

Exhibit 1

**Are Zero Tolerance Policies Effective in the Schools?
An Evidentiary Review and Recommendations**

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**A Report by the American Psychological Association
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**Submitted to the APA Board of Directors
February 1, 2006**

In addition to our appreciation of the many contributions of the APA staff named above, the Zero Tolerance Task Force gratefully acknowledges M. Karega Rausch, graduate research assistant at the Center for Evaluation and Education Policy at Indiana University, for his diligent effort, keen insights, and in general doing what needed to be done to assist the task force in the timely completion of this report. We also wish to thank Leigh Kupersmith, Publications Coordinator at the Center for Evaluation and Education Policy, for her assistance at key moments in copy-editing and formatting. .

ARE ZERO TOLERANCE POLICIES EFFECTIVE IN THE SCHOOLS? AN EVIDENTIARY REVIEW AND RECOMMENDATIONS

Executive Summary

There can be no doubt that schools have a duty to use all effective means needed to maintain a safe and disciplined learning environment. Beyond the simple responsibility to keep children safe, teachers cannot teach and students cannot learn in a climate marked by chaos and disruption. About this there is no controversy.

Abundant controversy has arisen however, over the methods used to achieve that aim. Since the early 1990s, the national discourse on school discipline has been dominated by the philosophy of zero tolerance. Originally developed as an approach to drug enforcement, the term became widely adopted in schools in the early 1990s as a philosophy or policy that mandates the application of predetermined consequences, most often severe and punitive in nature, that are intended to be applied regardless of the seriousness of behavior, mitigating circumstances, or situational context. Such policies appear to be relatively widespread in America's schools, although the lack of a single definition of zero tolerance makes it difficult to estimate how prevalent such policies may be. In addition to universal goals of any school discipline approach, such as maintaining a safe school climate, zero tolerance policies assume that removing students who engage in disruptive behavior will deter others from disruption, and create an improved climate for those students who remain.

In an era of educational policy defined by accountability, it is appropriate and important to examine the extent to which any widely-implemented philosophy, practice, or policy has demonstrated, through sound research, that it has contributed to furthering

important educational goals. Thus the American Psychological Association, as part of its mission to advance health, education, and human welfare, commissioned the Zero Tolerance Task Force to examine the evidence concerning the effects of zero tolerance policies. The task force examined the assumptions that underlie zero tolerance policies and all data relevant to testing those assumptions in practice. In addition, due to concerns about the equity of school discipline, the task force synthesized the evidence regarding the effects of exclusionary discipline on students of color and students with disabilities. Finally, the Zero Tolerance Task Force examined research pertaining to the effects of zero tolerance policies with respect to child development, the relationship between education and the juvenile justice system, and on students, families, and communities. The task force was also charged with offering recommendations for the improvement of zero tolerance policies and with identifying promising alternatives to zero tolerance. Thus the report concludes with recommendations for both reforming zero tolerance policies and for implementing alternatives in practice, policy, and research. The following are the findings of the Zero Tolerance Task Force.

Findings of the Task Force

1. Have zero tolerance policies made schools safer and more effective in handling disciplinary issues?

We examined the data concerning five key assumptions of zero tolerance policies. In general, data tended to contradict the presumptions made in applying a zero tolerance approach to maintaining school discipline and order:

- **School violence is at a serious level and increasing, thus necessitating forceful, no-nonsense strategies for violence prevention.** Although violence

and disruption are unacceptable in schools and are hence key concerns that must be continually addressed in education, the evidence does not support an assumption that violence in schools is out-of-control. Serious and deadly violence remain a relatively small proportion of school disruptions, and the data have consistently indicated that school violence and disruption have remained stable, or even decreased somewhat, since approximately 1985.

- **Through the provision of mandated punishment for certain offenses, zero tolerance increases the consistency of school discipline and thereby the clarity of the disciplinary message to students.** Consistency, often defined as treatment integrity or fidelity, is indeed an important criterion in the implementation of any behavioral intervention. The evidence strongly suggests, however, that zero tolerance has not increased the consistency of school discipline. Rather, rates of suspension and expulsion vary widely across schools and school districts. Moreover, this variation appears to be due as much to characteristics of schools and school personnel as to the behavior or attitudes of students.
- **Removal of students who violate school rules will create a school climate more conducive to learning for those students who remain.** A key assumption of zero tolerance policy is that the removal of disruptive students will result in a safer climate for others. Although the assumption is strongly intuitive, data on a number of indicators of school climate have shown the opposite effect, that is, that schools with higher rates of school suspension and expulsion appear to have *less* satisfactory ratings of school climate, less satisfactory school governance

structures, and to spend a disproportionate amount of time on disciplinary matters. Perhaps more importantly, recent research indicates a negative relationship between the use of school suspension and expulsion and school-wide academic achievement, even when controlling for demographics such as socioeconomic status. Although such findings do not demonstrate causality, it becomes difficult to argue that zero tolerance creates more positive school climates when its use is associated with more negative achievement outcomes.

- **The swift and certain punishments of zero tolerance have a deterrent effect upon students, thus improving overall student behavior and discipline.** The notion of deterring future misbehavior is central to the philosophy of zero tolerance, and the impact of any consequence on future behavior is the defining characteristic of effective punishment. Rather than reducing the likelihood of disruption however, school suspension in general appears to predict higher future rates of misbehavior and suspension among those students who are suspended. In the long term, school suspension and expulsion are moderately associated with a higher likelihood of school dropout and failure to graduate on time.
- **Parents overwhelmingly support the implementation of zero tolerance policies to ensure the safety of schools, and students feel safer knowing that transgressions will be dealt with in no uncertain terms.** The data regarding this assumption are mixed and inconclusive. Media accounts and some survey results suggest that parents and the community will react strongly in favor of increased disciplinary punishments if they fear that their children's safety is at stake. On the other hand, communities surrounding schools often react highly negatively if

they perceive that students' right to an education is being threatened. Although some students appear to make use of suspension or expulsion as an opportunity to examine their own behavior, the available evidence also suggests that students in general regard school suspension and expulsion as ineffective and unfair.

2. What has been the impact of ZT on students of color and students with disabilities?

Part of the appeal of zero tolerance policies has been that, by removing subjective influences or contextual factors from disciplinary decisions, such policies would be expected to be fairer to students traditionally over-represented in school disciplinary consequences. The evidence, however, does not support such an assumption. Rather, the disproportionate discipline of students of color continues to be a concern and may be increasing; over-representation in suspension and expulsion has been found consistently for African American students and less consistently for Latino students. The evidence shows that such disproportionality is not due entirely to economic disadvantage, nor is there any data supporting the assumption that African American students exhibit higher rates of disruption or violence that would warrant higher rates of discipline. Rather, African American students may be disciplined more severely for less serious or more subjective reasons. Emerging professional opinion and qualitative research findings suggest that the disproportionate discipline of students of color may be due to lack of teacher preparation in classroom management or cultural competence. Although there are less data available, students with disabilities, especially those with emotional and behavioral disorders, appear to be suspended and expelled at rates disproportionate to their representation in the population. There is insufficient data available as yet to draw

any conclusions about the causes of disciplinary disproportionality for students with disabilities.

3. To what extent are zero tolerance policies developmentally appropriate as a psychological intervention, taking into account the developmental level of children and youth?

In this section, the task force considered evidence relating to the developmental capacities of youth that are relevant to the use of punishment in school, focusing on research on adolescent development. Research relevant to juvenile offending has found extensive evidence of developmental immaturity. Particularly before the age of 15, adolescents appear to display psychosocial immaturity in at least four areas: poor resistance to peer influence, attitudes toward and perception of risk, future orientation, and impulse control. The case for psychosocial immaturity during adolescence is also supported by evidence from developmental neuroscience indicating that the brain structures of adolescents are less well-developed than previously thought. Developmental neuroscientists believe that if a particular structure of the brain is still immature, then the functions that it governs will also show immaturity; that is, adolescents may be expected to take greater risks and reason less adequately about the consequences of their behavior. Finally a growing body of developmental research indicates that certain characteristics of secondary schools often are at odds with the developmental challenges of adolescence, which include the need for close peer relationships, autonomy, support from adults other than one's parents, identity negotiation, and academic self-efficacy. Used inappropriately, zero tolerance policies can exacerbate both the normative challenges of early adolescence and the potential mismatch between the adolescent's developmental stage and the

structure of secondary schools. There is no doubt that many incidents that result in disciplinary infractions at the secondary level are due to poor judgment on the part of the adolescent involved. But if that judgment is the result of developmental or neurological immaturity, and if the resulting behavior does not pose a threat to safety, it is reasonable to weigh the importance of a particular consequence against the long-term negative consequences of zero tolerance policies, especially when such lapses in judgment appear to be developmentally normative.

4. How has zero tolerance affected the relationship between education and the juvenile justice system?

There is evidence that the introduction of zero tolerance policies has affected the delicate balance between the educational and juvenile justice systems. Zero tolerance policies appear to have increased the use and reliance in schools on strategies such as security technology, security personnel, and profiling. Although there have been increased calls for the use of school security technology and school resource officers in the wake of publicized incidents of school homicide in the late 1990s, there is as yet virtually no empirical data examining the extent to which such programs result in safer schools or more satisfactory school climate. Although such approaches may be useful as part of a comprehensive approach to preventing school violence, more data on their efficacy is urgently needed so that schools can know whether these methods, which tend to be more resource-intensive, are of sufficient benefit in promoting safe schools. Zero tolerance may have also increased the use of profiling, a method of prospectively identifying students who may be at-risk of violence or disruption by comparison to profiles of others who have engaged in such behavior in the past. Studies by the U. S.

Secret Service, the Federal Bureau of Investigation, and researchers in the area of threat assessment have consistently found that it is impossible to construct reliable profiles that can be of assistance in promoting school safety. Rather, best-evidence recommendations have consistently focused on the emerging technology of threat assessment, which can assist school personnel in determining the degree to which a given threat or incident constitutes a serious danger to the school.

The increased reliance on more severe consequences in response to student disruption has also resulted in an increase of referrals to the juvenile justice system for infractions that were once handled in school. The study of this phenomenon has been termed the *school-to-prison pipeline*. Research indicates that many schools appear to be using the juvenile justice system to a greater extent and, in a relatively large percentage of cases, the school-based infractions for which juvenile justice is called upon are not those that would generally be considered dangerous or threatening. As greater numbers of students are referred to the juvenile system for infractions committed at school, questions have been raised about whether or not these referred youths' constitutional rights have been respected fully. It is important to recognize that the existence and characteristics of the connections between education and juvenile justice represented by the term *school-to-prison pipeline* have not been explored extensively in research. Although some of the apparent parallels between the educational and juvenile justice systems are compelling, the prospective longitudinal research necessary to document conclusively any links between school discipline and juvenile justice outcomes has not yet been conducted.

5. What has been the impact—both negative and positive—of zero tolerance policies on students, families and communities?

Although the research in this area is insufficient to make strong statements, to the extent that zero tolerance policies are related to student shame, alienation, rejection, and breaking of healthy adult bonds, there are a number of reasons to be concerned that such policies may create, enhance, or accelerate negative mental health outcomes for youth. Similarly, little research has been done documenting the effects of zero tolerance on families or the community; no reports were found by this review indicating that the policies themselves have assisted parents in the difficult challenges of parenting or that family units have been strengthened through their use. Further, preliminary estimates suggest that the extensive use of suspension and expulsion and increased reliance on the juvenile justice system for school misbehavior may not be cost effective. To the extent that school infractions lead to increased contact with the juvenile justice system, the cost of treatment appears to escalate dramatically. Research is necessary to document the cost-benefit ratio associated with prevention and early intervention approaches as compared directly to zero tolerance policies.

6. Are there other disciplinary alternatives that could make a stronger contribution toward maintaining school safety or the integrity of the learning environment, while keeping a greater number of students in school?

It would make little sense to conclude that zero tolerance is ineffective and needs to be modified or discontinued if in fact zero tolerance was the only option for maintaining safe school climates conducive to learning. In the past ten years, however, there has been abundant research, as well as a number of government panels, that have

critically examined violence prevention strategies. The findings of both research and official panels have been highly consistent in identifying a host of strategies that have demonstrated efficacy in promoting school safety and reducing the potential for youth violence. These strategies have been increasingly organized in the literature into a three-level model of primary prevention, suggesting that effective school discipline and school violence programs must include three levels of intervention:

- *Primary prevention strategies* targeted at all students,
- *Secondary prevention strategies* that are targeted at those students who may be at-risk for violence or disruption, and
- *Tertiary strategies* that target those students who have already engaged in disruptive or violent behavior.

Although space does not permit a thorough description of all the programs found to be effective or promising in these three areas, three programs that have been shown to be effective in reducing the risk of violence or disruption are highlighted: *bullying prevention* (primary), *threat assessment* (secondary), and *restorative justice* (tertiary). Comprehensive systems of implementation of such strategies are necessary to guide schools in the implementation of these effective alternatives. Initial implementation of such models has yielded promising results in terms of reductions in office referrals, school suspensions, and expulsions, and improved ratings on measures of school climate. Finally, the controversy over zero tolerance and the concern that increased rates of school removal may decrease educational opportunities have led a number of state legislatures, such as Indiana, Texas, and Virginia, to propose or adopt legislation to modify zero tolerance procedures or expand the range of disciplinary options available to schools.

Recommendations

The goal of any effective disciplinary system must be to ensure a safe school climate without threatening students' opportunity to learn. Zero tolerance has created controversy by threatening the opportunity to learn for great numbers of students. Moreover, our review of a large data base on school discipline reveals that, despite the removal of large numbers of purported troublemakers, zero tolerance policies have still not guaranteed safe school climates that ensure school learning. Clearly, an alternative course is necessary that can guarantee safe school environments without removing large numbers of students from the opportunity to learn. The Zero Tolerance Task Force thus offers the following recommendations to either reform zero tolerance or to implement alternatives to zero tolerance, organized into practice, policy, and research. Each of these recommendations is discussed in greater detail in the main body of the report.

A. Reforming Zero Tolerance Policies

A.1 Practice

A.1.1 Apply zero tolerance policies with greater flexibility, taking context and the expertise of teachers and school administrators into account.

A.1.2 Teachers and other professional staff who have regular contact with students on a personal level should be the first line of communication with parents and caregivers regarding disciplinary incidents.

A.1.3 Define all infractions, whether major or minor, carefully, and train all staff in appropriate means of handling each infraction.

A.1.4 Evaluate all school discipline or school violence prevention strategies to ensure that all disciplinary interventions, programs, or strategies are truly impacting student behavior and school safety.

A.2. Policy

A. 2. 1 Reserve zero tolerance disciplinary removals for only the most serious and severe of disruptive behaviors.

A.2.2 Replace one-size-fits all disciplinary strategies with graduated systems of discipline, wherein consequences are geared to the seriousness of the infraction.

A.2.3 Require school police officers who work in schools to have training in adolescent development.

A.3 Research

A.3.1 Develop more systematic prospective studies on outcomes for children who are suspended or expelled from school due to zero tolerance policies.

A.3.2 Expand research on the connections between the education and juvenile justice system and in particular empirically test the support for an hypothesized school-to-prison pipeline.

A.3.3 Conduct research at the national level on disproportionate minority exclusion, or the extent to which school districts' use of zero tolerance disproportionately targets youth of color, particularly African American males.

