

# **EDUCATION AND DELINQUENCY**

**Summary of a  
Workshop**

NATIONAL RESEARCH COUNCIL  
INSTITUTE OF MEDICINE

# EDUCATION AND DELINQUENCY

## Summary of a Workshop

Panel on Juvenile Crime:  
Prevention, Treatment, and Control

Joan McCord, Cathy Spatz Widom, Melissa I. Bamba, and  
Nancy A. Crowell, *Editors*

Committee on Law and Justice  
and  
Board on Children, Youth, and Families

Commission on Behavioral and Social Sciences and Education

National Research Council  
and  
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**PANEL ON JUVENILE CRIME:  
PREVENTION, TREATMENT, AND CONTROL**

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Although the individuals listed above provided constructive comments and suggestions, it must be emphasized that responsibility for the final content of this report rests entirely with the authoring committee and the institution.



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# Introduction

The Panel on Juvenile Crime: Prevention, Treatment, and Control convened a workshop on October 2, 1998, to explore issues related to educational performance, school climate, school practices, learning, student motivation and commitment to school, and their relationship to delinquency. The workshop was designed to bring together researchers and practitioners with a broad range of perspectives on the relationship between such specific issues as school safety and academic achievement and the development of delinquent behavior. Nearly 50 individuals from research organizations, government agencies, universities, and private foundations participated in the workshop. During the course of the workshop, participants reviewed recent research findings, identified gaps in knowledge and promising areas of future research, and discussed the need for program evaluation and the integration of empirical research findings into program design.

The goal of the workshop was to supplement the work of the panel, a study group of scholars and practitioners with expertise in juvenile justice and delinquency, criminology and criminal justice, psychology, and public policy. The workshop was designed to augment the knowledge of panel members and inform the study process, specifically regarding areas of expertise not represented on the panel, particularly education, learning, student motivation and commitment to school, and school practices and policies.

Participants at the workshop represented a range of disciplines, including law enforcement, sociology, psychology, education, and psy-

chiatry. Six themes emerged from the workshop presentations and discussion:

- Definitions of school crime have been adopted for a variety of purposes and yield widely varying estimates. This situation has made it impossible to determine the extent of the problem and whether there have been changes in the nature and severity of school crime over time.
- Few studies have evaluated the consequences of programs designed to control school crime and the effects of such programs on the educational environment.
- There are major gaps in knowledge about the causal pathways linking school performance to delinquency. Participants discussed the need for further research, especially research that utilizes longitudinal designs and tests multiple competing and alternative theoretical perspectives.
- Although school policies regarding tracking, suspension, and expulsion may be designed to help students do better in school, these same programs may have demonstrably negative effects on the school performance of many students.
- School programs that focus on the motivation of students and that foster the desire to learn seem to be more successful in facilitating learning than programs that focus exclusively on cognitive or behavioral deficits.
- Innovative school programs need to be evaluated before they are instituted on a large scale. Special attention should be paid to the possible negative effects of grouping young people who misbehave.

This report draws on the workshop itself as well as support materials that were included in a briefing book distributed to workshop participants. It should not be thought of as a comprehensive review and synthesis of research. Rather, it reflects the proceedings of a 1-day workshop and as such cannot fully capture the voluminous research on the topic. Statements in this report regarding the quality of research findings are derived from the workshop presentations and discussions; many important areas of research therefore are not covered. Because this report is a summary of workshop presentations and not a review of existing literature, considerable attention is given to the research of invited presenters. The report does only a very limited job of presenting challenges to this research and is not intended as an exhaustive presentation of all relevant perspectives on the topic.

The report begins with a brief description of methodological issues and limitations inherent in research and data collection on school crime. The next section presents a discussion of concerns raised by workshop participants that responses to school crime may have the unintended

effect of alienating students and teachers and normalizing a culture of violence in schools. The effect of security measures on school operations and the behavior and interactions of students and teachers also are considered.

The report next turns to the relationship between school performance and delinquency. Workshop participants explored a number of key mediating factors, among them delinquent peer associations, peer rejection, social isolation, cognitive and behavioral deficits, learning and emotional disabilities, and family management. The next section of the report presents a discussion of the effects of school practices and policies (e.g., tracking, expulsion, dropping out) on learning, school management, and delinquency outcomes. In this context, several workshop participants highlighted the impacts of racial, gender, and class inequalities on student performance. (A presentation was planned on the topic of school delinquency and violence prevention programs, but was cancelled because of an unforeseen scheduling conflict.) The final section of the report examines motivation for learning, life course transitions, and developmental processes that may operate as important mediating influences on school performance and delinquency.



# Defining and Measuring School Crime

In the past decade, parents, policy makers, and school officials have paid increasing attention to school crime. Because of extreme incidents of school violence, the problem of school crime has assumed national importance. Barely a day goes by when some school crime incident, great or small, is not reported in the mass media or the subject of a government report or investigation. With increased focus on school crime comes the need for accurate statistics.

There are many different ways to define school crime. Schools appear to be safe or dangerous, depending on what one counts as school crime. Definitions of school crime range from considering any threat or theft as a crime to considering only violent attacks that are reported to police as crimes. They differ, too, depending on whether or not crimes committed against children on their way to school or on school playgrounds as well as in school buildings are counted. They also differ in whether crimes are counted only during school hours or also before and after school. Rates also differ because some surveys count crimes only by or against school personnel and students, whereas others count any victim on school property. In addition, the amount of school crime reported differs in relation to who gives the information and whether it is acquired by personal interview, telephone interview, or questionnaire or is from official records.

Without a standard definition of school crime, tracking incidents of crime is problematic. Behaviors and offenses included as school crime, assertions made about its incidence and prevalence, and estimates of students' risk of victimization are unreliable (Hanke, 1996). Lack of defi-

nitional precision may also contribute to the mistaken assumption that extreme incidents of school violence, like the tragic shootings in Littleton, Colorado, are representative of school crime in general. While there are advantages to having a single, widely accepted definition of school crime, circumstances may arise in which more fine-tuned measures of school crime are preferred (e.g., when data are collected for a single school, school district, or jurisdiction).

Attempts to standardize definitions have been made. While there are no guidelines at the national level for data collection on school crime, widely accepted definitions of school crime do currently exist. The Crime, Violence and Discipline Task Force created by the National Forum on Education Statistics in 1995 has developed definitions and protocol for collecting data on school crime and violence (Minogue et al., 1999). It recommended that school crime be inclusive of: incidents that occur on school grounds, on school transportation, or at off-campus school-sponsored events; incidents involving alcohol, drugs, or weapons; incidents involving a gang; hate-crime motivated incidents; and all incidents reported to law enforcement agencies.

There is a scarcity of reliable data on school crime. Moreover, there are limitations to the data that are collected. Several workshop participants noted the inconsistencies across data collection efforts in who is sampled, how data are collected (e.g., personal interview, telephone interview, questionnaire), which incidents are included as school crime, and how estimates are derived. Several workshop participants also noted that little attention has been given to ascertaining the accuracy of data used for reporting school crime.

In the last several years one-time and on-going data collection efforts have been initiated by government agencies to provide better data on school-related crime (see Chandler et al., 1998; Kaufman et al., 1998; National School Safety Center, 1998; National Center for Education Statistics, 1998).

In 1974 Congress mandated the first national study of school safety. Researchers from the Research Triangle Institute asked public school students and teachers in grades 7 through 12 to report school-related victimization experiences. School principals, too, supplied information on such crimes as vandalism in their schools. According to the information collected, in a typical month during the prior year an estimated 128,000 junior and senior high school teachers had something worth more than \$1 stolen from them. In a typical month an estimated 5,200 teachers were physically assaulted (National Institute of Education, 1986). Students reported considerably more crime on the questionnaires than they did in personal interviews (Gottfredson and Gottfredson, 1985). In addition to actual victimization incidents, students and teachers reported being threatened at a rate several times greater than actual thefts or attacks.

