The Effects of School Climate on School Disorder

By WAYNE N. WELSH

ABSTRACT: Explanations of school disorder have suffered from at least two deficits: (1) institutional explanations of disorder (that is, school climate) have been largely ignored, and (2) insufficient attention to appropriate measures of disorder has guided research and policy. Like people, schools have their own characteristic personalities, or climates. Using survey responses from students in middle schools in Philadelphia, the author discusses the effects of school climate (such as clarity and fairness of rules) and individual student characteristics (such as age, sex, race, and dimensions of bonding) on different measures of school disorder, including victimization, avoidance, perceptions of safety, misconduct, and offending. The schools varied significantly on all measures of disorder, and school climate provided significant explanatory power for each. Results varied for different measures, though. For example, school climate predicted less serious misconduct more strongly than it predicted serious offending. School climate offers significant potential for enhancing both the understanding and the prevention of school violence.

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LITTLE systematic attention has been devoted to examining how school disorder is influenced by school climate relative to individual- or community-level factors. The climate of a school includes the unwritten beliefs, values, and attitudes that become the style of interaction between students, teachers, and administrators. School climate sets the parameters of acceptable behavior among all school actors, and it assigns individual and institutional responsibility for school safety. This article examines the relative contribution of individual and institutional factors to five different measures of disorder in Philadelphia public schools. My purpose is twofold: (1) to advance the measurement of school disorder and (2) to identify relevant causes of school disorder to guide development of appropriate interventions.

THE PROBLEM OF SCHOOL DISORDER

Throughout the United States, recent shootings in and around schools have fueled a national debate about school disorder. Students, teachers, parents, and concerned citizens are shocked by events such as the Littleton, Colorado, high school massacre on 20 April 1999 and the Jonesboro, Arkansas, schoolyard shootings on 24 March 1998. While public perceptions of any social problem are often driven by a few dramatic, rare incidents (Welsh and Harris 1999), there is certainly cause for concern.

In a 1995 survey of students from 10 inner-city high schools, almost half of the male students said they could borrow a gun from friends or family if they wanted to, and 40 percent of the male students said they had a male relative who carried a gun (Sheley and Wright 1993). Approximately 56 percent of all juvenile victimizations (property and violent crimes) in 1991 occurred in school or on school property (Snyder and Sickmund 1995), leading researchers to emphasize, "There is no comparable place where crimes against adults were so concentrated" (Snyder and Sickmund 1995, 16). Thirty-seven percent of all violent crimes experienced by youths aged 12-15 occurred on school grounds (Whitaker and Bastian 1993).

Unfortunately, the term "school disorder" has been used to refer to quite diverse phenomena, including student, teacher, and administrator perceptions of disorder; school security responses to disorder; school disciplinary data such as the number of suspensions; student and teacher self-reported victimization; and measures of serious offending or misconduct by students.[1] Violent deaths occurring on school property are extremely rare compared to these other indices of disorder.

Perceptions and fear of school disorder are important to the degree that they influence student behavior. As student fear increases, confidence in school administrators or other adults diminishes, and informal social controls against violence weaken. Resultant behaviors may include carrying weapons to school,

managing impressions by fighting or putting on a tough front, or retaliating against perceived transgressors (Lockwood 1997). According to 1989 data from the School Crime Supplement (SCS),[2] only 5.3 percent of students overall feared being attacked at school at least "sometimes" (Pearson and Toby 1991). However, in central-city schools where the presence of street gangs was reported, 37.4 percent of the students feared attack. Fear was also related to age (younger students feared attack more and were more likely to avoid certain places at school out of fear) and mode of transportation (those traveling more frequently by public transportation reported higher levels of fear) (Bastian and Taylor 1991). Part of this fear is related to residing in communities with high rates of crime. However, fear may stem from various sources, including perceptions of risk, emotions related to fear, and indirect victimization experiences (for example, witnessed occurrences or secondhand reports) (Ferraro 1994).

School security responses reflect reactions to perceived disorder. Metal detectors, paid security personnel, and student locker sweeps are now commonplace in public schools. In a National School Board Association survey of 720 school districts throughout the United States, researchers found that 39 percent of urban school districts used metal detectors, 64 percent used locker searchers, and 65 percent had security personnel in their schools (National School Board Association 1993). Eighty-two percent of school district administrators reported that the problem of school violence had worsened in the previous five years, and 35 percent believed that incidents were more serious.