A.3.4 Conduct research on disproportionate exclusion by disability status, specifically investigating the extent to which use of zero tolerance increases the disproportionate discipline of students with disabilities, and explore the extent to which differential rates of removal are due to intra-student factors versus systems factors.

A.3.5. Conduct research to enhance understanding of the potential differential effects of zero tolerance policies by student gender.

A.3.6 Conduct econometric studies or cost-benefit analyses designed to explore the relative benefits of school removal for school climate as compared to the cost to society of removal of disciplined students from school.

B. Alternatives to Zero Tolerance

B.1 Practice

B.1.1 Implement preventive measures that can improve school climate and improve the sense of school community and belongingness.

B.1.2 Seek to reconnect alienated youth and re-establish the school bond for students at-risk of discipline problems or violence. Use threat assessment procedures to identify the level of risk posed by student words.

B.1.3 Develop a planned continuum of effective alternatives for those students whose behavior threatens the discipline or safety of the school.

B.1.4 Improve collaboration and communication between schools, parents, law enforcement, juvenile justice and mental health professionals to develop an array of alternatives for challenging youth.

B.2 Policy

B.2.1 Legislative initiatives should clarify that schools are encouraged to provide an array of disciplinary alternatives prior to school suspension and expulsion and, to the extent possible, increase resources to schools for implementing a broader range of alternatives, especially prevention.

B.2.2 Increase training for teachers in classroom behavior management and culturally-sensitive pedagogy.

B.2.3 Increase training for teachers, administrators and other school personnel to address sensitivity related to issues of race.

B.2.4 Increase training on issues related to harassment and sexual harassment for teachers, administrators and other school personnel.

B.3 Research

B.3.1 Conduct systematic efficacy research including quasi-experimental and randomized designs to compare academic and behavioral outcomes of programs with and without zero tolerance policies and practices.

B.3.2 Increase attention to research regarding the implementation of alternatives to zero tolerance. What are the best and most logistically feasible ways to implement alternative programs in schools?

B.3.3 Conduct outcome research focused on the effects and effectiveness of various approaches to school discipline, not only for schools, but also for families and the long-term functioning of children.

Conclusions

There is no argument with the goals that zero tolerance shares with any school disciplinary system, a safe school and a positive learning climate. It is the means to these ends that have created controversy around zero tolerance policies. Ultimately, an examination of the evidence shows that zero tolerance policies as implemented have failed to achieve the goals of an effective system of school discipline.

The accumulated evidence points to a clear need for a change in how zero tolerance policies are applied and toward the need for a set of alternative practices. It is

time to make the shifts in policy, practice, and research to implement policies that can keep schools safe *and* preserve the opportunity to learn for all students.

Are Zero Tolerance Policies Effective in the Schools? An Evidentiary Review and Recommendations

Beginning in 1989, elementary and secondary school systems in New York, California, and Kentucky began implementing strict rules with rigid enforcement strategies for dealing with violations of school rules. In response to increasing concerns over violence in and around schools and clear recognition of the need for students to be and to feel safe at school, these policies proliferated rapidly over the next decade. Termed “zero tolerance,” these policies became at once popular and controversial with school officials, parents, and the general public.

The goals of violence reduction and the creation of safe, nurturing environments for learning and development in schools are entirely appropriate and receive broad-based support throughout society. Psychology as a discipline has long embraced the need for safety and nurturance during childhood to foster positive development in virtually all domains. Zero tolerance policies have been embraced by some proportion of our nation’s educators and policy-makers as a means of facilitating these goals. Unfortunately, the promulgation and implementation of zero tolerance policies has outpaced the empirical or theoretical foundations of such measures. Certain applications of zero tolerance policies, typically those that seem to take the policy to an extreme, find their way into the popular media, fueling the controversy surrounding zero tolerance.

For example, as reported in the *St. Petersburg Times* (“Educational intolerance”, 2001), a 10 year old girl found a small knife in her lunchbox, placed there by the mother, for cutting an apple. She immediately gave the knife to her teacher, but was expelled from school for possessing a weapon. A teen student was expelled for violating school rules by talking to his mother (with whom he had not spoken in 30 days) on a cell phone

while at school – his mother was on deployment as a soldier in Iraq (*Atlanta Journal Constitution*, May 7, 2005, p. 1A). The *Denver Post* (April 5, 2005, p. F1) reported that 15 students were expelled for a full year for watching a fight between two other students. In the same article, the *Denver Post* reported on an 11 year old charged with theft for taking a lollipop from a classroom jar that he mistakenly thought was free. His case spent 14 months passing through the juvenile justice system. The *Ottawa Citizen* (September 13, 2004, p. A1) reported on a case of a 5 year old suspended for “sexual harassment” after hugging classmates despite the fact that none of the classmates or their parents complained. In 2005, a student with a disability (Asperger’s Syndrome, a disorder characterized by deficits in the development of social and related interpersonal skills) was suspended indefinitely for making “terroristic threats” after responding with verbal aggression to prolonged teasing from other students (who were not disciplined) while riding on a special education bus (Reynolds, 2005, personal communication). There are numerous reports from media sources throughout the country of students expelled for possessing properly prescribed medications at school as well as legally obtained over-the-counter medications such as Tylenol. Such cases rankle students, their parents, and the public, but are often justified as necessary sacrifices if zero tolerance policies are to be applied fairly and are to be effective in creating a deterrent effect.

In the last decade, there has been tremendous progress in our research knowledge on preventing youth violence and creating safe schools. Numerous reviews have rigorously examined violence prevention programs and have identified a set of effective and promising practices that can reduce the probability of violence or disruption at school (Dwyer, Osher, & Warger, 1998; Elliott, Hatot, Sirovatka, & Potter, 2001; Gagnon &

Leone, 2001; Gottfredson, 1997; Greenberg et al., 2003; Mihalic, Irwin, Elliott, Fagan, & Hansen, 2001; Tolan, Guerra, and Kendall, 1995; Thornton, Craft, Dahlberg, Lynch, & Baer, 2000; Zins, Weissberg, Wang, & Walberg, 2004). The extensive and consistent nature of this evidence led the Surgeon General to conclude in his report on Youth Violence:

Clearly, we are past the era in which some observers believed that “nothing works” to prevent youth violence. Numerous programs have demonstrated their effectiveness in reducing risk factors for serious violence. (Elliott et al., 2001)

At the same time, accumulating evidence has raised serious questions about whether zero tolerance policies are effective in reaching their stated goals (Advancement Project/Civil Rights Project, 2000; Morrison et al., 2001; Skiba & Rausch, in press).

In recognition of the possible problems with current policies and the need to bring a data-based exploration into consideration of such issues, the APA Board of Directors recommended, and the APA Council of Representatives approved in June of 2005, a request from the APA Division of School Psychology to appoint and fund a task force on the impact of elementary and secondary school zero tolerance policies (herein referred to as the Zero Tolerance Task Force or ZTTF). An official review of such policies by the APA is consistent with the APA mission statement as expressed in Article 1 of the Bylaws of the APA (2004), which include the use of psychology as a discipline to advance health, education, and human welfare in individuals as well as in the interests of the general public good.

This report of the ZTTF begins with a review of what constitutes zero tolerance policies, their history and development, and methods of implementation. This is

followed by a review of literature related to the effectiveness of zero tolerance policies in making schools safer and more effective. The report next examines the impact of zero tolerance policies on specific classes of children with special attention to minority youth and children with disabilities. The impact of zero tolerance policies on children's development generally and on parents, communities, and related systems is addressed next. The report closes with a set of recommendations focusing on both reforming zero tolerance policies and on implementing alternatives to zero tolerance in practice, policy, and research.

What is Zero Tolerance?

What are the goals of zero tolerance? Where did it come from and how is it defined? How prevalent are zero tolerance policies?

Goals of School Discipline and Zero Tolerance

Zero tolerance represents not so much an intervention as a disciplinary orientation. Growing out of drug enforcement policies of the 1980s and early 1990s (Skiba & Peterson, 1999), the term has come to describe disciplinary philosophies and policies that are intended to deter disruptive behavior through the application of severe and certain punishments. Almost from its inception, zero tolerance has created controversy, in two respects. First, extensions of the policy to items or activities that are not clear threats to school safety (e.g. Midol, nail clippers) have led to the removal of students otherwise viewed as "good students" from school for what appear to be trivial infractions. Second, out-of-school suspension and expulsion resulting from the application of zero tolerance policies have removed an increasing number of students from the opportunity to learn (Michigan Public Policy Initiative, 2003; Potts, Njie, Detch,

& Walton, 2003; Wald & Losen, 2003). This loss of educational opportunity and the increased opportunity for contact with the juvenile justice system that being out of school creates may increase the chances of a more negative developmental trajectory for many youth. Although the trivial nature of many zero tolerance incidents has created intense media attention, we will ultimately argue that it is this potential disruption of student engagement with instruction that is the criterion upon which zero tolerance should be evaluated.

There can be no doubt that zero tolerance is intended to create a school climate free of violence and disruption that is conducive to teaching and learning. In this, it shares the following goals that are basic to any disciplinary philosophy or policy. *The task force strongly endorses the following four goals as absolutely necessary in maintaining a safe school climate that is conducive to learning and teaching:*

- **Ensure the safety of students and teachers:** Incidents of deadly violence in the schools in the late 1990s focused national attention on the importance of guaranteeing the safety of students and teachers. Although the most recent national data suggest that rates of school violence remain stable or decreasing (DeVoe et al., 2004), school staff still report that physical violence is a very or somewhat serious problem at their schools (Public Agenda, 2004).
- **Create a climate conducive to learning:** Physical safety aside, students cannot learn and teachers cannot teach in an environment of disruption, chaos, or frequent behavioral interruptions. Effective disciplinary systems might well be expected to improve academic outcomes by increasing the time teachers can spend teaching, rather than responding to classroom disruption.

- **Teach students needed skills for successful interaction in school and society.**

It is clear that a large majority of both teachers (93%) and parents (88%) believe that one fundamental element of a school's mission is to "teach kids rules so they are ready to join society" (Public Agenda, 2004, p.8). Children will always require socialization, instruction and correction that shape fundamentally egocentric behavior into interpersonal skills that make them more capable of interacting successfully with others in school and beyond.

- **Reduce rates of future misbehavior.** The technical term *punishment* has been defined in the literature of behavioral psychology as a consequence that reduces the future probability of occurrence of some behavior (Alberto & Troutman, 2003; Driscoll, 2000; Maag, 2001; Skinner, 1953). Effective disciplinary interventions then might well be expected to lead to reduced rates of inappropriate or disruptive behavior in the school setting.

In addition to general goals shared with other disciplinary systems, zero tolerance has also been intended as a philosophy that is presumed to derive its effectiveness from certain unique assumptions it makes about the disciplinary process (Skiba & Rausch, in press). Thus, the increased use of out-of-school suspension and expulsion as part of a zero tolerance strategy appears to be based on two additional goals for school discipline that are associated specifically with the philosophy of zero tolerance:

- **Deter potential troublemakers ("send a message") through the use of more severe consequences.** Historically, the purpose of severe punishment has always been the deterrent effect that witnessing punishment might have upon others who may witness that punishment (Noguera, 1995). Ewing (2000) argues that zero

tolerance “appropriately denounces violent student behavior in no uncertain terms and serves as a deterrent to such behavior in the future by sending a clear message that acts which physically harm or endanger others will not be permitted at school under any circumstances.” Advocates of a zero tolerance approach may also suggest that the converse applies: that failure to punish misbehavior sufficiently will “send a message” that a school is not serious enough about safety (Larson & Ovando, 2001).

- **Remove troublemakers in order to improve the school climate for other students.** Central to the idea of suspension and expulsion is the notion that removing the most persistently disruptive students will lead to substantial improvements in the learning climate for others. Recent surveys suggest that secondary teachers agree with this proposition, endorsing the notion that removing persistently disruptive students will make teaching and learning much more effective for the remaining students (Public Agenda, 2004).

In contrast to the more general goals that serve as the basis for any effective disciplinary system, these latter two goals are more characteristic of the philosophy and practice associated with zero tolerance policies. As such, they represent testable hypotheses about the disciplinary process. The purpose of this report is in large measure to examine the available data on zero tolerance and school discipline to determine the extent to which a) zero tolerance policies have made a substantial contribution to helping schools reach the general goals having to do with a safe school climate conducive to learning, and b) data on zero tolerance policies have demonstrated that those policies and practices make a contribution to school safety and climate through the unique

assumptions of zero tolerance (e.g., deterrence and the removal of troublemakers). We begin with a review of the history and development of zero tolerance policies.

History and Development of Zero Tolerance Policies

From its inception in federal drug policy of the 1980s, zero tolerance has been intended primarily as a method of using severe and predetermined consequences to send a message that certain behaviors will not be tolerated. The first use of the term recorded in the *Lexis-Nexis* national newspaper data base was in 1983, when the Navy re-assigned 40 submarine crewmen in Norfolk, Virginia for suspected drug abuse (“Drug Probe Hits Submarine, 1983”).¹ Zero tolerance first received national attention as the title of a program developed in 1986 by U.S. Attorney Peter Nuñez in San Diego, in which seagoing vessels carrying any amount of drugs were impounded. The Reagan Administration Attorney General Edwin Meese highlighted the program as a national model in 1988, and instructed customs officials to seize the vehicles and property of anyone crossing the border with even trace amounts of drugs, and charge those individuals in federal court. The language of zero tolerance seemed to fire the public imagination. Within months, the term began to be applied to a broad range of issues, ranging from environmental pollution and trespassing to skateboarding, homelessness, and boom boxes.

Frightened by a seemingly overwhelming tide of violence, educators in the early 1990s were eager for a no-nonsense response to drugs, gangs, and weapons. In late 1989, school districts in Orange County, California and Louisville, Kentucky promulgated zero tolerance policies calling for expulsion for drugs and gang-related activity (Skiba & Peterson, 1999). In New York, Superintendent Donald Batista of the Yonkers Public Schools

proposed a sweeping zero tolerance program to take action against students who caused school disruption (Hearth, 1990). With its ban on hats, restricted school access, immediate suspension for any school disruption, and increased use of law enforcement, the program contained many of the elements that have come to characterize zero tolerance approaches. By 1993, zero tolerance policies were being adopted by school boards across the country, often broadened to include not only drugs and weapons, but also smoking and school disruption (Skiba & Peterson, 1999).

The popularity of the approach led to the enactment of zero tolerance as national policy when the Clinton Administration signed the Gun-Free Schools Act of 1994 into law. The GFSA requires that each State receiving Federal funds under the Elementary and Secondary Education Act must: (1) have in effect a State law requiring local education agencies to expel from school for a period of not less than one year a student who is determined to have brought a firearm to school; (2) have in effect a State law allowing the chief administering officer of the local educational agency (LEA) to modify the expulsion requirement on a case-by-case basis; and (3) report information on such expulsions to the U. S. Department of Education on an annual basis (see Appendix A for text of the Gun-Free Schools Act). The law provides exceptions for a firearm that is lawfully stored inside a locked vehicle on school property, or if it is used as part of an activity sanctioned by the LEA and the LEA provides for the safety of students as part of that activity. Since removal of a student with disabilities from education may conflict with the protections afforded such students to a free and appropriate education under federal special education law (see e.g. Yell, 2006), the GFSA also contains a provision

that the provisions of the GFSA shall be construed in a manner consistent with the Individuals with Disabilities Education Act.