In 1989 the National Crime Victimization Survey added a School Crime Supplement to measure victimization of youth ages 12 to 19. During the first 6 months of 1988-1989, according to this supplement, 7 percent of students surveyed reported being victims of at least one property crime and 2 percent reported their victimization in a violent crime to the police. A larger proportion, 18 percent, reported being afraid sometimes of being attacked (Bastian and Taylor, 1991). In an analysis of National Crime Victimization Survey Incident Reports and interviewers' narrative data, Garofalo et al. (1987) found that 54 percent of victimizations reported by adolescents were school related (i.e., occurred while attending school); 41 percent of aggravated assaults, 44 percent of robberies, and 59 percent of simple assaults were school related. Robbery and aggravated assault were more likely to occur while students were traveling to or from school than on school grounds or on a school bus; simple assault was most likely to occur in a school building (Garofalo et al., 1987).

The 1993 National Crime Victimization Survey indicated that about half the students in grades 6 through 12 witnessed a victimization at school and about an eighth had personally been victimized (Nolan et al., 1996). Surveying 11,000 students in grades 8 through 10, the American School Health Association (1989) found that during the prior year 40 percent had been in a physical fight at school or on the school bus; 34 percent reported having been threatened; and 22 percent reported carrying a knife, gun, or other weapon. A survey by the National School Board Association (1993) found that 78 percent of the responding school districts reported incidents of assault; in more than 80 percent of the districts, school violence reportedly had increased. A major limitation of the National Crime Victimization Survey School Crime Supplement is that it limits participation to individuals 12 and older.

While data on school crime suffer from limitations—representativeness in terms of student age groups, differences in how school crime is operationalized across studies, missing/unreported incidents, types of incidents reported—existing data converge on the finding that most school crime (like crime generally) involves minor personal and property offenses. According to data from the National Crime Victimization Survey School Crime Supplement, most schools do not experience incidents of serious violence (i.e., murder, rape, robbery, aggravated assault) (Chandler et al., 1998; Kaufman et al., 1998). Of all school crime reported, the percentage of serious crime and violence is quite small. In the 1996-1997 school year, 10 percent of public schools reported a serious incident of violence to the police (Kaufman et al., 1998).

Other sources of data are available on school crime and violence, including surveys of self-reported victimization and offending. For example, the Monitoring the Future Study (University of Michigan, Insti-

tute for Social Research) is an ongoing survey (started in 1975) that collects information from high school seniors on their behavior, attitudes, and victimization experiences. The National School-Based Youth Risk Behavior Surveillance System (Centers for Disease Control and Prevention) is part of a larger monitoring system that focuses on behaviors, beliefs, and experiences that influence young people's health, including weapon carrying, involvement in physical fights, and drug and alcohol use. The 1997 National Longitudinal Survey of Youth (Bureau of Labor Statistics) follows a cohort of youth ages 12 to 16 to collect data annually on their educational and work experiences and attitudes as they transition into adulthood. These data include information on drug and alcohol use and self-reported offending. The National Longitudinal Study of Adolescent Health (Carolina Population Center, University of North Carolina at Chapel Hill) is a school-based survey of youth in grades 7 through 12 that collects data on the health-related behavior of adolescents in school, family, peer, and neighborhood contexts.

Surveys on the conditions of school environments also exist, including the National Household Education Survey (National Center for Education Statistics [NCES]), which looks at school safety and discipline; the Schools and Staffing Survey (NCES), which collects data on teacher victimization; and the Principal/School Disciplinarian Survey on School Violence (NCES), which is part of the NCES Fast Response Survey System designed to gather information on educational issues of interest.

Some states have instituted systems for collecting data across school districts. For example, Kansas and Louisiana have conducted censuses of all 6th, 8th, 10th, and 12th grade students in participating secondary schools. These surveys provide data on the prevalence of self-reported crime, substance abuse, and risk and protective factors on a school-by-school basis.

Although standardized definitions of school crime would permit comparisons across time and place and the establishment of an official repository for data on incidents, such standardization is unlikely to overcome pressures to resist recognition of crime in their own schools by some principals, teachers, and students. Neither would standardization provide an antidote for the tendency to overlook extremely common incidents of minor theft and assault, threats, and extortion that go on in the name of "normal childhood behavior."

Kenneth Trump, of National School Safety and Security Services, in Cleveland, Ohio, noted that there are institutional factors that exert a great deal of influence on the quality of school crime data. Measurement of school crime may be complicated by the reporting practices of schools. Schools may fail to report incidents to local law enforcement because they do not distinguish crime from disruptive behavior, or schools may simply

choose to handle incidents internally instead of reporting them to the police.

Estimates of school crime may also be affected when schools *differentially* report incidents to local law enforcement. The perceived seriousness of an offense influences whether it is reported to the police and varies depending on the context in which the offense occurred, including details specific to the incident, and whether similar offenses have occurred in the past. For example, incidents involving students and teachers may be more routinely reported to the police than are minor, student-on-student attacks. Likewise, incidents in large urban schools may be more likely to be reported than those that occur in rural school districts. Several state legislatures are addressing this problem by implementing guidelines for mandatory school crime reporting. How effective these guidelines will be remains to be seen.

Underreporting and differential reporting illustrate the importance of closely scrutinizing study findings, especially those based solely on official police arrest statistics. The use of student self-reported victimization data may serve as a counterbalance to official estimates (Chandler et al., 1998; Kaufman et al., 1998).

Although rare, serious incidents of school crime and violence raise pressing policy issues that school administrators must address. At the workshop, Trump explained that in order to grasp the meaning that school administrators attach to school crime and violence, one must understand that schools operate in a highly politicized environment and that school crime and violence are intensely political issues. His presentation emphasized the importance of understanding how schools behave as organizations with their own sets of contingencies. Because schools are concerned about their image in the community, school administrators may be hesitant to make public a whole range of student misbehaviors.

# Consequences of Crime Protection Measures in Schools

## SCHOOL CRIME AND CHANGES IN SCHOOL CLIMATE

Trump pointed out the importance of student fear of victimization, noting that it is an issue that should not be overlooked by school administrators and teachers concerned with school crime. Not only is student fear of victimization tied to a school's ability to provide an environment conducive to learning, but it may also play a key role in how effective a school is in preventing crime in the first place. According to the School Crime Supplement to the National Crime Victimization Survey, between 1989 and 1995 the percentage of students ages 12 to 19 who felt unsafe while at school rose from 6 to 9 percent. The increase in student fear of victimization was greatest among black students; between 1989 and 1995 black students who reported being fearful while at school nearly doubled (from 7 percent in 1989 to 13 percent in 1995) (Chandler et al., 1998; Kaufman et al., 1998).

Workshop participant John Devine, of New York University's School of Education, reported on study findings from troubled urban schools suggesting that, when children don't believe their school is safe, they adopt a "self-help" approach wherein they resolve to address disputes on their own or with the help of peers, which can have potentially harmful consequences. To prevent students from resorting to such self-help, schools could have in place consistent and fair mechanisms to deal with students—both offenders and victims—in the aftermath of a school crime incident. Not having programs or mechanisms in place to deal effectively

with school crime undermines students' sense of safety, increases fear of victimization, and encourages destructive behavior.

