejecting, the child learns almost constantly in a state of uncertainty about the physical or emotional availability of the parent. As a result, he or she experiences frequent and intense anger. Over time, the child in these circumstances learns a model of a relationship in which anger and insecurity are central features. Under some conditions, this anger is likely to be displaced onto others. Hostile or antisocial behavior may result.

Thus, for example, college students with certain types of insecure models of attachment are seen by their peers as relatively hostile, even though they do not view themselves that way. Attachment theory thus suggests that the child or adolescent's model of attachment relationships may mediate the link between poor parenting in childhood and deviant behavior in adolescence.

This perspective suggests that hostility and insecurity in children's models of attachment relationships may constitute an enduring basis of risk that leads to various age-specific manifestations of problems over the course of development. Children whose parents do not meet their needs for security and emotional support may form models of attachment characterized by the child's feelings of anger and hostility and the child's perceptions that their needs are unlikely to be met by other people in their lives. These models can then influence social behaviors throughout development. In childhood, poor family management practices have been seen to predict childhood antisocial behavior and to difficulty socializing with peers.

Insecure and angry models of attachment also have been tied to victimization in preschool and to heightened aggressiveness and noncompliance during preschool and early school age years.

Eventually, if unchanged, these hostile, angry models of relationships may create a high risk of adolescent problem behaviors. Several studies provide some support for this prediction by linking aggressiveness and noncompliance in childhood to antisocial behaviors in adolescence and beyond. The child or adolescent's models of attachment, then, may mediate the link between poor parenting practices in childhood and problem behaviors in adolescence.

Research is still needed to spell out the specific characteristics of models of attachment that create a risk of adolescent problem behaviors. For example, attachment theorists have identified several qualitatively different models of insecure attachment relationships, including ambivalent, avoidant, and disorganized models. Although it seems likely that models of attachments characterized by insecurity mediate the link between poor parenting and later delinquency, more work needs to be done to clarify the nature of this link. Specifically, research is needed to distinguish among models of attachment that lead to problems such as depression and social withdrawal, those that lead to adequate levels of adaptation, and those that lead to antisocial behavior as a response to difficult early childhood experiences. Current research and theory suggest that models of attachment that could be classified as avoidant or dismissing of attachment relationships and that could be classified as insecure and disorganized, are those most likely to be related to hostile and antisocial behavior in adolescence.

Clearly, however, more research is needed in this area.

Several lines of research on individual correlates of deviance and delinquency in adolescence appear to tap aspects of adolescents' models of themselves in relationships. Adolescents' perceived self-efficacy is one such correlate. Self-efficacy has been proposed as a substrate of, or a great deal of adaptive behavior change. Recent research has demonstrated links between adolescents' beliefs in their self-efficacy and beliefs in their control over social outcomes and their actual progress in psychotherapy and avoidance of serious problem behaviors.

This research suggests that adolescents who engage in deviant behaviors may have models of themselves in social relationships in which they view themselves as less competent, less in control, and less likely to achieve desired outcomes. Attachment theory suggests that experiences in adolescent-family interactions would be a likely source of adolescents' perceptions of their own self-efficacy in social interactions. This view is consistent with the notion that if infancy secure attachments are likely to be correlated with the infant's efficacy in meeting its needs in interactions with parental figures. Thus, an attachment theory perspective would suggest that family behaviors may produce later delinquency, in part by lowering an adolescent's sense of self-efficacy in social relations.

Research on the link between adolescent self-efficacy and problem behaviors may also tie into some of the work done within a social learning framework in understanding how specific patterns of child behavior are reinforced within parent-child interactions. It may be that one consequence of inconsistent parental reinforcement of child behaviors is that the child comes to feel a lack of self-efficacy and a lack of control over the progress of important social relationships. This explanation is similar to the way that parental inconsistency leads to an angry and insecure attachment on the part of the child. Both suggest that the child comes to believe that he or she will be unable to act in ways that lead to desired social outcomes. Thus, an attachment theory perspective has the potential to integrate a great deal of the existing research on adolescent delinquency and to begin to address the difficult question of the specific processes by which deviant behavior is learned and maintained in adolescence.

The importance of "attachment" has been highlighted by a number of delinquency researchers, although these researchers have not generally linked their work to the growing and compelling body of research on infant and adult attachment relationships. The framework outlined above is an initial step toward making such a linkage.
AUTONYM AND RELATEDNESS

A second aspect of developmental theory relevant to understanding problem behavior in adolescence is the consideration of the adolescent's developmental strivings for autonomy from parents and his or her simultaneous efforts to maintain a positive relationship with them.56 Theoretical work on autonomy and relatedness in adolescence is not at all inconsistent with attachment theory, however, it does embody a somewhat different research tradition and literature which has concentrated primarily on infants, toddlers, and young adults.