Definition and Prevalence Estimates

Since the passage of the Gun-Free Schools Act, some form of zero tolerance policy appears to have become prevalent in public schools, although there are few systematic studies about the precise prevalence of those policies. Defining zero tolerance as a policy that mandates predetermined consequences or punishments for specified offenses, the National Center on Education Statistics report, *Violence in America's Public Schools: 1996-1997*, (Heaviside et al., 1998) found that 94% of all schools have zero tolerance policies for weapons or firearms, 87% for alcohol, while 79% report mandatory suspensions or expulsions for violence or tobacco.

This relatively high estimate of the prevalence of zero tolerance may be due to the parameters of the definition of zero tolerance used in the National Center for Education Statistics (NCES) definition. The NCES report defines zero tolerance as “school or district policy mandating predetermined consequences for various student offenses” (Heaviside et al., 1998, p. 7). One would expect, however, that there are few school disciplinary policies that do not mandate some predetermined consequences for student offenses. By simplifying constructs, a limited definition may hold some advantage for measurement. Yet if the NCES criteria fail to capture some of the defining philosophical tenets of zero tolerance, they may yield inflated estimates of the number of schools adhering to that philosophy. Skiba et al. (2003), surveying school principals in one Midwestern state, reported that only 22.5% agreed or strongly agreed that “Zero tolerance makes a significant contribution to maintaining order at my school.”

One feature that appears to be at the heart of the zero tolerance philosophy is the notion of using swift and certain consequences for all incidents, whether major or minor, in order to send a message of deterrence. In an *Atlantic Monthly* article sometimes cited as a philosophical grounding for zero tolerance ², Kelling and Wilson (1982) argued that in high crime neighborhoods there is a relationship between seemingly minor phenomena, such as broken windows, and more serious violent crime. The implication for crime prevention is that relatively minor incidents that signal disruption or violence cannot be ignored, that “untended behavior leads to a breakdown of community control.” Thus Skiba and Peterson (1999) define zero tolerance as a disciplinary policy that is “intended primarily as a method of sending a message that certain behaviors will not be tolerated, by punishing all offenses severely, no matter how minor.” (p. 373)

Although there appears to be no consensus regarding a definition of zero tolerance, clarity of discussion demands clarity of terms. Thus, for purposes of this monograph, we will adhere to the following definition:

Zero tolerance is a philosophy or policy that mandates the application of predetermined consequences, most often severe and punitive in nature, that are intended to be applied regardless of the apparent severity of the behavior, mitigating circumstances, or situational context. Such an approach is intended to deter future transgressions by sending a message that no form of a given unacceptable behavior will be tolerated under any circumstances.

In the following section, we describe examples of the application of zero tolerance that exemplify the zero tolerance paradigm, and highlight the controversy that appears to be inherent in such an approach.

Controversy Concerning Zero Tolerance Application

From their inception in the 1980s, zero tolerance policies and practices have been consistently controversial. The harsh punishments meted out for relatively minor infractions in the early zero tolerance drug cases raised a host of civil rights concerns: The American Civil Liberties Union considered filing suit on behalf of those whose automobiles, boats, and even bicycles had been impounded with trace amounts of marijuana (Hansen, 1988). By 1990, the Customs Service zero tolerance boat impoundment program was quietly phased out after a Woods Hole Oceanographic Institute research vessel was seized for a marijuana cigarette found in a seaman's cabin.

Similar controversy has attended a host of suspensions and expulsions associated with zero tolerance for relatively trivial incidents in school settings. Literally thousands of media reports since the late 1980s have brought individual zero tolerance school disciplinary incidents to the public attention. In the following sections, we examine a few of these incidents, organized by weapons, threats, drugs, and other:

Weapons

The Gun Free Schools Act bans the possession of a firearm on school grounds and mandates a one year expulsion for that offense. Yet school districts have extended that policy considerably, with wide variation in what might be considered a weapon:

- October, 1999, Atlanta, Georgia: A 15 year old South Cobb High School sophomore found with an unloaded gun in his book bag was permanently expelled from the school district. "That is the standard we have set in the past for anyone that has brought a weapon to school," said the district's associate superintendent. "It's extremely serious, dangerous for everybody involved." The youth was also charged in juvenile court with possession of a weapon (Stepp, 1999).
- March, 2002, Hurst, Texas. A bread knife was found in the back of a truck of a high school junior who had been helping his father take a load of possessions from his grandmother to Goodwill the previous weekend. The

boy, an honors student and award-winning swimmer at the school, was expelled for one year to the Tarrant County Juvenile Justice Alternative Education Program. Said the boy's father, "It's crushing. That is for hard-core, violent youth" (Mendoza, 2002).

- September, 2000, Atlanta, GA. An eleven year old girl was suspended for two weeks from Garrett Middle School for possession of a 10 inch novelty chain attaching her Tweety Bird wallet to her key ring. School officials stated that district policy was clear, classifying a chain as a weapon, in the same category as pellet guns, ice picks, and swords. The American Civil Liberties Union filed a lawsuit on behalf of the girl, noting that students had been previously suspended in the district for a plastic knife used to cut a cake, bracelets and necklaces, and a screwdriver used to fix a band instrument (Rodriguez, 2000).
- November, 1997, Dublin Ohio. A seventh grade boy who brought in a toy cowboy gun for a skit in French class with the permission of the teacher was suspended for five days and received zeroes for all work during the period of the suspension. "For a skit on Old Yeller, I had brought in a much larger toy rifle," the boy noted. "I got extra credit" (Ellis, 2003).

These incidents highlight two sources of controversy created by zero tolerance incidents. In the Atlanta case involving a shotgun in a backpack, there can be little doubt of the seriousness of the offense; in this case however, it is not the necessity of the expulsion under the GFSA, but rather its length that makes the incident newsworthy. In other cases, controversy has been created by defining as a weapon an object, such as a chain attached to a Tweety Bird wallet, which poses little real danger. The unwillingness of many school districts involved in such incidents to back down suggests that the extension is intentional and consistent with the philosophical intent of zero tolerance, treating both major and minor incidents with severity in order to set an example to others. This stance appears to take some zero tolerance applications well beyond the statutory mandates of the Gun Free Schools Act. That act states that an instrument that otherwise might be construed as a weapon will not trigger a mandatory expulsion if it is for "activities approved and authorized" by the local educational agency; one might presume

that a cowboy gun brought to class for a skit in French class would constitute an activity approved and authorized by the local educational agency.

Threats

Recent incidents of lethal school violence, and the copy-cat threats those incidents have occasionally spawned, have made school personnel especially sensitive to threats of violence in school. It is not surprising that zero tolerance has been a strategy chosen by some schools and districts to address real or perceived threats.

- March, 2001, Topeka, KS. At Wabaunsee High School, a 15 year old student wrote a message that he was going to “get you all” on the boys’ bathroom wall. After the message was erased by the school, he wrote a second message stating that he should be taken seriously and was “going to shoot everyone.” The boy, arrested and charged with one count of criminal threat, returned to school after a five day suspension. Some parents protested the leniency of the school punishment. “I know kids who have been suspended for three days just for orneriness and this kid threatened to kill the whole student body,” complained one parent (Grenz, 2001).
- March, 2001, Irvington, N. J. Two second graders were suspended and charged by local juvenile authorities with making terroristic threats after pointing a piece of paper folded to look like a gun at classmates and saying “I’m going to kill you all.” The Superintendent of the district noted that “I thought this was very unfortunate. But, being that kids are being shot in schools across the country, children have to be taught they can’t say certain words in public.” The father of one of the boys disagreed, however, stating, “This is just stupid, stupid, stupid. How can you take two boys to the police precinct over a paper gun? This is very bad judgment” (Associated Press, 2001).
- April, 2001, Chicago, Ill. After a band concert, a junior at suburban Reavis High School and three friends put together a list of twenty members of fellow band members they did not like. When rumors spread that the list was really a “hit list,” the student, acknowledged as an active and bright student, was suspended for four days and excluded from band. “It’s crazy”, stated the boy’s mother, herself an assistant principal at a Chicago high school. “There’s a difference between saying ‘I’m going to come to school with a gun and blow everybody up,’ and saying, ‘Here are kids who annoy me.’” (Sternberg, 2001)

Recent school shooting incidents provide an unequivocal lesson that schools must have policies and procedures in place to investigate and respond to threats, and may place themselves at risk by ignoring serious threats of violence. It is not surprising then, to see

an increase in zero tolerance practices regarding threat in the aftermath of school shootings and copy-cat threats of school shootings. Indeed, some reactions to threat may be perceived by the community as too lenient, as in the case of the threat at Waubensee High School.

Yet the local and in some cases national furor created by some of these incidents suggests that there may be limits on what a school can or should do to protect staff and students. Indeed, automatic school exclusion for threats of violence is unlikely to solve the complex problems of threatened violence in schools. In its report *School Shootings: A Threat Assessment Perspective*, the FBI issued a strong caution:

It is especially important that a school not deal with threats by simply kicking the problem out the door. Expelling or suspending a student for making a threat must not be a substitute for careful threat assessment and a considered, consistent policy of intervention. Disciplinary action alone, unaccompanied by any effort to evaluate the threat or the student's intent, may actually exacerbate the danger—for example if a student feels unfairly or arbitrarily treated and becomes even angrier and more bent on carrying out a violent act. (O'Toole, 2000, p. 26)

Best practice in threat assessment recommends instead that schools conduct a comprehensive threat assessment to determine the seriousness of any threat, and develop a team approach to threat evaluation and intervention (Cornell & Sheras, 2006).

Drugs

Although there is no federal mandate of suspension or expulsion for drug-related offenses, the application of zero tolerance to drugs or alcohol has become quite common.

- June, 1998, Brookline, Massachusetts: Nine seniors caught with alcohol on a bus going to their senior prom were barred by the principal from attending their graduation, and two were not allowed to compete in the state baseball playoffs. Citing tragic accidents caused by alcohol abuse, Brookline High School Headmaster Robert Weintraub stated, "Every time there's a serious incident, a violation of drugs, alcohol, or weapons, I have taken a very hard line, because it's important for kids to get the message that if they do

something that violates some of the fundamental rules we have here, they will be punished” (Abrahms, 1998).

- October, 1998, East Lake, Florida: High school senior Jennifer Coonce took a sip of sangria at a luncheon with co-workers as part of a school-sponsored internship. When her parents called the high school to complain about minors being served alcohol, the district suspended her for the remainder of the semester. Jennifer, an honors student, was offered the opportunity to take her college placement classes at home, over the telephone (Smith, 1998).
- January, 2004, Bossier Parrish, Louisiana. A fifteen year old girl found in possession of one Advil tablet was expelled for one year under a district policy of zero tolerance for any drug. Closer scrutiny of previous school disciplinary actions in the school district revealed cases in which other students had received a lighter punishment for explicitly illegal drugs. As a result of local furor surrounding the case, Bossier Parrish school officials rewrote the policy to allow school principals to have greater discretion in determining which drugs would fall under the policy (“One headache cured”, 2004).

The fact that a wide range of incidents are met with very similar punishment may shed light on why zero tolerance creates controversy. Stiff punishments for serious drinking or drug abuse at school-sponsored events seem appropriate and may well serve to prevent more serious harm. In contrast, removing a child from school for possession of an over-the-counter headache tablet or punishing relatively minor off-campus behavior seems more likely to turn the offender into the perceived victim. Strictures against cruel and unusual punishment are enshrined in our legal system and Bill of Rights: School punishments that appear to be greatly out of proportion to the offense may create controversy by violating basic perceptions of fairness inherent in our system of law, even when those punishments are upheld by the courts.

Other

Federal legislation in the Gun Free Schools Act applies zero tolerance only to firearms on school grounds. Many school systems have extended the reach of zero

tolerance policy to a range of behaviors or incidents that do not involve weapons and that do not necessarily threaten the safety of the school environment.

- February, 2005, Adams City, CO. When 15 students who attended Adams City High School watched a fight between two students in a nearby park, the school principal made a recommendation that all 17 students be expelled for one year. The students were suspended for two months before the school board ordered that the students who had watched the fight be allowed to return to school (Poppen, 2005).
- May, 2005, Highlands Ranch, CO. An 11 year old at Cresthill Middle School who took a lollipop from a jar on the teacher's desk was charged with theft after charges were filed by the classroom teacher and the school principal. The boy, who claimed he did not know the candy was being sold to raise money, was convicted of a misdemeanor and is currently on probation (Rodriguez, 2005).
- May 2005, Columbus, GA, A junior at Spencer High School in Columbus, Georgia was suspended for 10 days for violation of district cell phone policy when he refused to hand over his cell phone to a teacher while talking on his mother serving in Iraq for the first time in a month. Although the boy stated he did not lose his temper and was "simply being insistent" about talking to his mother, school officials said he was being "very defiant" and that this was "not an isolated incident with this particular student." The boy's guardian, Staff Sgt. Shalita Hartwell, said, "I'm perturbed and his mom is perturbed. Anyone would have an attitude if they snatched the phone away when talking to his mother." (Torpy, 2005)

As in other categories, the apparent degree of threat posed by the infraction to school safety varies in these incidents. Although the first incident may have involved suspected gang members, the latter two incidents involve extensions of zero tolerance that appear to be issues of school policy more than school safety. The second incident is noteworthy as an example of the increasing willingness among some administrators to use juvenile justice consequences for school-related behavior (Casella, 2003). Finally, it is noteworthy that one administrative justification for the cell phone incident described above was a previous disciplinary action involving the boy. While it is common for school administrators to take previous disciplinary history into account in assigning school punishments, the use of that type of contextual information appears to contradict the assumption that zero tolerance punishments are certain, invariant, and context-free.

How Effective is Zero Tolerance?

Have zero tolerance policies made schools safer and more effective in handling disciplinary issues?

Appropriate Criteria for Evaluating Zero Tolerance

Media accounts of zero tolerance incidents have tended to place a focus on the unfairness of removing an otherwise “good student” from school for what appears to be a relatively minor infraction. Responding to a local zero tolerance incident, the *St.*

Petersburg Times wrote in an editorial:

Zero tolerance policies are inherently unjust and irrational because they conflate harms. Accepting a cup of sangria for a good-bye toast is punished as severely as a student who gets drunk on school property....Bringing a butter knife to school to cut an apple for lunch carries the same expulsion as toting a loaded magnum. Those harms are not equivalent, and if they are punished with equal severity, the system looks both unfair and nonsensical. (“Zero sense,” 1998)

As important as such concerns are, they may be less central to front line educators than guaranteeing the safety of school environments. It must be strongly acknowledged that school administrators are charged with ensuring the safety of students and teachers and maintaining school order in order to ensure that teaching and learning can occur. Thus, schools have the right and responsibility to use any and all effective procedures in order to maintain a school climate that is conducive to learning. It might well be argued that while occasional violations of individual students’ rights are unfortunate, zero tolerance suspensions and expulsions are necessary if they help maintain safe and productive school climates.