School disciplinary data, including school records of incidents, suspensions, and other disciplinary actions, are limited by several sources of unreliability (Lawrence 1998). Because record keeping is typically low on the list of school district priorities, school disciplinary records often contain significant errors in teacher reporting or administrative recording. Disincentives to report violent incidents include the fear of appearing incapable or incompetent and potential loss of local and state political support. Disciplinary records partially reflect individual teacher, school, or district policies in addition to actual rates of incidents.

Data on victimization occurring inside a school building or on school property is provided by the SCS (Bastian and Taylor 1991; Chandler et al. 1998). In the 1989 SCS, 16 percent of the students reported that another student had attacked or threatened a teacher at school (Bastian and Taylor 1991). Results comparing the 1989 and 1995 SCS surveys showed that the percentage of students reporting one or more violent crimes at school over a six-month period was quite low, although that figure increased over time (3.4 percent versus 4.2 percent). While victimization measures are useful as estimates of crime incidence and change, such measures involve known limitations, including potential respondent misunderstanding of questions and crime

definitions, faulty recall of incidents and time periods, and underreporting due to fear, embarrassment, or one's own participation in illegal activities (Biderman and Lynch 1991).

Self-report measures have been widely used to assess delinquency. While greater attention to validity issues is needed, self-reported delinquency measures have often demonstrated good concurrent and predictive validity in relation to criteria such as juvenile court petitions (Farrington et al. 1996). Standardized self-report measures of delinquency occurring in school are rare, although a few measures of student misconduct have been attempted (Jenkins 1997). Research on school violence also has not always properly distinguished between serious offending (such as assault, robbery) and less serious student misconduct (for example, disrespect toward teachers; violation of school rules such as dress code; truancy; cutting class). This distinction may be vital for accurate causal explanation and relevant policy formulation (Welsh, Jenkins, and Greene 1999).

In general, different researchers have measured different aspects of school disorder without due attention to theoretical or practical utility. Welsh, Greene, and Jenkins (1999) have argued that indicators of student misconduct and offending are most useful in facilitating the testing of different theories of school violence (for example, individual, institutional, and community-level theories) across different sites (different schools and school districts), but comparisons of various measures of disorder are also sorely needed.

INDIVIDUAL EXPLANATIONS OF SCHOOL DISORDER

Control theorists contend that delinquency is the result of a weakening of effective social and cultural constraints, especially via weakened transmission of values through institutions such as the family and the school. Social bonding is the mechanism by which effective controls and constraints are learned. In the original formulation of the theory, Hirschi (1969) identified four major elements of social bonding: (1) commitment to conventional goals, or the perceived costs and risks of investing time, energy, and self in conventional behavior; (2) attachment to prosocial others, or the extent to which one cares about others and their expectations and opinions; (3) involvement in conventional activities, or participation in conventional activities as opposed to delinquent activities; and (4) belief in conventional rules, or the degree of moral validity that youths do or do not attach to conventional values.

Schools provide a central venue for social bonding (or failure). Students with poor academic or interpersonal skills are likely to experience failure and alienation in school. They do not become attached to school because social interaction is unrewarding. They do not become committed to educational goals because they view them as unrealistic. They do not become involved in conventional social activities either

because they are denied access to them or because meaningful activities are lacking. They do not come to believe in conventional rules because they do not perceive meaningful present or future rewards for compliance. Relationships between bonding and delinquency have been generally supported by research, although the magnitude and direction of the relationships vary across studies (for reviews, see Akers 1997; Gottfredson and Hirschi 1990; Vold, Bernard, and Snipes 1998).

Other relevant individual predictors include gender, age, and race. Girls have generally evidenced lower rates of delinquency and school misconduct than have boys, although the gender gap has narrowed in recent years (Chesney-Lind and Shelden 1992). Older teenagers, on average, are at higher risk of being involved in both minor and serious delinquent acts (Steffensmeier et al. 1989). The effects of race are not entirely clear. While minorities are overrepresented in official (police or court) statistics, self-report measures of delinquency have generally revealed much smaller racial differences (Farrington et al. 1996). At least three reasons for this discrepancy have been suggested: police and courts are biased against minorities; minorities are underrepresented in survey samples; and the validity of self-reported delinquency may vary across ethnic groups.

THEORIES OF SCHOOL CLIMATE

Like individual people, schools have their own characteristic personalities, or climates. School climate includes factors such as communication patterns, norms about what is appropriate behavior and how things should be done, role relationships and role perception, patterns of influence and accommodation, and rewards and sanctions (Fox et al. 1979). Unhealthy organizational climates contribute to low innovation, low job satisfaction, alienation, lack of creativity, complacency, conformity, and frustration.