Throughout the workshop, participants emphasized the need for teachers and school administrators to take a more central role in addressing the problem of school crime. Devine suggested that a big part of this involves teachers connecting with students—encouraging more informal student-teacher interaction—traditionally a large part of the teacher's role. Over the past 20 years this has changed, as the physical space of schools has become more and more narrowly defined for teachers. According to Devine, the classroom is where the teacher retains most of his or her control and authority, while public places in schools are no longer thought of as teaching places. For example, as the role of teachers has evolved, informal interactions between students and teachers in the hallways, cafeteria, and stairwells of schools have become increasingly rare. In the past, teachers would gather in the halls with children and were able to influence them through this interaction. Teachers were also able to familiarize themselves with children outside class and influence their lives by being able to be a part of or to challenge youth culture.

This change in the role of teachers has accompanied other changes in how schools function. Devine argued that in some school systems the traditional authority role of teachers has been delegated to school security guards, who police the areas of the school outside the classroom. He suggested that the movement of guards into schools and the increasing use of security technology are part of a profound change in education that has splintered the role and authority of teachers. He also noted how pressure on teachers from unions, administrators, parents, and the public regarding the proper role of teachers vis-à-vis students has discouraged physical contact with students, for the protection of students as well as teachers. This involves not only what would be considered *improper* physical contact between students and teachers but also situations in which teachers might intervene in physical altercations involving students. In some school districts the teacher's role in witnessing a fight or an altercation that is likely to lead to a fight is to call the school security guard or simply let the incident play out.

Students are aware of teachers' withdrawal from the sphere outside the classroom and realize that teachers are purposefully underenforcing the rules there, noted Devine. Unfortunately, students may come away thinking that teachers do not care. This quite easily contributes to students' insecurity in those areas of school outside teachers' control and authority. For some students these areas become a no-man's land, a war zone, where in order to survive one must act tough. According to Devine, children want more structure in the school environment but cannot find it. Moreover, he argued that students are also not wholly satisfied with

what happens *inside* classrooms. They would like more involvement with teachers and indicate that disorder in classrooms gets in the way of learning.

### NORMALIZATION OF VIOLENCE

The use of security technology and personnel in schools has increased enormously in the past 20 years. For example, Devine noted in his presentation that in 1968 the New York City public school system did not employ security guards. Thirty years later, in 1998, there were more than 3,200 security guards—more law enforcement officers than in the entire Boston Police Department.

Faced with widespread fear, many schools have instituted programs for protecting students and property from crime. Strategies to enhance physical security include limiting access; enhancing communications systems; developing personnel and student identification procedures; and installing alarms to notify authorities of intrusions, markings for inventory control, secure locks, and protective lighting (Trump, 1998). They also include placing security guards in hallways, using metal detectors at entrances, and mounting cameras to survey students as they walk between classes. Such devices help school administrators present an appearance of being in control. That appearance may reduce parental concerns about crime in schools and have other side benefits as well.

Only a handful of studies have attempted to evaluate effects of using technology to reduce school crime or fear of crime. In one of them, Ginsberg and Loffredo (1993) conducted a study of a representative sample of New York City high school students in schools with and without metal detectors. It was found that students in both settings were equally likely to report having been threatened or involved in an altercation at or away from school. There was also little difference between the two groups of students in self-reported weapon carrying (in other settings outside school) in the prior month. Differences did emerge, though, between these two groups of students regarding the prevalence of carrying a weapon in school. Students in schools with metal detectors were half as likely to report carrying a weapon to or from school as students in schools without metal detectors.

According to Devine, the overt message these devices send is that the school is concerned about violence and is taking steps to prevent it. However, the latent message that reliance on security technology and personnel sends is that the school expects violence. This normalization of violence may lead students to believe that teachers and school administrators no longer exercise control and that control has been given over to the technology and the personnel brought into the school to keep crime out.



The ability of teachers to educate, Devine suggested, is likely to be undermined by the persistent focus on crime.

Devine argued that it is wrong to think only of creating safe schools. Administrators should think about creating safe school systems. While it is true that in some ways individual schools are unique, schools are interconnected in complex ways. How one school responds to disorder, crime, and violence affects other schools. For example, when a small alternative school is created in a neighborhood in which school crime has been a problem, it may skim off the neighborhood's best students. In this way, alternative schools may isolate and marginalize larger schools and increase the concentration of students in those schools who do not perform well academically, which may in turn affect the incidence of school crime.

Schools have instituted numerous programs designed to address issues of school safety. These programs include disciplinary procedures (e.g., expulsion, suspension), programs of classroom instruction, behavior management, counseling, mentoring, recreation, classroom management, intergroup relations, parenting, security, and architectural arrangements. Only a handful of school-based programs have received the types of careful evaluation that would justify a conclusion that they are effective in reducing crimes (Gottfredson, 1997). For the most part, programs that merely provide leisure activities have been found ineffective as crime prevention measures. Programs that encouraged school problem solving, clear specification of school norms, and improved classroom management appear promising in prevention of crime. Evidence regarding their impact on education is mixed. Workshop participants knew of no credible evidence about the impact of security devices or security patrols on education.

# Linking School Performance and Delinquency

A great deal of scientific research examines the relationship between poor school performance and delinquency. The direction of the causal link between education and juvenile delinquency is fundamentally complex. Early aggressive behavior may lead to difficulties in the classroom. Such difficulties, in turn, may result in a child's receiving unfavorable evaluations from teachers or peers. These, in turn, might result in delinquency. Equally, delinquency could be another manifestation of whatever characteristics got the child into trouble with school authorities in the first place.

Some studies have shown reductions in delinquent behavior when a teenager drops out of school. Others have shown increasing rates of delinquency following school dropout. In addition, many studies have shown that family and child characteristics predict both problems in school and an increased likelihood of delinquent behavior.

Despite the ongoing discussion of the direction of causality, the evidence is clear that poor school performance, truancy, and leaving school at a young age are connected to juvenile delinquency (Bachman et al., 1971; Elliott, 1978; Elliott and Voss, 1974; Farrington, 1986; Hagan and McCarthy, 1997; Hawkins et al., 1998; Huisinga and Jakob-Chien, 1998; Kelly and Balch, 1971; Maguin and Loeber, 1996; Mensch and Kandel, 1988; Polk, 1975; Rhodes and Reiss, 1969; Simons et al., 1991; Thornberry et al., 1984). Several factors linked to delinquency, aggression, and violence have been identified. For example, research has found that verbal and reading deficits are linked to victimization (both inside and outside

school), drug use, aggression, and delinquent behavior when students who fall behind in reading become marginalized as failures (Kingery et al., 1996). School failure undermines a student's interest in and commitment to school and learning. Delinquent peer associations may also be a consequence of school failure when a student comes to reject academic achievement and prosocial behavior as legitimate goals and values. Feelings of isolation and a student's perception that she is not receiving emotional support from caring adults also may play a role in the etiology of delinquent or aggressive behaviors (Gottfredson, 1997). Research has identified other factors at the community, family, and individual levels that influence the development of delinquent and/or aggressive behaviors, including the availability of criminogenic tools (e.g., weapons), community disorganization, family history of problem behavior, family conflict, and a history of early antisocial behavior (Howell, 1995).

Rolf Loeber, of the University of Pittsburgh Medical Center, Western Psychiatric Institute and Clinic, cautioned that the relationship between delinquency and school performance should not be oversimplified. It may be that progression from delinquent behavior to school failure is contingent on other factors, since not every offending juvenile experiences school failure and not every failing student commits offenses.

In addition, not every act of delinquency affects school performance in the same way. The seriousness of delinquent behavior may determine whether and to what extent school performance suffers. It appears that poor school performance is a more severe problem among serious violent delinquents. In a review of the literature on the predictors of youth violence, Hawkins and his colleagues (1998) concluded that serious and violent delinquents had more school-related problems (e.g., low grades, truancy, suspension, dropping out) than nonviolent children.