Thus, we argue that the appropriate criterion for evaluating zero tolerance is not simply the fairness, or lack thereof, of reported zero tolerance incidents. Rather, the key question to be addressed in this evaluation is the extent to which zero tolerance

philosophy and policy represents an effective (e.g., evidence-based) tool for improving student behavior or ensuring a school climate conducive to learning. Extreme situations may, under some circumstances, call for extreme measures. At some point, however, best practice in psychological or educational intervention demands a demonstration that all procedures, whether commonplace or extreme, have demonstrated a positive impact on the situations they were intended to remedy.

The evaluation of zero tolerance is further complicated by the inherent risk of removing a student from school, even when that removal is intended as an instructional or disciplinary tool. By its very nature, removing a student from school through out-of-school suspension and expulsion poses some risk to educational opportunity. One of the most consistently documented findings in the field of educational psychology over the last thirty years has been the positive relationship between academic opportunity and student achievement (Brophy, 1988; Fisher et al., 1981; Greenwood, 1996; Greenwood, Delquadri, & Hall, 1984; Greenwood, Horton, & Utley, 2002; Wang, Haertel, & Walberg, 1997). In addition, models of youth violence and delinquency have identified school alienation or weak school bonding as being among the strongest variables predicting juvenile delinquency (Catalano, Haggerty, Oesterle, Fleming, & Hawkins, 2004; Hawkins, Doueck, & Lishner, 1988). Thus it is important to explore whether procedures such as out-of-school suspension and expulsion that remove students from the opportunity to learn, and potentially weaken the school bond, are sufficiently effective in terms of changing student behavior or improving school climate to offset the risks inherent in lost instructional opportunities. Media accounts of zero tolerance incidents have tended to focus on “good” students trapped in the “web of zero tolerance” (Morrison

& D’Incau, 1997), and on the impact that being out of school has had on those students. Yet it might well be argued that students with challenging behavior or marginal academic skills are placed at even greater risk when they lose instructional opportunities.

Thus, evaluating zero tolerance may be considered a question of weighing the benefits of that approach against its possible risks: Do the disciplinary procedures most often used by zero tolerance, out-of-school suspension and expulsion, provide benefits to the school by reducing disruption and affording a school climate conducive to learning? Are those benefits sufficient to offset the risks to academic engagement and school bonding that are inherent in removing a student from the opportunity to learn? In the following sections, we review a set of assumptions concerning the application and expected outcomes of zero tolerance, and the extent to which there is evidence to support those assumptions.

Availability of Efficacy Research on Zero Tolerance

Has zero tolerance made schools safer or more conducive to learning? No Child Left Behind has increased the attention of policymakers and educators to issues of evidence-based practice: That law (PL 107-110, 2002) mandates that schools use only those interventions that have proven effective in improving student outcomes under rigorous experimental conditions. It seems reasonable to argue that disciplinary policies that may have both benefits and risks should be subjected to similar research-based standards.

Unfortunately, however, no reliable studies on the impact of zero tolerance on student behavior or school climate have been conducted under any kind of controlled experimental conditions. The United States Department of Education has commissioned a

series of reports on the implementation of the Gun Free Schools Act of 1994. In one of those reports (Sinclair, 1999), the author concluded that a nation-wide 31% reduction in the number of weapons reported on school grounds across a two year period may mean that “...students were getting the message that they were not to bring firearms to school and that, as a result, fewer students were expelled for this offense.” Yet the same document notes that reporting irregularities within and across states suggest that the “report results should be interpreted with caution” and that “reporting irregularities resulted in an overstatement of the number of expulsions under the GFSA for 1996-97 [the first of the two years of the study].” Thus, while the available national data on the implementation of the GFSA may be of interest in providing an approximate estimate of the number of firearms on school campuses nationwide, they are in no way sufficient to judge the effectiveness of the GFSA in influencing firearms possession in schools.

Nor are there data that could address the efficacy of state and local extensions of zero tolerance philosophy and policy to a host of other behaviors. Testimonials by school personnel (Burke & Herbert, 1996; Crosby, 1994; Litke, 1996) have sometimes painted a compelling picture of how such policies have turned around an apparently violent school situation. Yet such first-person accounts may be biased by any number of threats to validity (Campbell & Stanley, 2005), again leaving the field without a true test of the efficacy of procedures based on zero tolerance.

In the absence of direct evidence regarding the effectiveness of zero tolerance, this task force evaluated evidence from the literatures on school violence and school discipline that might bear upon the impact of zero tolerance. We compared these data

with a number of assumptions regarding the implementation and outcomes of disciplinary practices consistent with a zero tolerance approach. The assumptions addressed include:

- 1. School violence is at a near-epidemic level and is increasing, thus necessitating forceful, no-nonsense strategies for violence prevention.*
- 2. Through mandated punishments for certain offenses, zero tolerance provides consistent and clear messages to students about discipline.*
- 3. Removal of students who violate school rules will create a school climate more conducive to learning for those students who remain.*
- 4. Swift and certain punishment based on zero tolerance have a deterrent effect upon students, thus improving overall student behavior and discipline.*
- 5. Parents overwhelmingly support the implementation of zero tolerance policies to ensure the safety of their children in schools, and students feel safer knowing that transgressions will be dealt with in no uncertain terms*

In the sections below, we examine data bearing upon each of these assumptions and evaluate the extent to which those data support the assumptions.

Examining the Assumptions Underlying Zero Tolerance

- 1. To what extent is school violence out-of-control? To what extent has it been increasing?*

A series of school shootings in the late 1990s raised important concerns about the safety of America's children while in school. The dramatic nature of these incidents created a perception that violence in schools had reached critical proportions and seemed to be escalating:

...on a daily basis many students, parents, and teachers are aware of threats or bullying and they experience pervasive anxiety about violence.

Across the nation there is grave concern that our children are no longer as safe from intimidation, serious injury, or death as they once were while at

school or on their way to or from school. (Elliott, Hamburg, & Williams, 1998, p. 3)

Yet selective attention to only the most disturbing of school violence statistics may create a misleading impression that violence is rampant and increasing.. National data consistently indicate violence is not out-of-control in America's schools, nor does it appear to be increasing.

Data on school-based violence do not reveal evidence of an epidemic. Data on community violence showed an increase in youth violence in the community that peaked in the mid-1990s (Federal Bureau of Investigation, 2004), but no similar trends have been found with respect to violence in schools. In a report that remains the most extensive exploration of school violence and school discipline, the National Center on Educational Statistics (NCES) found that 10% of all schools reported one or more serious crimes (rape or sexual battery, robbery, fight with a weapon, suicide), 47% reported one or more incidents of less serious crime (theft, vandalism, fights or assaults without a weapon), while 43% reported no crime during the school year (Heaviside, Rowand, Williams, & Farris, 1998). The problems cited as most frequent by principals at both the elementary and secondary level were less violent behaviors such as tardiness (40%), absenteeism (25%), and physical conflicts between students (21%). The critical incidents that are the focus of school safety debates were reported by principals occurred relatively infrequently: Drug Use, 9%; Gangs, 5%; Possession of Weapons, 2%; Physical Abuse of Teachers, 2%. While it should be stressed that *any* amount of crime on school campuses is unacceptable and that continuing efforts must be made to reduce school crime, the data do not support claims that there is an “epidemic” of crime and violence in schools.

Other national surveys consistently find that school violence has stayed essentially stable or even decreased over time. Figures 1a and 1b, drawn from the most recent *Annual Report on School Safety* published by the U. S. Department of Education (DeVoe et al., 2004) illustrate that rates of physical fights among students remained stable in the 10 year period from 1993 to 2003, while the percent of students who report carrying a weapon appears to have decreased slightly. The University of Michigan Institute for Social Research (Johnston & O'Malley, 2005) tracked a number of indicators of school violence, based on self-reported victimization among 12th graders, for over twenty years. All of these indicators, including victimization with and without injury, and with or without a weapon, have tended to remain stable or even decrease slightly from 1976 to 1996 (*Annual Report on School Safety*, 1998). Hyman and Perone (1998) concluded from an examination of these data, "Despite public perceptions to the contrary, the current data do not support the claim that there has been a dramatic, overall increase in school-based violence in recent years" (p. 9).

Summary. School violence and disciplinary disruptions are extremely important concerns; nationally visible events clearly created the perception that school violence was at or approaching a crisis stage, and probably worsening. Yet despite data showing an increase in overall youth violence that peaked in the 1990s, the data have shown no similar trends for school violence. Rather, the types of serious infractions of greatest concern tend to occur at very low levels in most schools. Moreover, data going back almost 30 years tends to suggest that school violence and disruption have remained stable or decreased slightly over time. Thus, while school violence and disruption must be addressed through all effective means, national reports have consistently found no

evidence that school violence is at an epidemic stage or increasing in frequency or severity.

2. Does zero tolerance increase consistency in the application of school discipline? To what extent are school punishments associated with zero tolerance applied consistently within and across schools?

Supporters of zero tolerance suggest that the application of zero tolerance policies will increase the effectiveness of school discipline policies by increasing their consistency (Casella, 2003). Consistency is in fact a critical component of any educational or behavioral intervention: Unless an intervention can be implemented with some degree of consistency, it is unlikely that intervention can have a positive effect. Behavioral psychologists have argued that punishment, applied inconsistently, will be ineffective and perhaps even increase inappropriate behavior (Patterson, 1995; Patterson, Capaldi, & Bank, 1991; Skinner, 1953). Questions of consistency of treatment also bear upon the issue of quality of implementation (Gottfredson & Gottfredson, 2002) or treatment integrity (Lane, Bocian, MacMillan, & Gresham, 2004). Unless an intervention can be implemented with some degree of consistency, it is impossible to attribute any changes in school climate or student behavior to that intervention.

District-wide studies of school discipline have typically found a high degree of inconsistency in the use of suspension and expulsion across schools (Kaeser, 1979; Massachusetts Advocacy Center, 1986). Table 1 represents the percent of office referrals resulting in out-of-school suspension in 16 middle schools described in one urban school district by Skiba, Peterson, and Williams (1997). This might be regarded as an index of the likelihood of suspension given a referral to the office, or more simply, a measure of

the tendency of a school to use out-of-school suspension. The variability among these 16 middle schools is extremely high; at some schools, only about a tenth of all office referrals resulted in an out-of-school suspension, while other schools suspended over four-fifths of the students referred to the office.

Some of this variation in usage of suspension could be due to variations in student behavior; it is not unreasonable to assume that some schools, especially those in more disrupted communities, will face higher rates of student misbehavior, disruption, and violence (e.g., Elliott et al., 1998). Students who engage in harassment, bullying, or violent behavior appear to be at greater risk of future disciplinary action at both the sixth and eighth grade level (Tobin, Sugai, & Colvin, 1996). Some students clearly account for a disproportionate share of disciplinary effort; in one study of disciplinary referrals in 19 middle schools in a large Midwestern urban district, Skiba et al (1997) reported that 6% of students were responsible for 44% of all referrals to the office. Eckenrode, Laird, and Doris (1993) reported that students with substantiated reports of abuse or neglect were significantly more likely to be referred for school discipline and somewhat more likely to be suspended, especially at the middle and high school level. Morgan-D'Atrio et al. (1996) reported that almost three quarters of students who were suspended at the middle or high school level in one school district had identified academic or social skills deficits. Of those suspended students, 43% at the high school level and 38% at the middle school level had clinically elevated scores on one or more subscales of the Child Behavior Checklist on both student and teacher report.

Yet variation in student behavior does not account for such extensive variability in the application of out-of-school suspension and expulsion. Wu et al (1982) tested the

contribution of both student and school characteristics to a student's likelihood of being suspended at least once during high school. As noted above, student behavior and attitude did make a significant contribution to the probability of suspension in that model. Regression analyses, however, showed that a number of school characteristics (e.g. overall school suspension rate, teacher attitudes, administrative centralization, school governance, perceptions of achievement, socioeconomic disadvantage, and racial status) also made a significant contribution to the probability of being suspended. In the final model, including both student and school characteristics, Wu et al. reported that school and non-behavioral student characteristics made a more significant contribution to predicting school suspension than did student behavior and attitude.

At least some of the variance in school rates of out-of-school suspension and expulsion appear to be attributable to differences in administrative choices concerning the disciplinary process. Qualitative findings in the national report *Opportunities Suspended* (Advancement Project/Civil Rights Project, 2000) suggested that building principals used out-of-school suspension in direct proportion to their stated support for zero tolerance policies and procedures. In a comprehensive study of the relationship of principal attitudes and disciplinary outcomes, Skiba et al. (2003) surveyed 325 principals regarding their attitudes toward zero tolerance, suspension and expulsion, and violence prevention strategies. They found principal attitude and school disciplinary outcomes to be correlated: rates of out-of-school suspension were lower, and the use of preventive measures more frequent, at schools whose principals believed that suspension and expulsion were unnecessary given a positive school climate.

The presence or absence of a range of other disciplinary alternatives appears to be related to the incidence of school suspension and expulsion. Raffaele-Mendez, Knoff, and Ferron (2002) analyzed school suspension rates in 97 elementary schools and 45 secondary schools in one large urban district and found that variability in rates of suspension appeared to correspond to the presence of different alternatives at different levels. At the elementary level, schools with lower rates of out-of-school suspension were more likely to report the use of positive reinforcement for positive behaviors as part of a school wide plan, and were also more likely to involve both parents and related services personnel in the formulation of the school wide discipline plan. At the middle school level, low suspension schools reported a greater emphasis on staff training, especially in the area of classroom management practices, while at the high school level, schools with lower rates of out-of-school suspension appeared to have more opportunities for meaningful parental involvement in disciplinary matters. In a qualitative study comparing high and low suspension rates, Mukuria (2002) found that principals in low suspension rate schools tended to involve teachers in disciplinary decisions and tended to perceive disciplinary policy as a “flexible guideline” rather than a “rigid document” (p. 441). In addition, low suspension rate schools were more likely than high rate schools to have a school wide disciplinary plan in place.

Summary. High variation in the rate of out-of-school suspension and expulsion run counter to the claim that zero tolerance increases the consistency of school discipline. Some of this variability may be explained by differing rates of student disruptive behavior in different schools. Yet variation in school discipline also appears to be attributed to differences in school characteristics. Across schools, the use of out-of-school

suspensions and expulsions are associated to some degree with the disciplinary perspective of the school administrator. At this point, the data are insufficient to determine whether a principal's perspective on zero tolerance policy is associated with rates of suspension at his or her school, or whether both are due to a third variable such as severity of student behavior. Still however, these data support Morrison et al.'s (2001) conclusion that discipline is a complex and multiply determined process, and provide no support for the assertion that zero tolerance has increased consistency in the application of school discipline.

3. To what extent does the use of school removal as a disciplinary tool have a positive impact, creating a school climate more conducive to teaching and learning?

A key assumption underlying the formulation of zero tolerance policies and procedures is that the removal of more disruptive or troublesome students will result in a school climate that is more conducive to teaching and learning (Ewing, 2000). It is important to note that there have been no direct tests of this hypothesis by studying the relationship between validated measures of school climate and school disciplinary practices and outcomes.

A number of studies have looked at indicators correlated with a more satisfactory learning climate, however. In those studies, rather than making a contribution to school safety, suspension appears to have a negative relationship with indicators of a positive school climate. Bickel and Qualls (1980) administered climate surveys to students and school personnel in schools with higher and lower rates of school suspension. Results indicated that principals in low suspension schools appeared to be more concerned with climate and human relations than principals at high suspension schools, and teachers and

students at those schools perceived that principals at low suspension schools were more visible. Davis and Jordan (1994), in a multivariate analysis of the impact of school contextual variables on the achievement of African American male students, reported that school suspension negatively predicted academic engagement among 10th grade Black males, even when controlling for poverty and other demographics. Finally, Wu et al. (1982) found less satisfactory school governance to be a significant predictor of the probability of a student being suspended at least once in their school career.