Organizational climate, in general, is the "study of perceptions that individuals have of various aspects of the environment in the organization" (Owens 1987, 168). It is the feel of the school as perceived by those who work there or attend class there; it is the general "we feeling" and interactive life of the school (Anderson 1982). Perceptual measures are generally used to assess many different aspects of organizational climate. Most theorists argue that the aggregated perception of individuals constitutes something that is called climate: "though one may argue that perceptions themselves are not objective reflections of 'reality' (but may be influenced by subjective factors), the point is that whatever people in the organization perceive as their experience is the reality to be described" (Owens 1987, 298).

One of the benchmark studies relating school violence to dimensions of school climate was the Safe School Study by the National Institute of Education (1978). Using questionnaires, data were collected from students, teachers, and principals from 642 U.S. public schools. Community data from each school were prepared from the 1970 census. The

institute's report clearly suggested that school administration and policies make a significant difference in victimization rates. Certain policies, the report stated, reduced disorder in schools: decreasing the size and impersonality of schools; making school discipline more systematic; decreasing arbitrariness and student frustration; improving school reward structures; increasing the relevance of schooling; and decreasing students' sense of powerlessness and alienation.

In a reanalysis of the Safe School Study data, Gottfredson and Gottfredson (1985) related student and teacher victimization to various factors internal and external to schools. Schools with the worst discipline problems were schools where the rules were unclear, unfair, or inconsistently enforced; schools that used ambiguous or indirect responses to student behavior (for example, lowered grades in response to misconduct); schools where teachers and administrators did not know the rules or disagreed on responses to student misconduct; schools that ignored misconduct; and schools where students did not believe in the legitimacy of the rules. Other major factors related to high levels of victimization included school size; inadequate resources for teaching; poor teacher-administration cooperation; inactive administrations; and punitive attitudes on the part of teachers.

Schools, of course, are embedded in communities, although communities are not the main focus here. In addition to school characteristics, high levels of crime, poverty, and unemployment in the community surrounding the school have occasionally been associated with higher levels of school victimization (Gottfredson and Daiger 1979; Rubel 1978). Hellman and Beaton (1986) found, in a sample of Boston high schools, that community characteristics predicted school violence (measured by suspension rates) more strongly than did school characteristics. In middle schools, however, characteristics of the school environment, such as teacher-student ratios, explained suspension rates better than did community characteristics. Welsh, Greene, and Jenkins (1999) demonstrated that community-level factors in large, urban school districts offered only a little additional explanatory power (less than 5 percent of explained variance) beyond that afforded by individual variables (16 percent of explained variance). Poverty in the local community, however, was significantly associated with higher rates of student misconduct.

SCHOOL CLIMATE SURVEY RESULTS

Research results from Philadelphia are used to address three major questions. First, do schools vary significantly on dimensions of school climate? Second, do schools vary significantly on measures of disorder (victimization, avoidance, perceptions of safety, serious offending, and misconduct)? Third, to what degree do individual and school climate variables explain variations in

disorder across schools? Policy implications are straightforward: identification of the most relevant causes of school disorder suggests appropriate directions for prevention and intervention. School climate fills a critically important gap in policy, not just theory.

The School District of Philadelphia is the fifth-largest public school system in the United States. In 1993, the school district had an annual budget of slightly over $1.3 billion, served approximately 192,000 students, and employed a staff of nearly 30,000 persons, 13,217 of whom were regular classroom teachers. The district operates 31 high schools, 42 middle schools, 171 elementary schools, and 15 special facilities (such as magnet schools and disciplinary schools) throughout the city. The research described in this article was conducted in 11 middle schools during the 1994-95 school year.[3]

Measures of school climate and individual student characteristics were taken from the 118-item Effective School Battery (ESB), an instrument designed to study school climate and its outcomes (Gottfredson 1984). Reliabilities and validities of ESB scales have been well established across diverse subgroups (such as age and race) and settings (such as urban and rural). The ESB is divided into two sets of subscales: psychosocial climate and student characteristics.

Six psychosocial climate scales focus on the ways students in the school generally perceive and describe the school environment. These include perceptions of school safety; clarity of rules; fairness of rules; respect for students; student influence on school affairs; and planning and action (student reports of the degree to which the school undertakes efforts to plan and implement school improvement).[4]

Twelve student characteristics scales concentrate more on the population characteristics of the school; that is, they describe a school by the people who inhabit it. Five scales correspond well to Hirschi's control theory (1969): school involvement (involvement in school activities), positive peer associations (the degree to which students have friends who value school and avoid trouble), belief in school rules (the extent to which students believe in the validity of conventional social rules), school effort (how much care and effort students devote to schoolwork), and school rewards (how much students are rewarded for good behavior). Three additional characteristics were assessed: age, race, and sex. School misconduct and delinquency are generally greater among males, older teenagers, and nonwhite students, although the effects of age and gender on school misconduct are less clear-cut than their effects on delinquency. Previous research suggests that fear (for example, avoidance) is greater among nonwhites, females, and younger students, while the objective risk for victimization among juveniles generally increases with age.