Inversely, studies have found that students who do not perform well academically are more likely to be delinquent. The Cambridge Study on Delinquent Development and the Pittsburgh Youth Study have both found that low school achievement predicts adolescent delinquency (Maguin and Loeber, 1996). In a meta-analysis of studies that examined the relationship between academic performance and delinquency and interventions designed to improve school achievement and reduce offending, Maguin and Loeber (1996) found that poor school performance was related to the frequency of delinquent offending, the seriousness of offenses, and persistence in delinquency offending. Findings from this study highlight the importance of examining the effect of poor educational performance on delinquency over time—to think of a child's development on a trajectory with multiple transition points (e.g., childhood to adolescence) along which key events occur.

There are, however, methodological issues that limit study findings.

Loeber noted that while findings applied equally to boys and girls in some studies, because most studies are conducted with boys, the findings may not in fact be generalizable to the experiences of girls.

While time limitations did not allow for an exhaustive review of the relevant research at the workshop, participants were able to discuss the important role that peers play in the relationship between delinquency and poor school performance. That peers exercise influence on the development of delinquent behavior is a common perception among researchers. Workshop participants discussed three issues related to the effects of peers on delinquency: delinquent peer conversations, peer rejection, and unintended negative effects of grouping high-risk youth together for services or programs.

### DELINQUENT PEER ASSOCIATIONS

Studies have found evidence of negative effects attributed to deviant peer associations (Gottfredson, 1987). Many schools include programs designed to improve children's social behavior. Guided counseling programs, for example, have been mandated in some states. These programs are often administered to students in groups.

Thomas Dishion, of the University of Oregon's Department of Psychology, described the danger of assuming that all intervention programs are benign. As part of a study designed to measure and code interactions among teenage boys assembled to discuss problems in their relationships with parents and peers, Dishion and his colleagues (1999) found that interactions among the boys were influenced by the content of their conversations. Conversation was classified into two categories: rule-breaking talk and norm-accepting talk. Researchers observed that the nonverbal reactions to rule-breaking and norm-accepting topics and activities communicated either positive or negative reinforcement for the associated behavior (Dishion et al., 1996a). Among nondelinquent dyads, normative talk led to positive reinforcement in the form of laughter. Alternatively, in dyads in which the members had some experience with delinquency, normative talk failed to elicit a positive response; only rule-breaking talk received positive feedback.

The researchers concluded from this study that delinquent peer groups are organized around rule-breaking talk (Dishion et al., 1996a). Positive reinforcement for rule-breaking talk is referred to as "deviancy training." Dishion and his colleagues (1996b) found that, controlling for past behavior, deviancy training observed at ages 13 and 14 predicted an increased probability of escalating addictive substance use, delinquency (self-reported), and police-reported violent behavior in the next two years. These findings have been replicated among delinquent and nondelin-

quent girls. Although adolescent girls differed from adolescent boys in terms of the topics they discussed and the rules they broke, the deviancy training process was similar.

At the workshop, Dishion argued that these findings point toward needed changes in school policy. If it is the case that deviant peers exert a strong influence on the development of delinquent behavior, one way to discourage this is to reintegrate at-risk children and adolescents into the educational mainstream. By doing this, children who would traditionally be grouped together because of problem behavior (or school failure) would benefit from the prosocial influence of peers who exhibit more normative conduct.

### PEER REJECTION

Workshop participants also discussed how peer rejection influences delinquency. Research findings in this area are contested, however, and mechanisms through which peer rejection leads to delinquency are not at all clear. Aggression has been suggested to explain the connection between peer rejection and delinquency. Participants noted that it is equally reasonable that aggression leads to peer rejection as it is that peer rejection leads to aggression. While the research proposes a link between peer rejection and aggression (see Coie et al., 1990), it may be that the popular literature overstates the relationship. On closer inspection of this body of research, it appears that only children who are both aggressive and victimized are rejected by their peers. In other words, it may not be aggression that leads to peer rejection. On the contrary, by adolescence many aggressive children are admired, and in some settings delinquents are popular. Furthermore, not all peer-rejected adolescents perceive themselves as being rejected. These observations undermine support for the assertion that peer rejection is causally related to delinquency and aggression (Cairns and Cairns, 1994; Graham and Juvonen, 1998).

Workshop participants were in agreement that while the research may not be able to identify how peer rejection relates to delinquency, peer rejection has a meaningful impact on students' commitment to school and learning. Peer rejection can occur in many different contexts, some amenable to school intervention, others not. Workshop participants noted that a great deal of peer rejection occurs in classrooms—a context in which teachers have considerable influence. Some teachers do a good job of organizing the classroom environment so that children do not feel rejected. Other teachers do a poor job of controlling peer rejection in their classrooms or, worse yet, encourage it.

## POTENTIAL HARM OF GROUPING HIGH-RISK YOUTH

Several times during the course of the workshop participants stressed how programs that aggregate high-risk youth (e.g., anger management classes, alternative schools) should be considered with caution. Even when researchers observe prosocial effects and skill improvement in subjects who participate in these programs, such groups may nonetheless facilitate the formation of deviant peer associations. This can happen even when clinicians are careful that interactions that can lead to negative outcomes do not occur in their presence.

Thomas Dishion, professor of psychology at the University of Oregon, described the danger of assuming that all intervention programs are beneficial. An example of the contrary comes from the Guided Group Counseling Programs, which have been mandated in some states. When evaluated using random assignment to such a program, negative effects were found for high school students (Gottfredson, 1987).

Dishion has also documented this phenomenon in his research. In a study conducted by Dishion and Andrews (1995), young adolescents (ages 11 to 14) and parents received an intervention designed to reduce problem behavior. Participants were placed in one of four groups—teenagers only, parents only, parents and teens, and self-directed—and administered curricula designed to improve communications skills, facilitate better family management, and encourage prosocial behavior. Groups met for 90 minutes each week for 12 weeks, and individuals participating in groups were also visited once by a therapist. Subjects in the self-directed group received curriculum material through the mail and were not visited by a therapist. Findings indicated that while subjects in the teenager-only group experienced a reduction in antisocial behavior over the short run, all delinquency-involved teenagers in the group showed increases in antisocial behavior (e.g., smoking and teacher-reported problem behavior) on follow-up. Adolescents in the self-directed group and those in the mixed parent-teenager group did not show these same negative changes in behavior over time. Dishion and Andrews theorized that the delinquency-involved youth in the teenager-only group received subtle forms of positive feedback (e.g., head turning and attention) and approval for their antisocial behavior and that this may have accounted for the increase.

Other intervention experiments also suggest that peer group interactions may explain some deleterious effects. For example, Feldman (1992) evaluated an intervention that provided group-level behavior modification treatments to two groups, one of all antisocial youth and one in which several antisocial youth were included in a group of prosocial peers. The observed misbehavior of boys in the mixed groups declined,

but that of the boys assigned to unmixed groups did not. In other work, McCord (1992) analyzed the effects of the Cambridge-Somerville Youth Study, which used a matched pair design (that is, each boy in the treatment group was matched to a particular boy in the control group) so that a variety of interventions could be evaluated. Boys in the treatment group were sent to summer camp, about half of them for one summer and the remainder for more than one summer. Those sent to summer camp more than once turned out considerably worse than their matched pairs in terms of crime convictions, early death, alcoholism, and several mental health disorders.

Workshop participants noted that it might be useful for publicity to be given to harmful as well as beneficial effects and that special care is needed in the evaluation of programs that put misbehaving young people together in groups.

### COMMON FACTORS

Research findings support the existence of common factors that may cause both delinquency and poor school performance. These factors include intelligence and attention deficit hyperactivity disorder (Maguin and Loeber, 1996). According to Maguin and Loeber's (1996) meta-analysis of intervention programs, the consensus of studies found low intelligence and attention problems to be common causes of both delinquency and poor academic performance. Child and family risk factors, peer group influences, socioeconomic status, low school motivation, and early conduct problems were also causes of school failure and delinquency and, in combination, increased the risk of both.