Descriptive studies and teacher surveys (Public Agenda, 2004; Scott & Barrett, 2004) have found that in some schools, relatively large amounts of time are spent on discipline-related matters. One study of an urban elementary school estimated that suspended students missed 462 hours of instructional time in one year alone (Scott & Barrett, 2004). Further, administrators in this study spent an estimated 160 hours on disciplinary office referrals and suspensions during this year. It is unclear whether such time preserves academic learning time for students not involved in those particular disciplinary incidents, or represents a net loss of academic learning time in those schools.

Since an important purpose of any school discipline policy is to create and maintain conditions for a school climate that is conducive to learning, one would expect a positive correlation between effective school discipline and academic achievement. Investigations of suspension/expulsion and academic achievement have, however, found a negative relationship between disciplinary exclusion and measures of achievement. In a state-level analysis, Skiba et al. (2003) found that a state's suspension ranking was negatively related to their National Assessment of Educational Progress (NAEP) achievement ranking in mathematics, writing, and reading. At the district level, Morrison

and D’Incau (1997) found that students recommended for expulsion on average had relatively low grades and below average percentile scores in reading, mathematics, and language. Finally, in a longitudinal investigation, Raffaele-Mendez (2003) found a negative relationship between a student’s total number of suspensions in 6th grade and his/her achievement in math and reading in 7th and 8th grade.

Without controls for socio-demographic variables, however, it is difficult to interpret these simple correlations. It is possible, for example, that socio-demographic disadvantage may create conditions resulting in both higher suspension or expulsion and low achievement. Few investigations have included such controls and the results have not been entirely consistent. In a multivariate analysis predicting achievement for African American males, Davis and Jordan (1994) found that a school’s emphasis on discipline and the number of suspensions a student received negatively predicted individual student achievement in mathematics, science, and history even when controlling for a number of other variables including socio-economic status. Raffaele-Mendez, Knoff and Ferron (2002), in an investigation of disciplinary outcomes in one school district, reported strong and negative correlations between the school suspension rate and school-wide achievement scores in reading, mathematics, and writing at both the elementary and secondary school level. Only the relationship between suspension and writing at the secondary level remained statistically significant, however, after controlling for economic and demographic influences. Finally, Rausch and Skiba (2005) constructed a multivariate analysis investigating the relationship of school discipline and academic achievement at the school level, controlling for a number of demographic variables including the school’s percentage of free and reduced lunch students (poverty),

enrollment of African American students, and school type (elementary or secondary). Results indicated that higher school rates of out-of-school suspension were associated with lower school passing rates on the state accountability test, regardless of the demographic, economic, or racial makeup of the school. Thus, the data indicate a negative relationship between the use of disciplinary exclusion and school achievement; schools that suspend and expel children at a lower rate show better overall achievement.

Summary. Together these results provide no support for the assumption that zero tolerance, by removing more disruptive students, creates a school climate more conducive to learning for the remaining students. There are no studies that have directly explored the correlation between validated scales of school climate and school disciplinary practices, but assessment of indicators linked with school climate (e.g., student-teacher ratio, teacher ratings of governance) suggest that schools with a higher rate of school exclusion tend to be perceived more negatively on those climate indicators. A high use of suspension and expulsion that may be part of a zero tolerance philosophy appears to be associated with a significant time commitment on the part of teachers and administrators in carrying out disciplinary measures; whether this time commitment preserves school order or takes time away from time devoted to academic pursuits has yet to be determined.

Contrary to predictions made by a zero tolerance model, however, emerging data suggest that reliance on out-of-school suspension and expulsion may be negatively associated with student academic outcomes. The correlational nature of this line of research makes it difficult to assess the extent to which the use of out-of-school suspension or expulsion may pose an actual threat to academic learning time. Yet it

would be difficult to argue that zero tolerance yields instructional climates more conducive to learning when schools that use exclusionary discipline to a greater extent demonstrate less satisfactory academic outcomes, even when controlling for demographic indicators.

4. To what extent do data suggest the application of out-of-school suspension and expulsion result in improved student behavior for students who were so disciplined?

Short-term impact on student behavior. A key element in evaluating the efficacy of school exclusion is whether it effectively changes behavior. Behavioral psychology defines an effective punishment as one that reduces the future probability of responding (Skinner, 1953). Yet descriptive studies of out-of-school suspension have consistently shown a high rate of repeat offending. Costenbader and Markson (1998) reported that over 42% of all suspensions are represented by students who have been suspended more than once. The Massachusetts Advocacy Center (1986) found that 41% of suspensions are represented by repeat offenders, while Bowditch (1993) reported that 35.2% of all suspensions were due to repeat offenders.

Indeed, longitudinal investigations of school discipline have found that out-of-school suspension appears to be associated, not with a reduction in future misbehavior, but with an increased rate of individual transgressions over time for those students who have been suspended. Out-of-school suspension in late elementary school has been found to be among the strongest predictors of out-of-school suspension in middle school (Raffaele-Mendez, 2003). In a study of school discipline records for middle school students, Tobin, Sugai, and Colvin (1996) studied predictors of school suspension. The investigators expected to find that those students who were suspended early in middle

school would be deterred from future misbehavior. In fact, the results of a multivariate statistical analysis showed the opposite: students who were suspended in the first term of Grade 6 were *more likely* to have discipline problems over the next four terms. These results, plus an analysis of individual patterns of disciplinary referral, led the authors to conclude that for some students “suspension functions as a reinforcer (variable interval schedule) rather than as a punisher” (p. 91).

Association with long-term outcomes: School dropout. It is of course possible that the strict limits set by zero tolerance suspensions and expulsions could yield short-term increases in student misbehavior, yet still have a positive effect on student outlook and behavior in the long term. What is the relationship between disciplinary exclusion and longer term outcomes?

In the 1980s, national concern over children termed “at-risk” led to extensive investigation of the causes and correlates of school dropout. Consistently, school suspension was found to be a moderate to strong predictor of dropping out. Data from the High School and Beyond study, a national longitudinal sample surveying 30,000 high school students, revealed that 31% of sophomores who dropped out of school had been suspended, as compared to a suspension rate of 10% for their peers who had stayed in school (Ekstrom, Goertz, Pollack, & Rock, 1986). In a re-analysis of the same data base reported by Wehlage and Rutter (1986), discipline emerged as part of a constellation of factors, along with poor academics and low SES, predicting school dropout. In fact, prior engagement with school discipline was among the strongest predictors of school dropout.

Unfortunately, there is evidence showing that the relationship between school suspension and school dropout may not be entirely accidental. Ethnographic field studies

of school discipline involving interviews with administrators and observations of the school discipline process have noted that disciplinarians in troubled urban schools often view their role in large measure as dealing with persistent “troublemakers” who challenge the institution’s authority (Bowditch, 1993). Over time, as such students develop a reputation, disciplinary contacts afford administrators the opportunity to rid the school of its most troublesome students:

In this high school, the practice of cleansing the school of ‘bad kids’ was quite widely acknowledged and equally appreciated by administrators, teachers, and counselors. Criticisms of the practice were voiced rarely, quietly, and confidentially behind closed doors. (Fine, 1986, p. 403)

In such a context, suspension may be used as a “push out” tool to encourage low-achieving students and those viewed as “troublemakers” to leave school before graduation.

Summary. Zero tolerance philosophy and practice relies to some extent on an assumption that disciplinary removal can lead to improved student behavior, either by experiencing that removal, or through the deterrent effect of observing others being removed for disciplinary infractions. There is little or no evidence of positive effects of school removal on student behavior in either the short- or long-term, however. In the short term, high rates of disciplinary recidivism do not support the case that school removal has a deterrent effect on students who have been so disciplined; if anything, the experience of out-of-school suspension appears to be predictive of future higher rates of future disciplinary infraction. In the long term, disciplinary removal appears to be moderately associated with school dropout, and in fact in some cases may be used

explicitly as a tool for “push-out.” In short, there is no evidence that zero tolerance yields improved short- or long-term outcomes for students more likely to engage in disruptive behavior. In the short term, suspension and expulsion appear to be associated with an *increase* in the future probability of disruptive behavior or disciplinary action. In the long term, the experience of disciplinary exclusion is associated with an increased probability of school dropout or failure to graduate on time.

5. Do parents and students support zero tolerance as a method of guaranteeing school safety?

It is probably not an exaggeration to suggest that get-tough disciplinary approaches are sometimes driven by community demands that schools guarantee the safety of students and teachers. In a survey conducted by the Public Agenda (2004), 73% of parents agree that the experience of most students suffers from a few troublemakers, while 68% endorsed zero tolerance policies “so that students know they will automatically be kicked out of school for serious violations” (p. 60). In North Hollywood, California, 500 parents packed the auditorium of Grant High School to demand reassurance from the school board concerning the safety of their children in the wake of a lunchroom brawl between Latino and Armenian students (Blankstein, 1999).

Yet parental concerns for safe schools do not necessarily translate into inevitable and invariant community support for zero tolerance policy. In Hartford, Wisconsin, 550 parents and community members crowded a meeting of their school board to voice their opposition to zero tolerance policies mandating expulsion for drug and alcohol offenses (Davis, 1999). Concerns about fairness or loss of educational opportunity appear to become especially acute when community concern arises about the disproportionate

suspension and expulsion of students of color (see below). In Decatur, Illinois over a thousand protesters led by the Rev. Jesse Jackson marched on Decatur High School after seven students, all of them Black, were expelled by the school district for two years after a brawl in the stands during a football game (Johnson, 1999). These incidents strongly suggest that although parents strongly support safe schools, they are also concerned that school policies do not unfairly threaten the educational opportunity of children.

Likewise, student reactions to zero tolerance are not consistently positive. Rather, qualitative studies of school suspension report that although some students feel that suspension or expulsion has given them an opportunity to consider the consequences of their behavior, it is also quite common for students to believe that school punishments are for the most part ineffective:

All of the punishments that we've had, none of the kids respond to, I mean, not one of them do. And if they really wanted to stop, they'd stop on their own. This wouldn't make them stop. (Thorson, 1996, p. 5)

Such reactions appear to be especially pronounced among disadvantaged or culturally and linguistically diverse students. In a qualitative study of student reactions to school discipline, Brantlinger (1991) interviewed adolescent students from both high- and low-income residential areas concerning their reactions to school climate and school discipline. Both low- and high-income adolescents agreed that low-income students were more likely to be unfairly targeted by school disciplinary sanctions. Students also perceived differences in the nature of punishment meted out to students of different social classes. High-income students more often reported receiving mild and moderate consequences (e.g., teacher reprimand, seat reassignment) while low-income students

reported receiving more severe and demeaning consequences (e.g., yelled at in front of class, made to stand in hall all day, search of personal belongings). Sheets (1996) interviewed students and teachers in an urban high school concerning their perceptions of school discipline. Both White and ethnically diverse students perceived sources of racism in the application of discipline. But while White students perceived disciplinary disparities as unintentional or unconscious, students of color saw them as conscious and deliberate. In particular, African American students felt that contextual variables, such as a lack of respect, differences in communication styles, disinterest on the part of teachers, and “being purposefully pushed to the edge where they were expected and encouraged to be hostile” (p. 175) were the primary causes of many disciplinary conflicts. Students of color, when asked to describe the rules of the school, insisted that there were in effect no rules, arguing that teachers often apply classroom rules and guidelines arbitrarily to exercise control or to remove students whom they dislike.

Summary. In summary, it is something of an oversimplification to argue that parents and teachers support zero tolerance as a means for guaranteeing the safety of students in schools. Some reports (e.g., Public Agenda, 2004) indicate that parents clearly support measures to reduce violence and disruption in school, and communities may react strongly if they feel that the safety of their children is threatened. Yet other accounts suggest that parents in schools with high rates of suspensions and expulsions may react negatively to school removals that threaten to decrease the opportunity of children in that school to learn. Those reactions may become especially intense when paired with the perception, on the part of the local community, of possible discrimination in the application of school suspension or expulsion. Nor does there appear to be a

blanket endorsement of zero tolerance among students. Although some students removed from school view their punishment as a learning experience, other students, especially students of color, perceive that school discipline is often ineffective and unfairly administered. In short, more data on both student and parent reactions to zero tolerance policies are needed; at present, there are insufficient data to gauge the extent of parent support for zero tolerance, and what data there are on student reactions suggests that students may be as likely to oppose as to support zero tolerance policies in their school.

Impact of Zero Tolerance on Specific Populations

What has been the impact of zero tolerance on students of color, males, and students with disabilities?

On the face of it, a zero tolerance approach to school discipline might well be expected to result in more equitable disciplinary treatment. Since a single invariant punishment is prescribed for all students without attention to contextual factors, there should be little room for differential treatment of students from any particular group (Casella, 2003).

In reality, however, the over-representation of minority students, males in particular, and students with disabilities in school suspension and expulsion has been and continues to be an issue in school discipline. In the fall of 1999, the Decatur (Ill.) School Board recommended the expulsion of seven students, all of them Black, after a brawl in the stands after a football game. The decision sparked local protests and national attention (Howlett, 2000).

The right not to be discriminated against on the basis of race, color, or national origin is guaranteed by the Equal Protection Clause of the Fourteenth Amendment and

Title VI of the Civil Rights Act of 1964 (Browne, Losen, & Wald, 2002). Yet almost 30 years of research has documented disparities in school discipline due to race and, to a lesser extent disability. Such concerns are magnified if, as suggested above, the intervention to which some students are differentially exposed is itself associated with negative educational outcomes.

Disproportionality Due to Minority Status.

In one of the earliest national studies of school suspension, the Children's Defense Fund (1975) studied U.S. Department of Education Office for Civil Rights (OCR) data on school discipline, and found rates of school suspension for Black students that were between two and three times higher than suspension rates for White students at the elementary, middle, and high school levels. The overrepresentation of African American students in school punishments has been consistently documented since then (Costenbader & Markson, 1994; Costenbader & Markson, 1998; Glackman et al., 1978; Gregory, 1997; Kaeser, 1979; Lietz & Gregory, 1978; Massachusetts Advocacy Center, 1986; McCarthy & Hoge, 1987; McFadden, Marsh, Price, & Hwang, 1992; Raffaele-Mendez & Knoff, 2003; Raffaele-Mendez et al., 2002; Rausch & Skiba, 2004; Richart et al., 2003; Skiba, Michael, Nardo, & Peterson, 2002; Streitmatter, 1986; Taylor & Foster, 1986; Thornton & Trent, 1988; U.S. Department of Education, 2000; Wu et al., 1982). Data from the most recently available discipline survey by the U. S. Department of Education Office for Civil Rights (2004) disaggregated by race, are presented in Figure 2. At the national level, they show that African American students are between 2.5 and 3 times more likely than other students to be suspended, expelled, or subjected to corporal punishment; there is also some evidence of disproportionality for Native American and

Latino students. Some analyses of district or statewide disciplinary data (Raffaele-Mendez & Knoff, 2003; Rausch & Skiba, 2004) have found rates of out-of school suspensions for African American elementary school students that are as much as seven times greater than White students. Disciplinary overrepresentation of Latino students has also been reported in some studies (Raffaele-Mendez & Knoff, 2003; Rausch & Skiba, 2004), but the finding is not universal across locations or studies (see e.g., Gordon, Della Piana, & Keleher, 2000).