Five measures of school disorder were examined. The safety scale of the ESB indicates how safe students report the school environment to be. Examples of items include "How often do you feel safe while in your

school building?" and "How often are you afraid that someone will hurt or bother you at school?" Student victimization was measured by a separate self-report questionnaire distributed to all students. Items asking about experiences during the current school year included: "Were you ever hit or pushed by another student?" and "Did anyone ever take anything directly from you by force, weapons, or threats at school?" Student avoidance was measured by several survey items asking respondents if they purposely avoided certain school locations (such as locker rooms or a parking lot) or cut classes because of fear of victimization. Self-reported offending was measured by nine items assessing fairly serious behavior. For example, students were asked whether they had, during the current school year, hit another student or teacher, threatened a student or teacher, stolen something from someone, carried a weapon, or used or sold drugs or alcohol in school. Student misconduct was measured by four ESB items asking whether the student had been sent out of class for punishment, had had to stay after school as a punishment, had been suspended from school, or had had to fight to protect himself or herself.[5] These items represent a more general class of misbehavior that may violate school rules without being clearly illegal or delinquent as such.

Eleven middle schools were chosen in consultation with district officials for administration of the ESB. We included schools that together represented a wide range of disorder (as indicated by incident rates), a range of income levels, and different geographic regions of the city. Descriptive statistics are presented in Table 1. I attempt in this article a relatively nontechnical summary of results; those interested in the statistical analyses should consult the original sources (Welsh, Greene, and Jenkins 1998; Welsh, Jenkins, and Greene 1999; Welsh, Greene, and Jenkins 1999; and Welsh, Stokes, and Greene 1999)

DO SCHOOLS HAVE DIFFERENT CLIMATES?

The 11 schools differed significantly on all five measures of school climate. The largest between-school differences were found for planning and action; clarity of rules; and student influence. Schools, therefore, differ considerably in the degree to which students perceive that the school is making any effort to implement school improvements; in the clarity of school rules; and in the degree to which students have any influence on school policies. Note, however, that sizable but smaller effects were found for the other two climate scales as well: students feel more respected and they perceive that school rules are more fair at some schools than at others. Schools are not at all identical in the rules, procedures, norms, and practices that make up school climate.

DO SCHOOLS HAVE DIFFERENT LEVELS OF DISORDER?

While one might expect that 11 public schools in the same large, urban school district would evidence similar levels of disorder, this was

TABLE 1

DESCRIPTIVE STATISTICS: STUDENT CHARACTERISTICS, SCHOOL CLIMATE, AND COMMUNITY VARIABLES

Variable	Mean	Standard Deviation	Minimum	Maximum	Valid *N*
Student characteristics					
Age	12.09	0.99	11.00	17.00	6,907
Race (0 = white, 1 = nonwhite)	0.79	0.41	0.00	1.00	6,860
Sex (0 = male, 1 = female)	0.50	0.50	0.00	1.00	6,936
Avoidance	9.59	0.89	5.00	10.00	6,379
Victimization	15.25	2.19	6.00	18.00	6,365
Offending	14.71	1.41	8.00	16.00	6,341
Misconduct	2.53	1.23	0.00	4.00	6,597
Involvement in school activities	2.83	2.22	0.00	12.00	6,628
Positive peer associations	6.75	1.85	0.00	9.00	6,555
Belief in school rules	4.15	1.46	0.00	6.00	6,169
School effort	3.11	1.43	0.00	5.00	6,755
School rewards	1.55	1.29	0.00	4.00	6,669
Student perceptions of school climate					
Safety	8.93	3.02	0.00	13.00	6,385
Planning and action	1.62	0.88	0.00	3.00	6,671
Student influence	1.98	1.21	0.00	5.00	6,493
Respect for students	3.40	1.42	0.00	6.00	6,692
Fairness of rules	1.92	0.88	0.00	3.00	6,629
Clarity of rules	3.02	0.94	0.00	5.00	6,493
School characteristics*					
Incidents on school property	42.73	22.71	10.00	91.00	11
Suspensions	324.09	168.97	49.00	590.00	11
School size	966.18	218.28	605.00	1288.00	11
Community characteristics*					
Poverty rate, ages 5-17	37.30	17.94	14.85	69.28	11
Percentage AFDC†	77.78	15.64	48.20	93.80	11

*Some variables shown here were used only in the original selection of schools, in consultation with school district officials.