Studies suggest that changing educational performance and behavior simultaneously is more likely than either alone to result in durable positive outcomes. For example, evaluations of interventions designed to address delinquency and poor academic performance have found that educational programs that teach self-control and social skills and provide parental training (Arbuthnot and Gordon, 1986; Gottfredson, 1990; Tremblay et al., 1992) were more successful in improving education outcomes than those that provide only remedial educational assistance (Maguin and Loeber, 1996). What this suggests is that addressing behavioral and cognitive deficits (i.e., factors that arguably operate as common causes of both delinquency and poor school performance) may do more to improve academic performance and to decrease or prevent delinquency than either providing remedial academic support or imposing punitive criminal sanctions alone. The available evaluations of programs that focus on cognitive or behavioral deficits alone find that the effects are either equivocal or of a short-lived, positive nature (Maguin and Loeber, 1996).

Disabilities may also operate as common factors in the etiology of both poor school performance and delinquency. Such disabilities include language and speech problems, learning disabilities, behavioral problems (e.g., attention deficit hyperactivity disorder), and emotional problems (e.g., severe emotional disturbance) (see Meltzer et al., 1986; Perlmutter, 1987). More research, especially research using longitudinal study designs, is needed to examine how disabilities operate as common causes of both delinquency and poor school performance.

Workshop participants also noted the importance of family risk factors as common to both poor school performance and delinquency. Research has shown that family management skills training can disrupt trajectories toward school failure and crime. By reducing negative family interactions and conflict and improving parental supervision of children and parent-child relationships, family management skills training reduces risk factors associated with delinquency and increases parental monitoring of a child's activities and school progress (Maguin and Loeber, 1996).

Families not experiencing problems can also benefit from increased parental involvement. Dishion noted how the parents' role in education and delinquency prevention is often left out in devising prevention and intervention strategies. He suggested the need to reverse this trend and to do more to reengage parents, particularly at important transition points in children's development. Transition into middle school is an especially critical time.

Workshop participants noted that there are serious structural and motivational barriers to parental involvement in prevention and intervention programs. Poor and working parents may find it difficult to attend meetings consistently. More difficult are the issues that arise in working with crime- and/or drug-involved parents. Not only does the behavior of the parent run counter to program goals and objectives, but work with these parents and children also is more complex and requires a level of services often not available through traditional prevention and intervention programs. The needs of special populations (e.g., those who are poor, single parents or substance abusing) should be anticipated and addressed if prevention and intervention programs are to assist such parents in supporting their children's development.

## PREDICTION

Many children exhibit aggressive behavior at an early age, but most do not persist in this behavior as they mature. Researchers have a great deal of difficulty in discriminating between children displaying problem behavior in the preschool period who will desist and those who will become persistent adult offenders. Researchers and policy makers must



keep in mind that the period from early childhood to adolescence is a dynamic one, accompanied by complex and often unpredictable behavior.

Research findings argue against adopting a point of view that portrays delinquency as the result of a discrete event in a child's life. Loeber pointed out that research consistently shows that individual delinquency is a gradual process. He noted that serious instances of school violence do not erupt without some prior signs of trouble. The most serious incidents of violence occur among individuals who for years have displayed minor forms of aggression, including physical fighting, gang fighting, or frequent arguing and bullying. These findings should inform program design and the selection of interventions. Programs should be targeted and designed for different stages in the escalation process. Loeber asserted that it is naive to think that serious violence can be completely prevented in schools. What school prevention and intervention programs can do well is deal with lower-level forms of acting out (e.g., serious bullying and physical fights), which, if left unchecked may evolve into more serious instances of delinquency and violence.

# Assessing Tracking, Suspension, and Expulsion

Schools are designed to promote student achievement and healthy development and, for the most part, are successful in creating an environment that facilitates these. Schools play an essential part in educating, socializing, and otherwise preparing children for their roles as adults in an ever-changing world. Students' commitment to school and learning is known to contribute to their academic success and to operate as protective factors against many problem behaviors. Some schools are seriously handicapped in their ability to successfully encourage bonds to school and learning. It is important to remember that schools operate in a complex social context characterized in many instances by limited resources. Gottfredson (1997:5-1) has noted:

By far the strongest correlates of school disorder are characteristics of the population and community contexts in which schools are located. Schools in urban, poor, disorganized communities experience more disorder than other schools. Research has also demonstrated that the human resources needed to implement and sustain school improvement efforts—leadership, teacher morale, teacher mastery, school climate, and resources—are found less often in urban rather than in other schools.

Research has identified features of schools that undermine learning and encourage delinquency. For example, the availability of drugs, alcohol, or weapons, weak or inattentive school leadership, and poor administration of discipline (i.e., unclear rules and/or inconsistent enforcement of

rules) (Gottfredson, 1997) are all factors that correlate with school disorder and a school's inability to cope with and solve problems.

Workshop participants were also concerned that there are school policies and practices, over which school administrators exercise a degree of control, that weaken students' commitment to school and learning and contribute to academic failure. Providing a learning environment for those who are well behaved is often posed as requiring cutting off the education of those who are not. Current practice often involves removing misbehaving children from the classroom or even the school. Exploring the history of the practice, Maynard Reynolds (1994:134) of the University of Minnesota, has explained:

Today, many children showing behavior problems are displaced from regular classes and schools into special programs. Unfortunately, the special programs may serve only a relief or arresting function. That is, they make regular classes more orderly because disturbing children have been removed. But too many of the students given the special placements show little improvement in the abilities required to reenter the ordinary classes of the schools or to thrive in other institutions of the community.

Workshop participants discussed school policies that might contribute to school failure, including tracking and school expulsion. Concern was expressed that school policies in these areas stigmatize students by separating them from their peers and disrupting the educational process. School practices concerning student dropouts were also highlighted by workshop participants as an area in which schools could improve the academic performance of their students by reforming school policy.

Social inequality was a recurrent theme in several workshop presentations. There was wide agreement that more attention should be paid to the ways in which social inequality—including racism, sexism, and classism—is reflected in school structure, policies, and practices. Participants underscored how important it is to begin to understand the potentially unique developmental experiences and stressors of racial minorities, females, and economically poor students.

Workshop participants stressed the importance of examining school policies for their effects on students' commitment to school and learning. Generally, commitment to school refers to students' participation in school activities, class attendance, completion of homework, and the recognition that there are negative consequences for not fulfilling school expectations.

## TRACKING

Students' bonds to school are an important element of the debate on tracking. Tracking is most commonly defined as the placement of students in a curricular program based on their perceived abilities. This differs from the situation 20 years ago, when tracks were oriented toward academic, vocational, and business goals. Methods of tracking vary by school. To many educators, tracking has a negative connotation, and many schools insist that they do not track students. What is more common today is for students to be grouped course by course, a form of *de facto* tracking.

Ethnographic research conducted in the United States and England indicates that, when students are tracked, their attitudes and behavior become polarized over time (Berends, 1995). Attitudes and behavior are shaped by the way tracking structures children's activities and relationships to other students. Ethnographers have observed that different tracks are associated with contrasting subcultures that have well-defined norms and expectations. For example, students placed in high tracks accept the normative culture of the school, while students placed in low tracks create their own alternative oppositional culture (Berends, 1995). In this way, polarization produces and reinforces stigma and feelings of inequality among students.