Data since 1995 indicate that the application of zero tolerance policies does not appear to have reduced, and indeed may have exacerbated, this disciplinary disproportionality. In fact, some writers have suggested that zero tolerance policing and drug enforcement are inherently unfair, disproportionately targeting African Americans and individuals of low socio-economic status (Crowther, 1997; Hall, 1997; Lusane & Desmond, 1991). Both state (Michigan Public Policy Initiative, 2003; Tailer & Detch, 1998) and national (Advancement Project/Civil Rights Project, 2000; Gordon, et al., 2000) reports have presented data showing minority disproportionality in zero tolerance suspensions and expulsions. As a result of such allegations, the U.S. Civil Rights Commission held hearings in February, 2000 on the extent to which zero tolerance discipline policies were inherently discriminatory, and concluded that the evidence was sufficient to warrant further study (Koch, 2000).

Is disciplinary disproportionality a function of poverty? The high overlap of race and socioeconomic status in American society (Duncan, Brooks-Gunn, & Klebanov, 1994; McLoyd, 1998) creates the possibility that any finding of disproportionality due to race is primarily a by-product of disproportionality associated with SES. Research has

consistently found that students who receive free school lunch are at greater risk of school suspension than those who do not (Brantlinger, 1991; Skiba et al., 1997; Wu et al., 1982). Yet it is clear that race makes a contribution to disciplinary outcome independent of socioeconomic status (SES). Regression studies have consistently found that significant racial disparities in school suspension and expulsion remain even after statistically controlling for poverty (Skiba et al., 2002; Wu et al., 1982); indeed, Skiba et al. (2002) reported that SES proved to be a far less significant and consistent predictor of school suspension and expulsion than race when both SES and race were entered as simultaneous predictors.

Are differential rates of school exclusion based on differential behavior?

Investigations of student behavior, race, and discipline have yielded no evidence that African American over-representation in school suspension is due to higher rates of misbehavior. Indeed, the literature investigating racial differences in school behavior and school punishment suggests that, where differences exist, African American students are suspended and punished for behavior that is less serious than other students. Studies based on both self-report and review of school records have reported that Black students tend to receive more severe punishments and receive those harsher punishments for less serious transgressions (McCarthy & Hoge, 1987; McFadden et al., 1992; Shaw & Braden, 1990; Skiba & Rausch, 2006).

Skiba et al. (2002) described racial disparities in school punishments in an urban setting, and tested alternate hypotheses for that disproportionality. Discriminant function analyses by race revealed differences on only 8 of the 32 possible reasons for referral to the office; yet the group receiving the higher rate of school punishment did not show a

pattern of more disruptive behavior. White students were referred to the office significantly more than Black students for offenses that can be more easily documented objectively: *smoking, vandalism, leaving without permission, and obscene language*. In contrast, African American students were referred for discipline more than White students for *disrespect, excessive noise, threat, and loitering*, behaviors that would seem to require more subjective judgment on the part of the referring agent. In summary, there is no evidence that racial disparities in school discipline can be accounted for by higher rates of African American disruption. Rather, where racial disparities exist, African American students may be subjected to office referrals or disciplinary consequences for less serious or more subjective reasons.

Classroom contributions to disparities in discipline. Some evidence suggests that the disproportionate representation of African American students originates at the classroom level. Skiba et al. (2002) found no difference between African American and White students in measures reflecting disciplinary treatment at the office level (e.g., number of days suspended, probability of being suspended given an office referral). Rather, multivariate analyses showed that racial disparities in out-of-school suspension rates could be almost entirely accounted for by rates of teacher referrals to the office that were twice as high for African American than White students.

Qualitative studies have identified possible mechanisms for this classroom contribution to racial disparities. Vavrus and Cole (2002), analyzing videotaped student-teacher behavioral sequences, found that office referrals leading to school suspension were less due to flagrant violation of disciplinary codes than to students' "violation of

implicit interactional codes” (e.g., a student calling into question established classroom practices or the teachers’ authority). The authors conclude that:

...suspensions are the result of a complex sequence of events that together form a disciplinary moment, a moment when one disruptive act among many is singled out for action by the teacher. This singling-out process, we contend, disproportionately affects students whose race and gender distance them from their teachers, and this subtle, often unconscious process may be one of the reasons why students of color often experience suspension in the absence of violent behavior. (p. 109)

These results are consistent with suggestions that cultural discontinuities create patterns of interaction that increase the likelihood that African-American students, especially African-American male adolescents, will be removed from class. Townsend (2000) suggested that many teachers, unfamiliar or uncomfortable with the more active interactional style that characterizes many African American males, may misinterpret the impassioned and emotive manner popular among young African Americans as combative or argumentative. Fear may also play a role in over-referral. Teachers who are influenced by stereotypes of adolescent African-American males as threatening or dangerous may react more quickly to relatively minor threats to authority that might be ignored for other ethnic or racial groups, especially if such fear is paired with a misunderstanding of cultural norms of social interaction (Ferguson, 2001). An important direction for future school discipline research will be to identify the extent to which teacher skills in behavior management or cultural competence predict the extent of racial disparities in office referrals or school exclusion.

Cultural stereotypes. At least some of the racial disparity in the use of zero tolerance policies might be linked to cultural stereotypes in this society that associate race with negative characteristics. Even though privately held beliefs about African

Americans have become more positive over the last 50 years (e.g., Schuman, Steeh, Bobo, & Krysan, 1997), studies of cultural stereotypes, or shared beliefs, continue to show that respondents associate being Black (and male) with hostility, aggressiveness, violence, and danger (e.g., Correll, Park, Judd, & Wittenbrink, 2002; Devine & Elliott, 1995; Krueger, 1996).

Racial stereotypes can influence decision making in subtle or unknown ways. Controlling for crime severity and offending history, Bridges and Steen (1998) documented that probation officers were more likely to perceive the crimes of African American male youths as due to internal and controllable causes such as negative personality traits (e.g., being unremorseful) and the same crimes of White youth as more due to more to external and uncontrollable causes (e.g., exposure to deviant peers or a dysfunctional family). Internal causes, in turn, predicted greater perception that the youth would re-offend and harsher punishment recommendations. Bridges and Steen (1998) suggested that particular attributions about crime might reflect the stereotypes that decision makers hold about African American youthful offenders.

There is a growing and persuasive literature in social psychology documenting that stereotypes can be activated and used outside of conscious awareness (e.g., Greenwald & Banaji, 1995; see review in Fiske, 1998). That is, perceivers may often invoke racial stereotypes unintentionally and automatically in the presence of an environmental cue (Bargh & Chartrand; 1999). The view of stereotypes as largely unconscious is consistent with social cognition research on the cognitive heuristics or short cuts that perceivers employ to manage the vast amount of social information with which they must deal (Fiske & Taylor, 1991). By filtering information, and at times

categorizing people according to cultural stereotypes, perceivers can manage information overload and make social decisions more efficiently.

In experimental research on decision-making in the juvenile justice system, there is evidence that racial stereotypes can be activated outside of conscious awareness and that these stereotypes, once activated, are linked to harsher punishment of hypothetical adolescent offenders (Graham & Lowery, 2004). It is important to point out that unconscious stereotype activation does not require perceivers to endorse the stereotype, to dislike African Americans, or to hold any explicit prejudice toward that group. Even good decision makers with good intentions, like most teachers and school administrators, are susceptible. New opportunities for thinking about individual level intervention are provided by situating the root causes of racial disparity within basic social cognitive process, institutional racism and overt prejudice. Because stereotypes are amenable to change (e.g., Blair, 2002), decision makers in schools can be educated to be more aware of the nature and function of implicit biases.

Disproportionate Discipline of Students by Gender

There is consistent evidence that males are overrepresented in school disciplinary indicators compared to females. A number of studies have found that males are over four times as likely as females to be referred to the office, suspended, expelled, or subjected to corporal punishment (Bain & MacPherson, 1990; Cooley, 1995; Gregory, 1996; Imich, 1994; Raffaele Mendez & Knoff, 2003; Skiba et al., 2002). Male students have been found to be referred to the office and suspended more often than female students for a host of infractions ranging from minor offenses (e.g. general disruption and disrespect) to serious infractions (e.g. sexual harassment, narcotics possession, battery) (Raffaele

Mendez & Knoff, 2003; Skiba et al., 2002). No reliable data exists to date on the degree to which disproportionality by gender has changed over time.

There are a number of possible hypotheses for disproportionality in discipline by gender. The overrepresentation of males in school discipline may reflect well-established higher rates of externalizing behavior problems for male students (American Psychiatric Association, 1994; Boulton and Underwood, 1992; Mears, Ploeger and Warr, 1998; Parke and Slaby, 1983), perhaps leading to higher incidents of school removal. Part of the underrepresentation of female students may be due to schools not using suspension or expulsion for acts of aggression that have been characterized as non-physical (e.g., relational, indirect, or social; DeFour, 2005). At present, there are insufficient data to select from among these hypotheses.

A race by gender interaction in the probability of being disciplined has also been found consistently in investigations of school disciplinary outcomes: Black males have been consistently found to be the most likely student group to be referred to the office, suspended, expelled, and receive corporal punishment across school levels (elementary and secondary schools) and geographic locales (Gregory, 1996; Raffaele Mendez & Knoff, 2003; Skiba et al., 2002; Taylor & Foster, 1986).

Disproportionate Discipline of Students with Disabilities

Disciplinary disproportionality has also been documented for students with disabilities, even with explicit protections written into federal law to protect those students' guarantee of a free and appropriate public education."² Most but not all available studies find that students with a disability represent a larger proportion of the suspended/expelled population than expected based on their proportion in the school

population, and are overrepresented when compared to students not receiving special education services (Leone, Mayer, Malgren, and Meisel, 2000). Students with disabilities typically represent between 11-14% of the total school, district, or state population, but represent between 20-24% of the suspended and expelled population (Cooley, 1995; Kansas Department of Education, 2004; Maryland Department of Education, 2000; Morrison & D’Incau, 1997; Wagner et al., 2005).⁴

Students identified with emotional disturbance (ED) appear to be at high risk for office referral, suspension or expulsion. Drawing from a nationally representative database, Wagner et al. (2005) found that 47.7 percent of elementary/middle school, and 72.9 percent of high school students with ED reported being suspended or expelled, percentages significantly higher than students with other disabilities (11.7% at the elementary/middle school level, and 27.6% at the secondary school level). One state-level analysis reported that students identified with ED were 7.5 times as likely to receive a suspension or expulsion compared to their non-ED disabled peers, and 12 times as likely compared to all other students with and without disabilities (Cooley, 1995).

It is unclear whether disciplinary disparities for students with disabilities are due to disproportionately higher rates of serious misbehavior. Some studies have reported findings suggesting that students with disabilities engage in more serious misbehavior such as fighting (Fiore & Reynolds, 1996; U.S. General Accounting Office, 2001), although other studies have found no substantive differences between rates of misbehavior on the part of students with disabilities as compared to their non-disabled peers (Cooley, 1995; McFadden, Marsh, Prince, & Hwang, 1992). Leone et al., (2000) have hypothesized that the behaviors of students with disabilities may not be

substantively different than their peers, but rather that “students with disabilities are represented disproportionately... in part, because their non-disabled peers are more adept at eluding detection” (p. 10).

Summary

The data do not appear to support the contention of those who argue that zero tolerance reduces disciplinary disparities by providing a single unchanging metric for all infractions. Rather, students of color, particularly African American students, continue to be at increased risk for school removal through suspension and expulsion. These disparities cannot be explained simply by socioeconomic status or the behavior of students themselves. Although further research is clearly needed to identify the factors that create racial disparities, the evidence appears to be most consistent with a hypothesis that such disparities are in part a product of cultural discontinuity, insufficient training in culturally responsive classroom management practices, or implicit or unexamined biases. Disciplinary disproportionality has also been documented for students with disabilities, even with explicit protections written into federal law to protect those students’ guarantee of a free and appropriate public education. The data in the field of special education are not yet sufficient to determine why disproportionality exists for students with disabilities. Similarly, disproportionality by gender has been found, but it is currently unclear to what degree patterns of removal are due to systemic issues versus higher rates or more serious disruption among male students.

Rather than showing increased fairness under zero tolerance policies, these data make a case that the use, and especially the overuse, of disciplinary removal carries with it an inherent risk of disparity for students of color and possibly for students with

disabilities. Such findings are especially troubling given the generally negative outcomes associated with the use of out-of-school suspension and expulsion, and indicate that zero tolerance may place students of color and students with disabilities at increased risk for a variety of harmful educational outcomes.

Developmental Considerations

To what extent are zero tolerance policies developmentally appropriate as a psychological intervention?

In this section, we consider evidence relating to the developmental capacities of youth with respect to the use of punishment in school. Because zero tolerance policies are more likely to be implemented in secondary schools, we focus on research about adolescent development. Many zero tolerance policies appear to be based on theories about the goals of punishment for adults (Schwartz & Rieser, 2001) rather than the developmental needs of children and adolescents. Yet the risks for the current or future opportunities of youth must be evaluated in light of what is known about normative development during the second decade of life. Indeed, the United States Supreme Court has acknowledged the important role of research on adolescent development in its recent decision to abolish the juvenile death penalty (*Roper v Simmons*, 2005).

Relevant research in three areas of adolescent development is considered: a) studies of the psychosocial capacities of adolescents and their implications for treating age as a mitigating factor in judgments about criminal culpability, b) recent findings from developmental neuroscience on adolescent brain functioning, and c) studies of the potential mismatch between early adolescence as a developmental stage and the structure of secondary schools. These three topics together capture some of the most important

cognitive, social, biological, and contextual influences on development during the second decade of life.

Psychosocial Immaturity during Adolescence

There are many parallels between school system disciplinary practices based on zero tolerance and the legal response to youthful offenders in the juvenile justice system. In both systems, an offense is allegedly committed, blameworthiness is determined, and punishment is allocated. In recent years, research from a variety of disciplines has highlighted the implications of understanding adolescent development for policies about the treatment of youthful offenders in the juvenile justice system (see, for example, Grisso & Schwartz, 2001; Steinberg & Scott, 2003). One important outcome of these efforts has been to document that adolescent offenders, by virtue of their age and developmental immaturity in a number of psychosocial domains, should be judged as less blameworthy and punished less severely than adult offenders who commit similar crimes. In a similar manner, studies of adolescent development and the role of age as a mitigating factor should guide decisions about blameworthiness and the appropriateness of harsh punishment in handling school infractions.