†The percentage of students participating in Aid to Families with Dependent Children (AFDC) is the percentage of students qualifying for free or reduced-cost lunches.

not the case at all. However, observed differences depended to a considerable degree upon exactly which definition of disorder was used. Schools varied greatly in their levels of student misconduct, for example (as indicated by eta-squared estimates), but differed to a much lesser degree in their levels of serious offending. This is perhaps not surprising, given the low levels of serious victimization reported earlier. The other measure of disorder showing the largest between-school differences was school safety: schools varied to a great degree in how safe their students felt. In general, students who perceived higher levels of safety in their schools also tended to report lower rates of victimization, avoidance, and offending (Welsh, Greene, and Jenkins 1998). Schools

TABLE 2
SIGNIFICANT PREDICTORS OF FIVE MEASURES OF SCHOOL DISORDER

Predictors	Avoidance	Victimization	Safety	Offending	Misconduct
Psychosocial climate scales					
Respect for students	–	–	+	–	–
Planning and action	0	–	+	0	0
Fairness of rules	0	–	0	–	–
Clarity of rules	–	–	+	–	0
Student influence	–	0	–	–	0
Student characteristics					
Age	–	–	+	+	0
Race (0 = white, 1 = nonwhite)	0	+	0	+	+
Sex (0 = male, 1 = female)	–	–	+	–	–
School involvement	+	+	–	+	+
Positive peer associations	–	–	+	–	–
Belief in school rules	0	0	+	–	–
School effort	0	–	0	–	–
School rewards	0	+	–	0	0

SOURCES: Welsh, Greene, and Jenkins 1998; Welsh, Jenkins, and Greene 1999.

NOTES: "+" indicates a significant, positive relationship between a dependent variable and a predictor (example: respect for students is associated with higher levels of perceived safety). "–" indicates a significant, negative relationship between a dependent variable and a predictor (example: respect for students is associated with lower levels of offending and misconduct). "0" indicates that no statistically significant relationship between a dependent variable and a predictor was found (example: clarity of rules is not associated with misconduct).

also differed significantly, although to a much lesser extent, in their levels of student avoidance and victimization. Again, schools are far from identical. There are considerable differences in disorder to be explained.

THE INFLUENCE OF SCHOOL CLIMATE AND STUDENT CHARACTERISTICS ON DISORDER

The effects of individual and school predictors are summarized in Table 2.[6] Four of the five school climate variables significantly predicted victimization: respect for students, planning and action, fairness of rules, and clarity of rules. Student influence on decision making had no effect. Respect for students had the greatest influence on lower levels of victimization. Of the individual student characteristics, sex and positive peer associations had the greatest effects. Females reported lower levels of victimization than did males, as did students with less deviant peer networks. Older students reported lower levels of victimization, as did nonwhite students. It may be the case that older students are at the top of the heap in middle school, although that status is short-lived as they prepare to graduate to high school. Nonwhite students make up the majority (79 percent) of the student population (see Table 1), but the race finding for victimization cannot easily be interpreted as an indication of interracial

tension. As expected, students with greater involvement in school activities reported higher levels of victimization.

Three of five school climate variables significantly predicted avoidance: respect for students, student influence, and clarity of rules. Clarity of rules had the strongest effects on reducing avoidance. Unfortunately, where students reported greater influence on school decisions, avoidance was also higher. Of the individual student characteristics, older students reported lower levels of avoidance, as did females. Race had no effect. Two other large effects were found. As expected, students with greater involvement in school activities reported higher levels of avoidance. Students with positive peer associations reported much less avoidance. However, small explained variance suggests that constructs in addition to demographics, bonding, and school climate are needed to explain avoidance behavior.

Four of five school climate variables significantly predicted safety: respect for students; student influence; clarity of rules; and planning and action. Respect for students had the strongest effects on increasing safety, but clarity of rules was strongly positively associated with safety as well. Surprisingly, high involvement was related to low perceived safety, confirming similar findings for victimization. Of the individual student characteristics, older students reported feeling more safe, as did female students. Race had no effect. Belief in rules and positive peer associations both had strong, positive effects on safety. However, students with greater involvement in school activities and greater experience of rewards reported lower feelings of safety. Unfortunately, commitment to conventional goals appears conducive to higher victimization and lower perceived safety.