Tracking can wear away positive attitudes toward school. Researchers refer to this process as "downward track mobility." Students in lower or nonacademic tracks become less and less committed and involved in school over time. These students may develop a fatalistic culture and believe that the school is not responsive to their needs. They are likely to merely tolerate school and to believe that it has nothing useful to offer them. While there is not much quantitative research on tracking and social bonds to school, available studies have found a correlation between tracking and behavioral problems, including absenteeism, delinquency, expulsions, and dropping out (Berends, 1995). Studies have demonstrated little association, however, between tracking and delinquency, once prior delinquency has been controlled (Wiatrowski et al., 1982). It is important to point out that research on the effects of tracking must account for preexisting differences in tracked students. This difficulty should not be underestimated.

Mark Berends, of the RAND Corporation, presented his research on the effects of tracking on students' commitment to school. He examined data from the High School and Beyond Survey, a nationally representative, longitudinal dataset of approximately 1,000 schools and over 25,000 students, originally collected in the 1980s. In the reanalysis of these data, 10th and 12th grade students in general and vocational tracks were com-

pared with students in academic tracks, controlling for background characteristics, test scores, and prior orientation toward school (Berends, 1995).

Berends found that students in the general and vocational tracks were more likely than students in the academic tracks to drop out of school between 10th and 12th grade, to have lower long-term educational expectations (i.e., plans for attending college), to have more disciplinary problems, and to be less engaged in school generally. While the differences were small, he suggested that they might operate cumulatively over students' academic careers so that students become increasingly disadvantaged over time.

Berends argued that these findings suggest that separating students, whether through tracking or other mechanisms, can have negative consequences for them in terms of academic achievement and commitment to school.

Negative effects from tracking are not inevitable. According to Berends, whether grouping has a negative impact on students' attitudes and behavior is somewhat dependent on how students are grouped, for what purpose, and whether there are scheduled follow-up assessments that move students when progress has been made. Tracking decisions must also be examined in light of the developmental differences between students in various age groups. The research evidence is clear that ability grouping across grades in the early elementary grades is beneficial for teaching reading (Slavin, 1987). In contrast, tracking for all academic subjects in middle school and high school can have negative consequences for students in low tracks without improving the performance of those in high and average tracks (Slavin, 1990).

Students are grouped for instructional purposes in many different ways, of which tracking is just one. Workshop participants agreed that the negative stigmatizing effects of school tracking must be countered by flexible school policies and practices. These policies and practices must reassess track assignments, balance the needs for academic achievement (measured at the school level by students' performance on standardized tests) with a child's own feelings of self-worth and efficacy, and include formal and informal strategies that discourage the formation of isolated groups of students who feel disconnected from the school mainstream.

At the workshops, Berends said that some form of oversight would be advisable regarding tracking assignments. Researchers have found that tracking assignments apparently made in terms of academic ability were actually more reflective of disruptive behavior in the classroom (Hinshaw, 1992; Jimerson et al., 1997; Loeber et al., 1989; Sandoval, 1984). Not only are there dangers in slowing the process of learning among those who are not having difficulties, but bringing disruptive children together also may increase their disruptive behaviors.

Research has also found racial and social class differences in students in high school tracks, with non-Asian minority and low-income students in low tracks and economically advantaged and white students in high tracks (Oakes, 1992). It was also found that when tracking is based on an advising system, the adviser too often steers some minority students into vocational tracks regardless of their abilities. Sometimes parental intervention alters the outcome, but, as several people at the workshop noted, such intervention is unnecessary for middle-class white children because these students tend to be assigned to high tracks.

Informal tracking is common in elementary schools. For example, teachers may divide children into reading groups based on their skills. Some schools divide students into classrooms based on their assumed ability to learn. These groupings typically also set off upper- and middle-class white children from all others. Workshop participants agreed that criteria for tracking should be monitored and that effects of tracking on both learning and behavior should be studied, especially among young children.

Discussion also addressed the absence of evidence that ability grouping increased learning (Oakes, 1992). Participants noted that children learn by teaching one another, so that having slower learners in a class with fast learners may benefit both. In an atmosphere that promotes interactions among children with different abilities, children also learn how to be considerate of people who seem different from them. A good deal of informal evidence shows that when children who are considered slow learners are grouped together, they come to see themselves in an unfavorable light. Such self-denigration contributes to a dislike for school and to truancy and delinquency (Berends, 1995; Gold and Mann, 1972; Kaplan and Johnson, 1991).

## EXPULSION

In many instances schools appear to have no choice but to remove misbehaving or violent students from mainstream classrooms. Not only might disruptive children interfere with the learning of other students, in some cases the law mandates removing children when their behavior is very disruptive. The negative effects of grouping students in alternative settings, outside the mainstream classroom, are not well addressed by expulsion policies that call for the removal of children from classrooms. Workshop participants noted the need for separating disruptive students but emphasized the importance of being aware of the probable negative consequences of grouping misbehaving students, chief among them peer reinforcement of negative attitudes and behavior.

Schools are quickly moving toward policies of zero tolerance of school

violence. What is troublesome is the trivial use of zero tolerance policies that inappropriately expel youths for whom there are other more benign options. Although some school systems offer alternative educational placements, problems arise when provisions are not made for continuing the education of expelled youths. Generally, school systems have paid little attention to this. According to Gale Morrison, of the Graduate School of Education, University of California, Santa Barbara, school expulsion is not only a risk factor in itself, in that it sets the student on a trajectory that can lead to delinquency and school failure, but also an indicator that there are other disruptive or dysfunctional influences in a child's life. Not only does exclusion from school make it more difficult for a child to keep up with academic subjects, but it also gives children more time without supervision (Henry et al., 1999). Morrison argued that poor school performance should be seen as an early warning sign that alerts teachers and administrators to the possible need for intervention—that is, before behavior develops that makes expulsion seem necessary.

It is important that educators and researchers understand that the circumstances under which children are expelled are diverse and complex, as are the characteristics of these students. A study of 158 students recommended for expulsion over a 2-year period found that the incidents leading to the recommendations fit into four categories by severity of the offense: weapon possession or involvement, drug possession or involvement, defiance or insubordination, or a combination of weapon and drug possession (Morrison and D'Incau, 1997). Incidents could also be categorized as either intentional or accidental (e.g., a pocketknife left in a pocket after a weekend fishing trip) and as threatening or low threat (e.g., a weapon drawn in a fight versus a weapon found in a locker). Morrison and D'Incau (1997) found that students recommended for expulsion were primarily involved in incidents involving weapons. Incidents involving students with a history of misbehavior were more serious than incidents involving first-time offenders. Students with weak bonds to school (e.g., attendance problems) were involved in more drug offenses and combined drug and weapons offenses than first-time offenders or students with a history of misbehaving.

Morrison noted that despite the zero tolerance strategies of many schools, boards of education exercise considerable discretion in the handling of individual cases brought before them. Morrison and D'Incau (1997) found that family problems and weak bonds to school (e.g., frequent truancy) increase the likelihood of expulsion. Alternatively, if there is a family member, community agency, or professional advocating on behalf of a child, expulsion is less likely to occur. Student involvement in extracurricular activities or school leadership works as a protective factor

against unfavorable expulsion decisions. Special education also serves as a protective factor against expulsion, since strict federal laws discourage a disruption in the education of these students, even when the reason is disciplinary.

Workshop participants learned that little is known about the consequences of placement in special disciplinary classes or schools or of expulsion. Morrison suggested that a wide range of options and programming be made available to children expelled from school, and programs must match the diversity of context and circumstances appropriate to students. In addition, educators and researchers must understand how the overlay of social and emotional problems adds to a child's experiences and behavior at school and in the classroom. Nonsupportive family situations and comorbid disabilities (e.g., attention deficit hyperactivity disorder) create a chaotic environment for children. Morrison argued that children and schools might benefit from the development of clear prognostic criteria or performance standards that would make early intervention possible.