Adolescents before the age of 15 display psychosocial immaturity in at least four areas relevant to social contexts such as schools: resistance to peer influence, attitudes toward and perception of risk, future orientation, and impulse control. First, since peer group and peer approval in general take on heightened significance during early adolescence, young teens are particularly susceptible to peer influence, with that influence peaking at about age 14 or 15 (Steinberg & Scott, 2003). It has been documented, for example, that adolescents in this age group are more likely than adults to

engage in risky behavior in the presence of peers (Gardner & Steinberg, 2005) and that most juvenile crime is committed in groups rather than alone (Zimring, 1998). Second, adolescents are less risk averse than adults (Arnett, 1992). They tend to weigh anticipated gains more than losses when making decisions (e.g., Hooper, Luciana, Conklin, & Yarger, 2004). Third, young adolescents tend to be much less future-oriented than older adolescents and adults. They tend to discount the future when making choices (Greene, 1986) and to focus more on short-term rather than on the long-term risks and benefits of their decisions (Grisso et al., 2003). Finally, developmental studies on behavioral control indicate that younger adolescents are less able to evaluate situations before acting, which is in part due to greater difficulty they have in regulating their moods (see Cauffman & Steinberg, 2000; Luna, Garver, Urban, Lazar, & Sweeney, 2004).

Resistance to peer influence, risk perception, future orientation, and poor impulse control are interrelated capacities which together contribute to psychosocial (im)maturity among adolescents. Developmental immaturity in one or more of these capacities can lead to poor decision making and to school infractions that result in mandatory harsh punishment under zero tolerance policies. There is no doubt that many incidents that result in disciplinary infractions at the secondary level are due to poor judgment on the part of the adolescent involved. But if that judgment is the result of developmental or neurological immaturity, and if the resulting behavior does not pose a threat to safety, it makes sense to weigh the importance of a particular consequence against the long-term negative consequences of zero tolerance policies, especially when such lapses in judgment appear to be developmentally normative.

Adolescent Brain Development

The case for psychosocial immaturity during adolescence is further bolstered by a growing body of research from developmental neuroscience indicating that the brain structures of adolescents are less well-developed than previously thought (e.g., Giedd, et al., 1999; Nelson, 2003; Sowell, Trauner, Gamst, & Jernigan, 2002). Studies using magnetic resonance imaging (MRI) to scan an individual's brain at repeated intervals across childhood and adolescence reveal a great deal of growth during puberty in the prefrontal cortex (PFC). The PFC controls the brain's most advanced (executive) functions including planning, reasoning, and impulse control. Just prior to the onset of puberty there is a significant spurt in the production of gray matter (brain tissue that does the "thinking") in the PFC. Thereafter, two processes occur that together lead to more efficient executive control: *pruning*, during which the brain discards gray matter at a rapid rate, and *myelination*, during which white matter develops to insulate the brain's circuitry. Studies that compare MRI scans of adolescents and young adults reveal that pruning and myelination continue until young adults in their twenties (Sowell et al., 2002).

Studies using functional MRI (fMRI) allow researchers to see how the brain actually functions – that is, which parts of the brain are activated when performing specific tasks. Developmental neuroscientists believe that if a particular structure of the brain is still immature, then the functions that it governs will also show immaturity (e.g., Baird & Fugelsang, 2004; Luna & Sweeney, 2004). For example, adolescents may take more risks than adults and fail to reason adequately about the consequences of their actions at least partly because their frontal lobes are still developing. Research on brain

development during adolescence highlights the instability of behavior that has a biological base and the relevance of that instability for judgments of blameworthiness. As developmental neuroscientist Jay Giedd stated: "...it's sort of unfair to expect adolescents to have adult levels of organizational skills or decision making before their brain is finished being built" (PBS *Frontline*, 2002).

Development Stage-School Structure Mismatch

The third body of findings relevant to the developmental appropriateness of zero tolerance policies during adolescence comes from research that has explored the possible mismatch between the developmental level of youth and the demands of schooling, particularly during school transitions. Adolescents make two major school transitions during their pre-teen and teenage years - from elementary to middle school and from middle school to high school – where they go from being the oldest to the youngest in their academic environment. At each transition, schools become larger, more bureaucratic, impersonal, competitive, and discipline-oriented, as well as more focused on social comparison and public displays of ability. A number of researchers have reported that these characteristics of secondary schools often are at odds with the developmental challenges of adolescence, which include the need for close peer relationships, autonomy, support from adults other than one's parents, identity negotiation, and academic self-efficacy (see reviews in Eccles, 2004; Eccles & Midgley, 1989). A common theme in this research is that stage-environment mismatch during secondary school transitions can undermine students' self-confidence, feelings of belonging, and motivation to do well in school.

When used inappropriately, zero tolerance policies can exacerbate both the normative challenges of early adolescence and the potential mismatch between the adolescent's developmental stage and the structure of secondary schools. If teachers and administrators are perceived as harsh disciplinarians who automatically mete out severe punishments for targeted offenses, then students are less likely to develop supportive and trusting relationships with adults in their school and to feel connected to their school. Survey data indicate that adolescents in 7th to 12th grade rate their teachers as less caring and report lower feelings of school belonging when suspensions are widely used, especially for relatively minor rule infractions (McNeely, Nonnemaker, & Blum, 2002). Moreover, if ethnic minority students (particularly African American males as the findings suggest) are disproportionately the targets of harsh discipline, this increases minority students' perception of the school climate as unfair and teachers as untrustworthy, both of which are known risk factors for alienation and academic disengagement (e.g., Ruck & Wortley, 2002). Racial and gender disparities in school discipline can also convey negative messages about gender and racial identity at a time of heightened concern among adolescents about their personal and social identities.

Summary: Developmental Considerations

This section has presented evidence on some of the psychosocial, biological, and contextual influences on adolescent development that are relevant to zero tolerance policies and the degree to which their use is sensitive to the developmental level of the student. Research on psychosocial immaturity as it affects decision making and findings from developmental neuroscience on adolescents' brain maturation suggest that age should be a mitigating factor in judgments of blameworthiness. Further, youth should not

be punished for school infractions in ways that permanently foreclose future opportunities. Research on developmental mismatch between adolescents and their schools suggests zero tolerance policies can undermine the development of close bonds with adults, feelings of belonging to one's school, and perceptions of system fairness. We are not arguing that developmental evidence should always override the moral, legal, and practical issues associated with school discipline. However, there should be more attention to what is known about child and adolescent development in the public discourse about zero tolerance policies and ways to make them fairer and more effective.

Education and the Juvenile Justice System

How has zero tolerance affected the relationship between the educational and juvenile justice systems?

The relationship between schools and law enforcement agencies has always been a delicate one. School districts often feel a sense of autonomy and a desire to manage all aspects of school life. Increasingly, as crimes such as homicide, drug sales, and assault have occurred on school premises, more law enforcement involvement has been required. In this section we consider how systems of discipline stressing more severe consequences have impacted the relationship between the educational and juvenile justice systems. We begin by considering specific programs or interventions: security technology and personnel, and profiling. Although such interventions are not, strictly speaking, part of zero tolerance policies, they represent an approach that often co-occurs with and perhaps shares the same assumptions as zero tolerance (see e.g., Burke & Herbert, 1996; Noguera, 1995). This section concludes with a more general discussion of an emerging body of

literature exploring the extent to which certain school-based practices may increase the risk for juvenile incarceration, the so-called *school-to-prison pipeline*.

Security Technology

One of the manifestations of zero tolerance policies intended to make students feel safer has been schools' increased reliance on security technology. Despite a fairly high profile in the news media in the wake of school shootings, the implementation of security technology does not appear to be extensive. Four percent of schools have random metal detectors in use and one percent of schools have pass through metal detectors (Verdugo, 2002). Nor is there a body of research available on which to base judgments of efficacy of school security technology; Skiba and Peterson (2000) reported an attempt to complete a research review of school security measures, but found only a handful of empirical investigations dating back to 1988.

The available research is not promising, however, with respect to demonstrating the efficacy of security technology. Ginsberg and Loffredo (1993) reported no difference between high schools with or without metal detectors in terms of threats and physical fights. In contrast, students in schools that had programs such as the Resolving Conflict Creatively Program (DeJong, 1999) or The Peacemakers Program (Shapiro, 1999) demonstrated violence could be reduced and feelings of safety increased by creating a climate and culture of safety. The most comprehensive data on school security approaches used as a component of school violence prevention appear in the National Center on Education Statistics study of school violence (Heaviside, et al., 1998). The NCES survey asked principals to identify which of a number of possible components of a given security strategy (e.g., metal detectors, security guards, school uniforms) were

employed at their school. Of schools with no reported crime, only 5% of principals reported moderate or stringent security measures; in contrast, 39% of schools with serious violent crimes reported using moderate to stringent security.

More sophisticated analysis of national data-bases has yielded evidence of a similar relationship between reliance on physical security and increased risk of school violence. Mayer and Leone (1999) re-analyzed data from the 1995 School Crime Supplement to the National Crime Victimization Survey, comprised of 9,854 completed interviews of students aged 12 to 19 throughout the United States. Students were interviewed regarding their personal knowledge and experience with violence, their perceptions of school rules, and their fear of being victimized. Results of structural equation modeling suggested that the use of disciplinary approaches based on the understanding and enforcement of school rules was more associated with lower levels of school violence than was a reliance on school security measures. Schools that were perceived as having greater enforcement and awareness of school rules had fewer student reports of school violence. In contrast, increased school reliance on strategies such as security guards, metal detectors, and locker searches tended to be associated with greater student experience with violence, and greater student fear of violence.

From one perspective, correlations showing a relationship between levels of school violence and increased use of security measures are unsurprising, and possibly influenced by the safety of the surrounding community. That is, unsafe schools might well be expected to employ more extreme measures. Yet these data also fail to provide support for the hypothesis that security measures increase school safety: even after the implementation of school security measures, schools relying more heavily on those

measures continue to be less safe than those without such policies. These data are not sufficient to suggest that school security measures are in any way harmful or ineffective in promoting school safety or security. Indeed, an emphasis on assessing building security appears to be an important component in a comprehensive plan for addressing violence and disruption (Dwyer et al., 1998). Yet the data are also not sufficient to show that school security measures make a positive contribution to a safer school environment.

In an era of school reform characterized by an intense focus on the accountability of academic instruction, the almost total lack of empirical study on the effects of school security measures is surprising. As school security technology is considered for school adoption, it would be very valuable to know whether the substantial outlays that will be required for security technology will in any way guarantee a reduction in school disruption or violence.

Security Personnel

The School Resource Officer program began in the 1950s in Flint Michigan. The concept was to improve the relationship between police and youth in local schools. Full time sworn officers were placed in schools to serve as mentors, role models and teachers as well as law enforcement personnel (Sherling, 1998). In the last 40 years these programs have expanded dramatically. With the growth of zero tolerance in schools, the role of the School Resource Officer (SRO) or the School Security Officer (SSO) has frequently been viewed as part of a school's zero tolerance enforcement procedure. Training for School Security Officers is usually done at the State level, as an addition to conventional law officer training. With the presence of law enforcement personnel in schools to provide security and fulfill the other roles of the SRO, concerns about the

equity of enforcement have been raised. Johnson, Boyden, and Pittz (2001) reported that schools with high concentrations of students of color were more likely to use strict security measures than predominately White schools, while Verdugo (2002) reported that there is a significantly greater presence of law enforcement in school with higher minority populations and great numbers of students on free and reduced lunch programs.

Profiling

An initial reaction to the perceived increase in violence in schools has been the development of “profiles” of potentially violent students or lists of “warning signs” which might predict violence. Such lists of warning signs were published, for example, by the American Psychological Association in its “warning signs” pamphlet (APA, n.d.), by the U.S. Department of Education and Department of Justice in its “Early Warning Timely Response: A Guide to Safe Schools” publication, sent to every public school in the United States (Dwyer, Osher, & Warger, 1998) and by the National School Safety Center (NSSC, 1998). Many states released similar publications.

The profiling approach, however, was initially designed by the U. S. Secret Service to identify possible threats to national leaders. As a strategy for the identification of violent youth, however it has proved to be problematic (Sewell & Mendelsohn, 2000; Cornell, Sheras, Kaplan, McConville, Douglass, Elkon, McKnight, Branson & Cole, 2004). The process has a broad number of potentially dangerous behaviors and is likely to over-identify students as being potentially violent. Students are likely to be alienated or stigmatized for having some warning signs for a low probability behavior. In addition, it is unclear what to do once a child has been profiled. The U. S. Secret Service and the U.S. Department of Education, as well as the FBI, have convened panels to address the

issues of the most violent of students, school shooters. Each group independently concluded that valid profiles for such school shooters were impossible to construct (Vossekuil, Fein, Reddy, Borum, & Modzeleski, 2002; O'Toole, 2000). It is also clear that profiling can be controversial in that it over-represents minority populations in the category of those being identified as potentially dangerous (Bickford, 2001; Dunbar, 2004), even though there were no minority students among the most prominent school shootings in the late 1990s. Profiling students for characteristics (e.g. how they dress, with whom they associate, diagnostic labels, academic performance) rather than for observed behaviors is likely to produce many false positives and limit both creativity and diversity in school settings.

Is There a School-to-Prison Pipeline?

The metaphor of the academic pipeline has taken on new meaning in discussions about the interplay between schools that employ zero tolerance policies and the juvenile justice system. That interplay has been called the *school- to- prison pipeline* to capture a process by which schools that enforce zero tolerance contribute to the flow of youth into the justice system and to the criminalization of school misbehavior (e.g., Wald & Losen, 2003). Many schools and school districts employing a zero tolerance approach have lowered their threshold for referring misbehaving students to law enforcement and the justice system (see e.g. Casella, 2003). School infractions that a decade ago would have been handled locally by the principal are now more likely to lead to arrest or referral to the juvenile court. For example, compared to student arrests for violent crime on school grounds, arrests are five times more likely for vandalism, six times more likely for theft, and nine times more likely for fighting on campus (Dohrn, 2001).

Most states require schools to report students who commit various infractions to law enforcement agencies, but there is wide variation in the interpretation of those infractions. In some school districts, *aggravated assault* which requires referral is interpreted to include all fights between students, regardless of whether they satisfy the legal requirement of “serious bodily injury;” even bringing a pager to school can lead to court referral depending on the inclusiveness of local criteria. Although states and local school districts differ markedly in the types of infractions for which students can be taken into custody by law enforcement officials, it is evident that an increasing number of students are being arrested at school and referred to the juvenile justice system for relatively minor offenses (Casella, 2003).

As greater numbers of students are referred to the juvenile system for infractions committed at school, questions have been raised about whether or not these referred youths’ constitutional rights have been fully respected. First, arrested students are often taken from their school without their parents’ knowledge and in many cases detained and questioned without assurances that they understand their legal rights (Advancement Project, 2000). Second, standards of confidentiality may be compromised when there is greater sharing of records between law enforcement personnel and school personnel, for instance, when schools are routinely informed about their students’ non-school originating involvement with the juvenile justice system. In some districts, policy and local laws permit schools to suspend or expel students who have been charged or convicted of a crime, even when the alleged crime did not take place on school grounds or during school hours (Dohrn, 2001). Finally, in some states, juvenile records are not

automatically expunged at age 18 and the existence of a juvenile record can be a consideration in the sentencing of an adult (Advancement Project, 2003).

It might be expected that juvenile court judges would discourage school referrals to the juvenile justice system practices if for no other reason than concern about increase in case loads taxing the limited-resource system of the courts. Yet many judges tolerate and even encourage referrals because of their belief that referral is the only way to get “help” for troubled youngsters (Schwartz and Rieser, 2001). Furthermore, during the 1990s, when many states lowered the age allowing for waiver of adolescent offenders to the adult criminal court, juvenile courts experienced a reduction in their caseloads and thus were able to accommodate increased referrals from schools.