Four school climate variables predicted offending: respect for students; fairness of rules; clarity of rules; and student influence. Fairness of rules and respect for students had the strongest effects on lowered offending. Of the individual student characteristics, older students reported higher levels of offending, as did nonwhite students and males. In contrast to the predictions of control theory, students with greater involvement in school activities also reported higher levels of offending. Perhaps greater involvement in school activities spells greater opportunities for deviance for some and greater exposure to victimization for others. As predicted by control theory, those who believed in school rules, reported great school effort, and associated with nondeviant peers all evidenced much less offending. Experience of rewards, however, had no effect.

Similar influences were found on misconduct. Of the five psychosocial climate variables, however, only two (respect for students and fairness of rules) significantly predicted lower misconduct. For student characteristics, patterns were almost identical: nonwhite students and males reported higher levels of misconduct, but age had no effect. Greater involvement in school activities once again predicted higher levels of

misconduct. Those who believed in school rules, reported great school effort, and associated with nondeviant peers all reported much lower levels of misconduct. Experience of school rewards, once again, had no effect.

Results have shown, therefore, that schools vary significantly on multiple measures of school climate and on five different measures of disorder. School climate variables significantly predicted all five measures of disorder (victimization, safety, avoidance, offending, and misconduct), although patterns of results and overall predictive power differed somewhat across the five measures. There is a clear need to more explicitly consider institutional influences of school disorder than has previously been the case.

Two measures of school climate, respect for students and fairness of rules, appear highly relevant for explaining student offending and misconduct. Other school climate variables such as clarity of rules and student influence tended to better predict student avoidance and perceptions of safety. It makes a difference whether one seeks to understand misbehavior, victimization, or related components (avoidance, safety).

Variables associated with control theory (school involvement, positive peer associations, belief in school rules, and school effort), as expected, predicted offending and misconduct more strongly than they predicted other measures of disorder. Control theory is, after all, a theory of delinquency and continues to be robust in its generalizability to different types of delinquency in different settings. The strongest predictor of offending was positive peer associations, which are significantly inversely related to offending, as are belief in rules and school effort (Hirschi's commitment construct [1969]).

Offending is the dependent measure most consistent with existing theories of delinquency. Misconduct, however, is the type of behavior that is much more frequent in schools. Future studies of school disorder should consider both. Both are explained well by a combination of individual- and school-level variables. Together, they provided a strong multivariate measure of disorder. In the present study, both models accounted for large, independent portions of explained variance (16-18 percent), but misconduct showed a higher portion of variance explained by between-schools factors. Misconduct, therefore, offers greater potential for school-based prevention and intervention. Reductions of offending, on the other hand, will require greater attention to policies focused specifically on high-risk youths (see Howell 1995).

The strongest predictor of offending was positive peer associations, which are significantly inversely related to offending, but belief in school rules and school effort were also strong predictors. For misconduct, belief in school rules was the strongest predictor. Control theory suggests that those who are well integrated and attached to basic institutions of socialization such as the school are less likely to deviate from conventional norms and more likely to obey school rules and avoid

punishment. Those who invest greater effort in school, therefore, may be more committed to conventional goals and perhaps more motivated to cope with the demands and stresses of the school environment. Those who believe in conventional rules believe that school rules can and will be upheld by responsible adults to maintain a safe learning environment, and children thus maintain a certain "stake in conformity" by believing in the validity of those rues (Toby 1983). Those who have more positive associations are more likely to be involved in conventional activities and are less likely to be pressured into committing acts of deviance.

However, a greater involvement in activities alone may simply increase one's exposure to risk or opportunities for deviance at school, resulting in positive relationships between involvement in school activities and misbehavior (both offending and misconduct).[7] Similarly, perceptions of rewards for good behavior may be unrelated to offending because being cool or being tough are more valued by some students than being good or because valued rewards may be obtained in other ways.

Involvement in school activities was also associated with higher levels of victimization, avoidance, and lower perceived safety. This is an unfortunate state of affairs. Older students reported less avoidance and victimization and greater perceived safety, but older students also reported more serious offending. It may be more desirable to be the predator than the prey. This hypothesis was further supported by the finding that experience of school rewards (part of Hirschi's construct of commitment to conventional values [1969]) produced no effects on avoidance or offending, but negative effects on victimization and perceived safety. Good behavior may produce rewards but also higher victimization and fear.