# Facilitating Learning

Studies have shown that children tend to lose interest in learning as they progress through school (e.g., Brush, 1980; Eccles and Midgley, 1990; Harter, 1981, 1996). Also, over time children appear to decrease their beliefs that they can learn well, that they can perform well, and that they can behave well (Simmons et al., 1973). Research addressing the processes that contribute to such perceptions among children and youth was the focus of several workshop participants.

Workshop participant Carol Dweck, of the Department of Psychology at Columbia University, reported on her research on children and motivation. Her research examines the factors that cause some children to avoid risk and to break down in the face of a challenge, while others, who might not be thought of as academically talented, seek challenge, enjoy effort, and maintain effective strategies to deal with difficult tasks. Dweck's research clearly shows that intellectual ability is not a sufficient explanation of these observed differences.

These orientations are not individual traits or characteristics but rather learned ways of approaching challenging tasks. Opportunities and reinforcements provided in classrooms and the teaching and management styles of teachers likely influence these orientations. Research points to ways in which school may unintentionally encourage a helpless orientation in some students and how school policies and practices might be reformed to emphasize a mastery orientation toward the acquisition of academic skills and achievement, according to Dweck. In many ways, schools increase students' fear of failure. Incentives or material rewards

for achievement may communicate the wrong message to students and may decrease their effort. Praise of achievement rather than effort may run counter to developing an appreciation for learning in students, as it may cause a child to believe that intelligence comes in fixed amounts and that the goal in academic settings is to document it. Ultimately, this sets the child up for a helpless attribution when faced with challenging tasks.

Workshop participants were also concerned with the current self-esteem movement among educators and how this might, paradoxically, develop a helpless orientation in students. There was concern that by misrepresenting children's abilities, educators make them vulnerable to a helpless attribution when they fail. Dweck suggested that educators should not deny that there are skill differences among children. She recommends that educators praise children for their efforts to achieve, using a form of praise that would not require them to misrepresent a child's skill level. In a context in which teachers praise student effort (instead of student achievement), children do not fall apart when they are told they have skill deficits.

Dweck's research is also relevant to the controversy surrounding tracking and its negative effects. Taking an approach that emphasizes learning as a process of continual skill enhancement, educators could envision tracked sections as fluid and temporary. As such, students flow in and out of tracked sections as their skills improve. Students are not stuck in tracks, and tracks do not dictate a child's future academic course. This conception of tracking might have the added benefit of lifting much of the stigma associated with low-tracked sections. In addition, more students may benefit from a structure in which they can seek temporary, focused assistance with especially challenging academic tasks, according to Dweck.

## RESEARCH ON MASTERY AND HELPLESS ORIENTATIONS

Two orientations toward challenging academic tasks emerge from the research of Dweck and colleagues—mastery and helplessness. Her research has examined the psychological underpinnings of these orientations and how they unfold as children are confronted with failure in intellectual achievement situations. Mastery-oriented students approach challenging tasks as a chance to learn—an opportunity to gain new skills and expand knowledge. Children with a mastery orientation believe that intelligence is something one cultivates—a potential that one can fulfill and develop over time. These children believe that everyone can become more skilled through effort, hard work, and persistence. For them academic tasks measure their present skills only. These views free children up for learning.

Children with a helpless orientation behave differently. Dweck found that when such children fail at a task, they blame their ability and downgrade their intellectual self-evaluation. Furthermore, these children give a negative prognosis of their own intellectual performance. By contrast, when mastery-oriented students fail at a task, they become more task focused, intensify their efforts, and give themselves positive feedback and instructions. Mastery-oriented students show more positive affect after a failure, saying things like "I love a challenge."

Dweck concluded that students with a helpless orientation attribute failure to themselves. In their academic work these students emphasize performing well and documenting their competence and try to avoid situations where they might be challenged academically. Children with a helpless orientation see intelligence as a fixed trait and believe that each test and each academic challenge measures not only their current skills but also their global intelligence and future intelligence. Believing in intelligence as a fixed trait sets these children up for failure and makes them vulnerable to feelings of helplessness.

### OTHER PERSPECTIVES

A somewhat different approach to motivational issues has been adopted and applied in the research of Doris Entwisle, of the Department of Sociology at Johns Hopkins University. A life course perspective adds a depth of understanding that would not have been possible were it not for the attention paid to development and transition and the contingencies imposed by particularly stressful environmental contexts.

Using the life course perspective, the research of Entwisle and her colleagues (1997) has uncovered factors that play an essential role in school performance—factors that are missed by research that does not take into consideration developmental issues. In their research on the influence of employment on school completion among a sample of students in Baltimore, they discovered that there are different patterns of work behavior for students who drop out of school.

Traditionally, the relationship between school and work was thought to operate in only one direction—work undermines school performance, causing students to drop out. According to Entwisle, this is an oversimplified explanation. Findings from the Baltimore study indicate that the work patterns of those who are permanent dropouts are different from those who drop out of school temporarily. While students who work many hours a week are at high risk of dropping out of school, they are less likely than students who acquire jobs with good pay to become permanent dropouts. Entwisle theorized that the better-paid students may believe they are fortunate to have decent jobs and may opt to sacrifice

education credentials to build up the human capital and work experience valued by employers in the sales, clerical, and craft sectors of the job market.

Other findings from the Baltimore study demonstrate the impact of short-term disruptions in school attendance (e.g., summer vacation) on academic skills. These disruptions may contribute, over time, to poor school achievement (Entwisle et al., 1997). Examining seasonal learning patterns and performance on standardized reading and math tests, Entwisle found that students in Baltimore performed at about the same level, regardless of socioeconomic status (SES). However, when children were tested after returning from summer vacation, the middle- and low-SES group (at or below the poverty level) had virtually no gains in scores compared with the high-SES group, who experienced substantially higher scores (nearly 47 points). The researchers found that sustaining and augmenting academic gains during the summer is very much influenced by a student's socioeconomic background. Factors like parent and teacher expectations of student academic performance and the material resources (e.g., games, trips) that high-SES parents can provide may be the reasons for these differences. According to Entwisle, high-SES parents seem to be more able to provide depth and an extra dimension to their children's education, which help to sustain their level of learning over the summer months.

Summer instruction and remedial help alone, however, may not close the gap between low- and high-SES children (Carter, 1983, 1984; Entwisle et al., 1997; Klibanoff and Haggart, 1981). Summer school for low-SES youngsters has not worked (Entwisle et al., 1997). Some very elaborate programs have shown no effects (Carter, 1983, 1984; Klibanoff and Haggart, 1981). Summer programs may also fail to the extent that they are perceived as stigmatizing.

Schools are segregated on the basis of race and social class partly as a consequence of residential separation. In tracing the historical roots of urban education, Kantor and Brenzel (1993:373) have noted:

As the pace of suburbanization accelerated after 1950, distancing the white middle class from the city, the class and racial composition of city schools was altered, and the connection between race, income, and school location was tightened. In the process, city schools became more and more associated with low educational achievement, and the inequities between city and suburban schools became more clearly marked.

Margaret Beale Spencer, University of Pennsylvania, Graduate School of Education, noted a serious limitation in the literature on student school performance in its disregard of the unique needs of urban minority students. The primary problem with this literature is the lack of attention

paid to developmental processes and how they matter to young people who are often growing up in high-risk environments. For example, there is very little treatment of the issue of racial stigma as it relates to the development of black children. Spencer argued that without a clear sense of the complexity of child development, researchers do not always ask the right questions or use the appropriate methods.

From Spencer's research among black preschool students, important thematic findings have emerged that are relevant to school performance and student resiliency. She defines resiliency as good outcomes (e.g., academic success) in a context of risk. This definition highlights the importance of context and that there is sometimes a less than ideal match between individuals and their environments. According to Spencer, in practical terms this means that individuals in high-risk environments must deal with stresses that others with whom they are being compared (e.g., regarding academic performance) do not experience. Research that compares these groups is inadequate if it does not take into account the differences imposed by high-risk settings.