A primary tenet of most theories of autonomy and relatedness in adolescence is that the adolescent's strivings for autonomy in relation to parents will optimally occur in the context of a positive relationship.57, 58 Allport reports that adolescents who are viewed as the most socially competent by both teachers and peers are those whose values reflect some autonomy from adults' values, not only in terms of the relatively minor norms that adults have for adolescents (e.g., not talking out of turn in school). In the area of communication, the most competent adolescents strongly value communication with both peers and adults; norms that they also perceived adults would share. These findings suggest that the optimal developmental path in adolescence involves seeking autonomy, through not at the expense of the relationship with parents.

This analysis is important because it challenges the notion that serious problem behaviors are an inevitable consequence of the adolescent's natural strivings for autonomy. Competent adolescents are able to seek autonomy in ways that both meet their needs and respect the needs of others.15, 19, 66, 69 For example, the means by which a competence in means of seeking autonomy might involve establishing independence from parents in terms of dress, musical tastes, and career interests. Expressions of individuality in these areas can establish the adolescent's autonomy without necessarily threatening their relationship with parents or violating their major social norms. Recent research suggests that it is primarily when adolescents are unable to integrate their needs with those of others (when they cannot seek autonomy while preserving relationships) that problem behaviors occur.96

Viewed in this context, serious problem behaviors of adolescence are not inevitably follow from adolescents' strivings for autonomy. However, for individuals who are unable to express strivings for autonomy while preserving relationships, delinquency and other problem behaviors may be a likely outlet during adolescence. This appears particularly likely for adolescents whose models of attachment imply little likelihood of maintaining positive interactions with parents in the midst of striving for autonomy. Numerous studies have found that poor parent-child relationships are predictive of adolescent problem behaviors. For example, problem behaviors have been related to poor family communication patterns in adolescence.107, 46 and to the alienation of female adolescents from the values of important adults in their lives. Also supporting the notion that lack of positive relationships in adolescence is related to problematic behavior is the finding that a sharp drop-off in deviant behavior frequently follows marriage in late adolescence and young adulthood. The establishment of a relationship with an attachment figure (spouse) appears to reduce the expression of autonomy in antisocial, relationship-destroying ways. All of these findings suggest that serious problem behaviors of adolescents may be most likely to occur when adolescents seek autonomy while simultaneously holding the belief that they will be unlikely to obtain it while maintaining positive relationships with adults.

When considered along with attachment theory, theories about the development of autonomy and relatedness in adolescence can help explain both the increase in the incidence of serious problem behaviors in adolescence, as well as the fact that this increase occurs only for certain groups of adolescents. Although strivings for autonomy are a normal part of adolescence, for those adolescents with insecure models of attachment, these strivings may be perceived as jeopardizing the parental relationship. Such perceptions may rekindle existing insecurities about the emotional availability of the parent or parents. An essential task of adolescence—increasing the degree of emotional, physical, and financial autonomy from parents—thus strains the relationships with parents and reignites the sense of anger and insecurity implicit in some adolescents' models of attachment relationships. Without the stress produced by social pressures to increase autonomy, serious problem behaviors might not occur (although other social and emotional difficulties might still be present). Similarly, strivings for autonomy alone are not sufficient to create serious problem behaviors. However, when normal developmental pressures for autonomy are combined with relationships with parents that are appallingly, or actually unable to withstand these pressures, a substantial risk of serious problem behaviors arises.

This focus on the importance of adolescents' attempts to establish their autonomy in the context of positive relationships is also supported by research relating ego development to delinquency in adolescence. Ego development is largely reflected in the ability to integrate complex perspectives of self and others. Recent research has revealed a strong connection between adolescent ego development and the extent to which parents promote the adolescent's autonomy and relatedness in family interactions. This connection is significant when taken together with the finding that delinquent adolescents have lower levels of ego development than nondelinquents, even after controlling for possible confounding factors such as IQ. These findings further support the notion that adolescents who engage in problem behaviors are unable to achieve autonomy in the context of positive parental relationships. They suggest that these difficulties may be seen in the adolescent's own cognitive models of relationships, which may internalize difficulties in actual relationships with family members.
PREVENTION AND THE LARGER SOCIAL ENVIRONMENT

Although the developmental approach to adolescent problem behavior outlined here focuses on the influence of families, such a focus does not imply that larger social influences are unimportant. On the contrary, many of the pushes toward adolescent autonomy, as well as the frustrations in seeking it, derive primarily from extralocal sources, such as schools, work settings, and peer groups. In addition, some of these influences interact with social isolation, and unemployment may act on parents, affecting their capacities to provide a secure base for their offspring. In addition, whatever the adolescent's underlying risk status, that risk is heighted in a social context that may greatly influence the form of its expression. It is therefore not surprising that opportunities for employment, school success, and positive, nonfamilial relationships are all mediated by the modulatory effects of early problems in family relationships.