Conventional values may be a liability in large urban school districts. In the absence of strong school support for good behavior and effective discipline for bad behavior, students will lower their risk of victimization through means of their own invention. Unfortunately, the defensive strategies they adopt may only fuel a vicious circle in which aggressive postures adopted for self-defense all too easily convert to a higher incidence of aggressive behavior, either through one's own initiative to establish a reputation or through someone else's initiative to establish a reputation at the other's expense. Such posturing is all too likely to be reinforced and strengthened as students move into the larger, more dangerous, and more understaffed urban high schools. Case study results from the Philadelphia study (Welsh, Jenkins, and Greene 1997) further support this interpretation; the results include reports by students that rules and sanctions are unclear, that discipline is lax or inconsistent, and that neither teachers nor teaching assistants effectively monitor behavior or protect the smaller and weaker students in the school. In the absence of

effective control by teachers, teaching assistants, security personnel, or administrators, students can, do, and will enact their own codes of behavior.

Findings that nonwhite, male students report greater offending are consistent with findings of recent research, as is the positive relationship between age and offending (Welsh, Jenkins, and Greene 1999). Misbehavior of low-income, African American children may partially represent reactions to oppressive life experiences and standards perceived as unfair and unobtainable (Cohen 1955), resulting in attempts to recapture feelings of self-worth, identity, and respect by adopting norms of social distancing and physical toughness (Anderson 1990; Hanna 1988). In fact, strong beliefs in the core values of the American Dream, combined with the experience that the legitimate means required for success (such as a good education in a safe environment) are blocked, may provide a recipe for eventual alienation, frustration, and perhaps succession into deviant rather than conforming behavior (see Messner and Rosenfeld 1994). As Farrington et al. (1996) argue, however, greater methodological inquiry into the validity of self-report measures across different races and contexts is warranted.

School climate may play a critical role in mediating the effects of community-level factors on school disorder. Research in progress (Welsh, Stokes, and Greene 1999) suggests that school climate (measured by student attendance and turnover) strongly mediates the effects of community variables (poverty, residential stability, and community crime rate) on school disorder (as measured by school incident and dismissal rates). Neither community crime nor community stability reveals any significant effects on school disorder in path models, although community poverty exerts significant indirect effects through its influence on school climate.

Community characteristics such as poverty may affect school climate by limiting the social and economic resources available to a school (D. Anderson 1998; Welsh, Stokes, and Greene 1999). For example, poverty in the school's surrounding community influences the social characteristics of students attending the school (in terms of, for example, their readiness to learn, their interest in learning, their risk of abuse and victimization), the kind of faculty that are recruited and retained, the resources available for educational and recreational programs, and the involvement of parents and other citizens in school planning and activities. Further, regardless of where they live, students must travel through the local community, either by foot, car, or bus, to get to and from the school. Their perceived exposure to risk may cause them to carry weapons, avoid certain places, or engage in aggressive behaviors that reduce their sense of danger (Lockwood 1997). Community norms in high-poverty communities may reinforce aggressive patterns of behavior as forms of adaptation to environmental demands (E. Anderson 1990, 1998; Bernard 1990).

IMPLICATIONS FOR POLICY

School climate theories carry promise not only for the explanation of school disorder but also for prevention and intervention. School disorder can be reduced by conscious efforts by school administrators, teachers, parents, students, and community groups (for example, Gottfredson 1989). Indeed, the ESB was designed not just for theoretical exploration but also as a tool to influence planning and policy. Its author (Gottfredson 1984) intended that it be used by teachers, administrators, and superintendents to identify excellence and problem areas, stimulate planning and program development, provide benchmarks for planning and evaluating school improvement projects, and help in policymaking and allocating resources and personnel.

Following the completion of surveys in 11 schools and intensive case studies in 3 schools (Welsh, Jenkins, and Greene 1997), my colleagues and I established a collaborative process to discuss research results and implications for school planning. First, researchers met with teachers and administrators at each school. In their annual school improvement plans submitted to the school district office, each school targeted specific problem areas identified by research and developed problem-solving strategies. Two workshops were later held with teachers and administrators from the three schools where case studies were carried out and with representatives from the Philadelphia School District. At the conclusion of the first workshop, we identified four significant problem-solving strategies: (1) building family involvement and support for learning and school activities; (2) increasing staff development and training; (3) creating an alternative learning center for unruly students; and (4) strengthening the existing Student Assistance Program, which provided outside referrals to health and social services. The second workshop concentrated on developing these four strategies.