Spencer's research findings indicate that racial and cultural identities contribute to positive school outcomes among black children in preschool and primary school (Spencer and Markstrom-Adams, 1990). Children with a positive racial identity were better able to understand racism and values concerning color and race and to maintain a healthy sense of self. Spencer asserted that racial identity may have a positive long-term effect on children. In conducting a follow-up study with this group of children (at ages 6 to 12) Spencer found that children with a positive racial identity had fewer behavior problems and psychopathology (Spencer, 1986); this she attributes to their greater ability to handle the stress of dealing with their identity in a hostile society.

Spencer argued that children who receive no race socialization or training are at a disadvantage when it comes to dealing with the stress associated with racial stigma. She suggested that children without a strong sense of racial identity develop what she refers to as a "reactive racial identity." Children with a "reactive racial identity" realize that identifying with a group is important, and they know that society sees them as being part of a group; they do not, however, have a deep structured understanding of what it means to claim a specific racial identity. According to Spencer, not only does this leave the child with slim resources for dealing with stress, it can also have a devastating impact on school outcomes and academic performance when, for example, students associate performing well in school with "acting white." Parents are largely responsible for racial socialization and training. Most of the children in the study did not, however, receive race training from their parents.

There is also evidence from Spencer's research that "reactive racial

identity" encourages what she calls a hypermasculine orientation. It is characterized by a heightened state of readiness seen as necessary to keep the threat inherent in high-risk environments (both psychic and physical) to a minimum. Hypermasculinity may be manifest in aggressive behavior or bravado and is, for those who adopt it, a means of protecting their mental and emotional health. A hypermasculine orientation becomes patterned over time as identity, which then becomes linked to opportunities and outcomes that can be either adverse or productive. Adverse outcomes undermine successive stages of development throughout the life course.

In a random sample of 561 (70 percent male) young people involved in a summer academy designed to furnish academic support to failing students, Spencer found that the young men who elected to participate in an outdoor program for 2 weeks scored higher on help-seeking and help-accepting behaviors than their cohorts who chose not to participate (controlling for scores at baseline on these measures). The temporary separation of these youth from the high-risk environment that encouraged a hypermasculine response as a coping mechanism was the reason for the change in help-seeking and help-accepting behaviors, according to Spencer.

Spencer called on educators to confront issues of racial identity and to realize their impact on school performance. As children mature, they become aware of teachers' perceptions of their behavior. According to Spencer, black children often respond to negative feedback by adopting an oppositional stance. By the middle school years their social bonds to school may weaken as a response to what they perceive as a hostile, stigmatizing environment. In doing this, children turn off opportunities for learning and advancement. Over time this causes them to fall further and further behind in school.

Spencer encouraged the development of alternative theoretical frameworks that are sensitive to the context of developmental processes for minority children. Educators and researchers should not adopt models that assume that all children's development and the environments they grow up in are alike, she observed. Intervention strategies should reflect the realization that minority children carry a burden associated with being identified as a minority. Researchers should put aside their discomfort in dealing with issues of marginality and race and examine the consequences of growing up in a high-risk context.

Workshop participants emphasized the point that resiliency abounds in most risk-filled environments. The most vexing problem for researchers and those who design and implement programs is identifying the factors, deliverable through an intervention, that enhance resiliency. There is some indication from research that what may work best for mi-

nority children in high-risk contexts are programs that are multidimensional and culturally sensitive. Spencer described a program in Philadelphia that provides training and education to students in special-education classes using monetary incentives and employment to encourage academic achievement. Graduation rates in this program are 94 percent, whereas the graduation rate in the school system in general is 35 percent. A month following graduation, 93 percent of program students were engaged in full-time stable employment. Evaluation of this program is ongoing.

## Afterword

The education workshop convened by the Panel on Juvenile Crime: Prevention, Treatment, and Control brought together experts who do not usually sit at the same table. Developmental psychologists, sociologists, clinical psychologists, education specialists, and people who design and maintain security systems, among others, came to exchange ideas about how to improve the security and well-being of children in the educational system. The workshop was designed to address the educational and safety requirements of children in the mainstream as well as those on the edges.

Six issues drew special attention: the variability of references to school crime, the potential damage and questionable benefit from some school “protection” measures, the difficulties involved with reconciling universal education with education for the well-behaved, equalizing educational opportunities, promoting intrinsic motivation to learn, and recognizing potential harm from some school-based interventions.

By recognizing the variability of references to school crime, the workshop attendees noted that crime rates for schools are used to raise issues of safety, to gain attention for the popular press, and to measure progress for improving education. Crime rates for these different purposes are not comparable.

In recognizing the potential damage and questionable benefit from some school “protection” measures, the workshop attendees recognized that many consequences of programs designed to protect the schools from crime are unmeasured. They were made particularly aware of the possi-



bility that an emphasis on crime-protection might “normalize” the occurrence of crime.

In focusing on reconciling universal education with education for the well-behaved, the workshop attendees addressed the central issue of fairness. Some programs that appear to be necessary for better students to achieve their goals seem to have harmful effects on students who do not meet the stereotypes for success of some administrators or teachers. The workshop attendees recognized the complexity of understanding how attachment to and performance in school are related to delinquency.

In identifying the issue of intrinsic motivation, the workshop considered a possible way to overcome issues of fairness while also attending to an important goal for educators: maintaining a desire to learn.

In recognizing that some intervention programs have harmful effects, the workshop attendees noted the importance of examining preconceptions that have led to acceptance of intervention strategies without appropriate testing.

In sum, the workshop brought to the attention of participants some important issues that deserve attention in considering the relationship of education and delinquency.

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## APPENDIX

# Workshop Agenda and Presenters

Workshop on Education and Delinquency  
Panel on Juvenile Crime: Prevention, Treatment, and Control

National Research Council and Institute of Medicine

### AGENDA

October 2, 1998

8:00-8:15 a.m.      Welcoming Remarks  
                         **Joan McCord, Workshop Chair**

#### **School Environment and Social Climate**

8:15-9:00            School Environment and Effects on Learning  
                         **John Devine**  
                         Q&A/Discussion

9:00-10:00          School Safety Security Measures  
                         **Kenneth Trump**  
                         Q&A/Discussion

10:00-10:15        Break

10:15-11:00        Tracking, Social Promotions, and Other Educational  
                         Organizational Issues  
                         **Mark Berends**  
                         Q&A/Discussion

11:00-11:45      High-Risk Young Adolescents in Learning  
Environments  
    **Thomas Dishion**  
    Q&A/Discussion

11:45-12:30 p.m.    **Lunch**

12:30-1:15      Using the Framework of Risk and Resilience to  
Understand the Developmental Trajectories of  
Students Who Are Expelled from School  
    **Gale Morrison**  
    Q&A/Discussion

### **School Performance, Intervention, and Delinquency**

1:15-2:00      Overview of Educational Performance and  
Delinquency  
    **Rolf Loeber**  
    Q&A/Discussion

2:00-2:45      Approaches to Improve School Performance  
    **Margaret Beale Spencer**  
    Q&A/Discussion

2:45-3:00      Break

3:00-3:45      Motivation, School Readiness, and Teacher  
Preparation  
    **Carol Dweck**  
    Q&A/Discussion

3:45-4:30      Approaches to Delinquency Prevention in Schools  
    **Gary Gottfredson, Gottfredson Associates**  
    Q&A/Discussion

4:30-5:15      **Commentary**  
    **Doris Entwisle**

General Discussion

5:15      Meeting Adjourns

**PRESENTERS**

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