Several lines of research reveal the difficulties inherent in working with the families of adolescents who are engaging in problem behaviors, although they also make clear that such work may be beneficial under some conditions. Malvey and LeBoeuf, for example, found that delinquency rarely ceased due to improvements in family relationships. In contrast, however, Kazdin and colleagues found that parent management training, combined with problem-solving skills training for children, did reduce antisocial behavior. In another study, Kazdin and colleagues found that problem-solving skills training in decreasing children's externalizing and aggressive behaviors. This work is supported by other studies suggesting that family-oriented approaches that also incorporate social skills building may be effective in addressing problems of childhood antisocial behavior. The bulk of recent research thus suggests that early preventive work can be effectively targeted at families, particularly if the interventions are comprehensive. Later efforts at prevention and treatment may be better directed at the individual adolescent or at his or her social environment.

Preventive intervention with families might usefully address either family management practices or potential mediating factors, such as low socioeconomic status. Such factors have been related both to delinquency and to difficulty providing adequate child-rearing environments. The outlined in this review suggests several additional prescriptions for treating families with adolescent's engaging in problem behaviors. Efforts to enhance family communication patterns and encourage the adolescent's development of interpersonal communication appear promising.

Recognizing that problematic behavior may reflect severe insecurity in the adolescent's attachment to parents may also be central to effective treatment efforts. Such recognition may help parents to correct incorrectly interpret anger expressed by their troubled adolescents as at least partly reflecting a fear of losing the relationship with parents. Such positive reframing of the adolescent's anger may prevent it from further weakening the already strained adolescent-parent relationship.

Helping the adolescent gain autonomy in appropriate ways, without losing the parental relationship, should be a central goal of such treatment efforts. Such efforts may also require dealing with parental anger and insecurities about attachment relationships. These feelings are particularly likely to flourish as parents watch their offspring angrily preparing to leave home. Such parental anger is likely to increase the adolescent's insecurity about the relationship.

In the larger social environment, prevention and treatment efforts might focus on providing contexts in which the adolescent can gain autonomy while simultaneously developing strong, positive relationships with nonfamilial peers and adults. Even if the adolescent is limited in his or her ability to change family relationships, he or she may be able to develop nonfamilial relationships that both overcome and alter the adolescent's existing models of attachment relationships. Bovley notes that adolescence is a period that lends itself to the reorganization of models of attachment. Such a period is likely to have occurred when the adolescent's models of social relationships include the possibility of functioning autonomously while maintaining strong and positive relationships. Thus, remedial and preventive efforts should create social environments for adolescents that promote the development of such models. Ideally, this would involve creating behavior settings that allow adolescents to experience themselves both as autonomous and as capable of forming positive relationships.

Schools provide a promising site for such preventive interventions, given both their access to adolescents and the amount of time adolescents spend in them. The strength of adolescents' attachments to their schools has been related to lower levels of delinquency. Further, Feigin and McDonough found that a school that valued and promoted student autonomy within the school appeared more likely to promote strong adolescent attachments to it than a school that did not value and promote such autonomy. These findings suggest the value of designing schools that allow adolescents to demonstrate their autonomy in ways other than by breaking rules and jeopardizing their connection to school.

A rare case of a school-based program that was successful in reducing both teenage pregnancy and school dropout rates provides an example of such a program. Reduced rates of teen-age pregnancy and school dropout occurred when schools gave adolescents the opportunity to perform volunteer work in their communities, which potentially allowed them to establish meaningful relationships with nonparental adults. Creative options such as these, which promote both autonomy and relationships within a school structure, may be among the most promising preventive avenues. In contrast, more traditional schools may simply allow adolescents to recreate angry, hostile relationships patterned after earlier family interactions. This would account for the disturbing finding that for delinquency-prone adolescents, the act of
dropping out of school actually appears to lead to a decrease in delinquent activity. A second approach to prevention or treatment of adolescent problem behaviors might focus on encouraging the development of positive relationships with peers. Exploration of the role of peers in encouraging delinquent activity can be traced back to early sociological theories on the culture of the gang. Although recent research suggests that delinquency among peers may reflect biases in the selection of friends much more than actual peer influences, interventions that help prevent further problems among delinquency-prone adolescents. Specifically, peers may play a critical role in allowing the adolescent to establish positive models of themselves in relationships. Although peer norms are often feared as a cause of delinquency, it is noteworthy that at least one type of commitment to peers—marriage—is associated with a dramatic decrease in antisocial behavior. Difficulty getting along with peers is also cited as one of the childhood signs predicting problem behavior in adolescence. In addition, peer norms, even among groups of former delinquents, can become positive influences in the treatment of delinquency behavior when relationships with adults are also positively promoted. Thus, rather than being feared, open and positive peer relationships might be encouraged as a means of preventing adolescent problem behavior.

A developmental perspective highlights ways in which adolescent problem behaviors develop in terms of individual and family influences. However, it also suggests that the effects of individual and family influences in childhood and early adolescence will in part be mediated by interactions with other aspects of the social environment during adolescence. Without appreciation of family and individual factors, efforts at prevention will proceed with little theoretical foundation. Similarly, efforts at intervention that fail to recognize the mediating effects of the larger social environment are equally narrow. In contrast, appreciation of the ways that individual and family factors interact with social environments to influence the development of adolescent problem behavior will eventually spur the development of effective interventions to reduce the incidence of this behavior.

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REFERENCES


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