The year following our study (academic year 1995-96), the School District of Philadelphia embarked on a comprehensive program aimed at increasing the achievement of children in school, the Children Achieving Education Plan.[8] Two elements of that plan illustrate attention to school climate. First, the cluster concept—creating groups of schools from elementary through high school—was an attempt to coordinate local educational resources, enhance teacher communication, and improve transitioning of students between schools. The cluster concept was seen as a key factor in cultivating a positive school climate by engaging all stakeholders (including teachers, parents, students, community residents, and local businesses) in decision-making processes. Second, the plan identified a need to develop a coordinated system of social service delivery to students and families in need. This system was to be family centered, linking students and their families with health and social service agencies, as well as

with community agencies. Coordination of services was seen as a key to reducing school disorder and improving achievement.

Many other excellent examples of how school climate theory can be used for diagnosis, planning, intervention, and evaluation are available. Denise Gottfredson (1986), for example, examined Project PATHE (Positive Action Through Holistic Education) at four middle schools and four high schools in low-income, predominantly African American urban and rural areas in Charleston County, South Carolina. The program contained six main components: (1) the design and implementation of school improvement programs by teams of teachers, students, parents, and community members; (2) the review and revision of curriculum and discipline policies; (3) the design of schoolwide study skills programs and cooperative learning techniques; (4) school climate interventions, including expanded extracurricular activities, peer counseling, and a school pride program; (5) career-oriented activities; and (6) the development of special academic and counseling services for low-achieving and disruptive students. Although experimental and control schools were not directly compared in statistical models, descriptive results suggested that the PATHE program produced several favorable outcomes: students in experimental schools reported less delinquency, less drug involvement, and fewer suspensions or other punishments. Students in experimental schools who received special academic and counseling services scored significantly higher on standardized tests and were less likely to report drug involvement or repeat a grade than were control group students.

School-based programs that attempt to increase children's school effort, encourage positive associations, and demonstrate that obeying the rules will result in valued rewards may also provide critical foundations for reducing school disorder. A host of school-based interventions addressing such student needs are in various stages of implementation, but stronger evaluations of their effectiveness are still needed (see Howell 1995, pt. 2). Our results suggest that many such programs are targeting appropriate causal factors. We recommend, however, that close scrutiny of school climate be included in any school-based program designed to reduce violence. Efforts to change individuals, in the absence of attention to school policies that may be contributing to high levels of misconduct, are likely to be unproductive or even counterproductive.

CONCLUSION

Abundant research has addressed individual-level predictors of student misconduct and victimization, but usually in isolation from between-school factors. School climate theory identifies a host of relevant school-level variables to consider. I advocate more multilevel assessments of school disorder (using multiple measures of disorder), with assess-

ments of school settings to include much more detailed examination of interpersonal, situational, and institutional factors than has generally been the case (Reiss and Roth 1993; Short 1998).[9] School climate theory adds significantly to our understanding of school violence, and the identification of contributing or inhibiting factors at the school level can help guide appropriate, effective prevention and intervention efforts.

Notes

1. Only a brief review is attempted here. For more detailed discussions, see D. Anderson 1998; Gottfredson and Gottfredson 1985; Lawrence 1998; and Toby 1983.

2. The SCS is an enhancement to the National Crime Victimization Survey that surveys nationally representative samples of 10,000 students aged 12 to 19. The SCS surveys gather data on victimization at school, drug availability at school, street gangs at school, and fear of attack at school. SCS surveys were conducted in 1989 and 1995. Only partial data from the 1995 survey have been reported so far; data on fear have not yet been released.

3. Detailed descriptions of methodology are available in Welsh, Jenkins, and Greene 1997.

4. The safety scale is treated as a dependent rather than an independent variable here so as to facilitate comparisons with other measures of disorder. We thus use five rather than six measures of school climate to predict disorder.

5. Although misconduct is self-reported by students, several items are related to teacher and administrator responses to student behavior. There is some potential subjectivity in teacher and administrator responses, although misconduct that is punished in a large urban public school district is unlikely to be trivial (Welsh, Greene, and Jenkins 1999).

6. This discussion is based mainly upon results from multivariate analyses of variance (see Welsh, Greene, and Jenkins 1998; Welsh, Jenkins, and Greene 1999).

7. Similar findings were reported by Jenkins (1997) and Paternoster et al. (1983), who noted that many indicators of involvement are activities that occur during the school day, and substantial blocks of time are available for deviance even though one may also be involved in conventional activities.

8. A new superintendent, David Hornbeck, was hired during the concluding phase of our research. He was briefed on the results of our project, but his Children Achieving agenda was already well articulated when he assumed his duties in Philadelphia.

9. See Messner and Rosenfeld's arguments (1994) for closer examination of societal institutions that play important roles in socialization, including education.

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