Some of the apparent parallels between the education and juvenile justice are compelling. There are data showing that incarcerated juveniles are likely to have been suspended or expelled from school and showing strong racial disparities in incarceration (Pettit & Western, 2004). Skiba et al (2003) presented correlational data showing that states with higher rates of out-of-school suspension also have higher rates of juvenile incarceration. Yet it is important to note that available research on relationships between school discipline and juvenile justice outcomes are at this point primarily descriptive. There is as yet no prospective longitudinal research that could conclusively demonstrate that increased use of suspension, expulsion, or reliance upon the juvenile justice system makes a contribution to increased rates of juvenile incarceration.

Summary: Education and Juvenile Justice

The movement toward increased severity of consequences in both education and juvenile justice has created a change in the relationship between those systems. The increased use of zero tolerance has also yielded an increase in other interventions, such as school security technology, school resource officers, and profiling, that are not directly connected to zero tolerance policies but may be seen in some cases as part of a larger zero tolerance program. Unfortunately there is as yet little data that such programs have a beneficial impact on school safety or security. In the case of school security measures and school resource officers, there are simply insufficient published data to be able to evaluate the effects or effectiveness of such measures on school safety. In the case of profiling, best evidence reports by the Secret Service, the FBI, and scholars indicate that accurate profiling of those at-risk for serious violence is not possible at this time, and attempts to do so may divert attention and resources from more effective strategies such as threat assessment.

It seems conceptually likely that school suspension and expulsion constitute the critical links between school zero tolerance policies and students' involvement in the juvenile justice system. Developmental models of conduct disorder and juvenile delinquency (e.g., Patterson, Capaldi, & Bank, 1991) suggest that as at-risk youth become alienated from school over time, they will increasingly seek out other anti-social peers, accelerating the course toward juvenile offending. A student who is suspended or expelled from school is thus placed at greater risk for delinquent behavior and subsequent incarceration when placed unsupervised on the streets of the community for days or weeks at a time.

Yet while conceptually appealing, the school-to-prison pipeline has not yet been conclusively documented. While retrospective and some correlational data suggest a relationship between suspension and expulsion and juvenile justice outcomes, it is important to note that available research on relationships between school expulsion and juvenile justice outcomes are at this point primarily descriptive. Longitudinal research that prospectively examines the long-term outcomes of school suspension and expulsion would be necessary to test hypothesized causal influences of disciplinary practices on juvenile justice outcomes.

The Effects of Zero Tolerance on Students, Families and Communities

What has been the impact—both negative and positive—of zero tolerance policies on students, families and communities?

To date, little evidence exists directly linking positive or negative effects of zero tolerance policies on students, families, and communities. There have been no studies devoted to exploring the causal relationship between exclusionary discipline and increased negative outcomes for student mental health or community safety. To the extent that zero tolerance policies are related to outcomes associated with negative student mental health, however, there is reason to hypothesize that such policies may be related to undesirable student, family and community outcomes. These hypothesized relationships will be discussed in the sections that follow.

Zero Tolerance and Student Mental Health

To the extent that zero tolerance policies are related to student shame, alienation, rejection, and breaking of healthy adult bonds, there are reasons to be concerned that such policies may create, enhance, or accelerate negative mental health outcomes for youth.

The potential effects of alienation, rejection, and isolation associated with punitive and exclusionary school discipline are well documented, and may distance youth from healthy peer communities, accelerate contact with delinquent peers, reduce the amount of adult supervision they receive, and enhance the likelihood of marginalization (Comer & Poussaint, 1992).

Approaches to student misbehavior or threats of violence which are instructive rather than punitive—ones which foster community, positive identification between students and teachers, and enhanced school bonding—are believed to be more effective at reducing violence while minimizing the negative effects of alienation and marginalization. In this sense, zero tolerance approaches may fail to address root problems of student violence including student isolation, disengagement from learning, family pressure, and home stress caused by dysfunctional families (Bickford, 2001; Schiraldi & Ziedenberg, 2001).

In addition, there is some evidence that general levels of anxiety may be increased among students in schools over that past decade concurrent with the emergence of zero tolerance policies. During the restandardization of the Behavior Assessment System for Children (Reynolds & Kamphaus, 1992), the authors included in the data collection all of the original anxiety scale items from the self-report as well as the teacher and parent rating scales. A comparison of the responses to these identical items across the approximately 15 year period between the 2 data collections (the BASC was standardized between 1988 and 1991 and the BASC-2 was standardized between 2001-2003) indicates a significant increase in the anxiety levels of children and adolescents regardless of whether one looks at self- or other-reports of symptoms (Reynolds & Kamphaus, 2004).

While not causally linked to zero tolerance school policies, this increase in student anxiety may be responsible for the perceived need to use zero tolerance to allow students to feel safer or it may be an outcome of zero tolerance policies themselves in interaction with other variables that have led to increased stress and anxiety in the lives of school children in the United States.

Effects of Zero Tolerance on Parents and Communities

The promise of safe and drug free schools is not controversial, but the extent to which the use of zero tolerance policies contribute to this promise at community and family levels is not clear. That is, there is general agreement that communities value safe schools, but little information if parents actually support the use of zero tolerance policies as the vehicle to ensure such safety or if the use of zero tolerance policies has a positive or negative effect on the social/emotional welfare of families or security of communities. No reports have been found indicating that the policies themselves have assisted parents in the difficult challenges of parenting or that family units have been strengthened through their use (Robertson, 2000).

The community economic consequences of increasing numbers of people coming into contact with the criminal justice system may be large. For example, in Texas the average incarceration costs for an inmate are nearly \$40,000, compared to a yearly education of \$7,000. Further, the increased probability of dropping out due to suspension or expulsions is correlated with many adverse and expensive life course outcomes such as uninsured medical expenses, participation in the welfare system, and increased prevalence of depression. Moreover, long-term factors such as lost income and civic participation may capture an increased community financial burden.

In contrast to the potentially negative effects of zero tolerance policies leading to increased contact with the juvenile justice system, there is a strong body of evidence that preventing or treating delinquency and school failure are more cost effective than doing nothing or paying welfare and prison costs incurred by undereducated and alienated youth (Bear, Webster-Stratton, Furlong, & Rhee, 2000; Karlin & Harnish, 1995; Kingery, 2000; Kingery, Biafora & Zimmerman, 1996; Kingery, Murphy, & Minogue, 1998; Osher, Quinn, Poirier & Rutherford, 2003). Osher, et al (2003) found that early, universal or selective preventative interventions can create seven to one financial returns when benefits to both taxpayers and potential crime victims are included (see also Barnett, 1995; Schweinhart, 2003).

One such efficacious preventative intervention is effective alternative educational systems. For example, in the state of Iowa, investing in alternative education yielded significant savings in welfare, unemployment, and incarceration (Morley, 1991). The American Federation of Teachers has estimated that “for the [\$1,750] additional dollars spent on each [disruptive] student attending an alternative school, the public annually gains \$14,000 in student learning time that would have been lost, \$2,800 in reduced grade repetition costs, \$1,750 in reduced welfare costs, and \$1,500 in reduced prison costs,” for a total savings of \$18,300 per student (“Tiny knife sets off big debate,” 1995).

Preventative and restorative services, such as effective alternative educational systems, must be a community effort, conducted among major community stakeholders such as parents, law enforcement, public and private social service agencies, and schools. Achieving the goal of safe school communities requires an array of school and community-based interventions including educational, psychological, and mental health

services, and crisis intervention (e.g., American Bar Association, 2001; Boylan & Weiser, 2002; NASP, 2001; Robertson, 2000).

Further research is needed to document the effects of zero tolerance school discipline policy and practice on outcomes for students, families, and communities. Research is necessary to document the cost-benefit ratio associated with prevention and early intervention approaches as compared directly to zero tolerance policies.

Summary. Although no research on the actual direct effects of zero tolerance policies on communities and families has been identified, analyses of related work on the financial impacts of failure to complete school and involvement with the juvenile justice and prison systems points to zero tolerance policies as creating significant financial burdens for families and communities. Young people who drop or are pushed out of school prior to graduation create tax burdens based on increased likelihood of incarceration and a host of other health and mental health vulnerabilities. Families headed by or with undereducated youth are unlikely to benefit from robust incomes, with accompanying declines in tax revenue for states and communities. Families who fight the application of zero tolerance policies to their children incur significant expenses in litigation and other lost income pressures.

On the other hand, if the application of zero tolerance policies actually enhanced the learning and life outcomes of young people who remain in schools, their use might be financially rational. Sophisticated economic analyses are needed to fully understand the effects of zero tolerance policies beyond the affected individuals and their families. Without such analyses, the specters of lost individual financial opportunity and increased societal financial burden call the actual efficacy of zero tolerance policies into question.

Alternatives to Zero Tolerance Policies

Are there other disciplinary alternatives that could make a stronger contribution toward maintaining school safety or the integrity of the learning environment, while keeping a greater number of students in school?

Are There Effective Alternatives to Disciplinary Removal?

It would make little sense to conclude that zero tolerance is ineffective and needs to be modified or discontinued if in fact zero tolerance was the only option for maintaining safe school climates conducive to learning. Indeed, in the absence of knowledge of other effective strategies, the abrupt removal of the tool many administrators believe is their only or best option could simply increase school disruption and chaos. There is, however, an extensive research literature on the prevention of school violence that has empirically evaluated a range of options for maintaining school safety and effective school climates. Thus, it becomes extremely important to examine the available alternatives to suspension and expulsion, and the potential for their effective implementation in schools.

Evidence-Based Prevention Strategies

At the national level, effective alternatives for reducing the threat of youth violence have been consistently identified in an extensive body of evidence-based research. In the last ten years, a number of research efforts and panels on school-based prevention of youth violence have been convened or sponsored by the federal government, including the Sherman et al. (1997; see especially Gottfredson, 1997) report to Congress, the *Blueprints for Violence Prevention* series (Mihalic, Irwin, Elliott, Fagan, & Hansen, 2001), the Department of Education & Juvenile Justice *Early Warning, Timely Response* guide (Dwyer, Osher, & Warger, 1998), and reports from the U. S. Surgeon General (Elliott, Hatot, Sirovatka, & Potter, 2001) and the Centers for Disease Control

(Thornton, Craft, Dahlberg, Lynch, & Baer, 2000). These panels have in general relied upon stringent methodological criteria to identify effective and promising programs for reducing youth violence. Their findings have been remarkably consistent with each other, and with scholarly reviews (e.g., Gagnon & Leone, 2001; Greenberg et al., 2003; Tolan & Guerra, and Kendall, 1995; Zins, Weissberg, Wang, & Walberg, 2004), in outlining an emerging conceptual model, and in identifying programs that appear to be most effective within that model.

In 1993, the American Psychological Association released its report *Violence and Youth: Psychology's Response* (APA, 1993) addressing what was then widely perceived as an epidemic of youth violence. That report framed youth violence prevention efforts in terms of a three-tiered primary prevention model. Since the publication of that report, a large number of researchers, policymakers, and professional organizations have articulated similar three component prevention models as applied to mental health (Mrazek & Haggerty, 1994), youth violence in general (Elliott et al., 2001; Tolan et al., 1995), or school violence in particular (Dwyer, Osher, & Warger, 1998; Larson, 1994; Sprague et al., 2001; Walker et al., 1996). The model became the centerpiece for efforts of the U. S. Department of Education to address school violence in a series of publications intended to provide guidance to America's schools concerning the prevention of violence (Dwyer, Osher, & Warger, 1998; Dwyer & Osher, 2000).

Although there is of course some variation in the definition of each of the three tiers of prevention, in general, school-based primary prevention approaches apply increasingly intensive interventions across three levels:

- *Primary prevention:* In order to promote a safe and responsive climate for all students, *primary prevention* efforts, such as conflict resolution, bullying prevention, social-emotional learning, or improved classroom management are implemented school-wide.
- *Secondary prevention:* At the *secondary or indicated prevention* level, schools implement early screening or identification efforts are employed for children who may be at-risk for violence (Walker & Shinn, 2002), and programs such as anger management or mentoring that can re-connect students with schools and other institutions.
- *Tertiary prevention:* Despite our best efforts, it is likely that there will always be some level of disruption, aggression, and perhaps violence requiring an appropriate response. *Tertiary prevention* interventions such as multisystemic therapy are targeted at those students who have already engaged in violence and disruption. Such efforts are characterized by a planned and coordinated response that seeks to minimize the future damage of aggression to the child and others (Bear, Webster-Stratton, Furlong, & Rhee, 2000; Walker & Shinn, 2002).

Space does not permit a thorough review of all empirically-validated programs that may reduce the need for the use of zero tolerance policies and interventions. A number of reviews are available describing a range of preventive interventions, and evaluating the data base for such interventions (Elliott et al., 2001; Gagnon & Leone, 2001; Greenberg et al., 2003; Mihalic et al., 2001; Tolan, Guerra, and Kendall, 1995; Zins, et al., 2004). Rather, in the following sections, we highlight one promising alternative from each of the three levels of prevention.

Primary Prevention: Bullying Prevention

In the last few years, awareness of the seriousness and extent of bullying and peer harassment has increased dramatically, as knowledge of effects on both the short- and long-term adjustment of both victims and perpetrators has increased. Targets of bullying report feelings of vengefulness, anger, and self-pity after a bullying incident (Borg, 1998), feelings that, left untreated, can escalate into depression, physical illness, and even suicide. Students who engage in aggressive and bullying behaviors during their school years are more likely to engage in criminal and aggressive behavior after adolescence (Olweus, 1979). Bullying/harassment also appears to be a risk factor for less effective school climate and even serious school violence. In classrooms exhibiting high numbers of bullying problems, students tend to feel less safe and are less satisfied with school life in general (Olweus & Limber, 1999). In the most extensive analysis to date of school shootings in the United States, the Secret Service found that over two-thirds of those students who had engaged in a shooting viewed their act as revenge for continuing and long-term harassment and intimidation by peers (Vossekuil, Fein, Reddy M., Borum, & Modzeleski, 2002).

Surprisingly large proportions of students are bullied or harassed in schools. In the most recent national survey in the United States, published in the *Journal of the American Medical Association*, 29% of students reported some involvement with moderate or frequent bullying, 13% as bullies, 12% as victims, and 6% as both bullies and victims; bullying is most frequent in grades six through eight (Nansel et al., 2001). Yet bullying is often tolerated or ignored by school personnel; some studies have

estimated that teacher intervention occurs less than 5% of the time (Craig & Pepler, 1999).

Extensive research has shown that well-designed programs can reduce, eliminate, and prevent bully-victim problems, and significantly improve overall school climate. The most effective bullying and harassment prevention programs are comprehensive in scope, addressing harassment at all levels: school-wide (e.g., formulating and publicizing new school policy, school assemblies), classroom (e.g., class discussion, enforcing classroom rules against bullying), and individual (e.g., individual and family counseling) (Olweus & Limber, 1999). In the year following a comprehensive intervention program, Daniel Olweus and colleagues reported a 50% decrease in the numbers of bullying incidents, and reductions in the intensity of bullying and the number of new victims (Olweus, 1993). In addition, fighting, vandalism and truancy all decreased, while general student satisfaction with school increased. Using a similar whole-school approach, the Sheffield Anti-Bullying Project found that, as victims became more likely to report harassment, there was a decrease over time in both the number of students bullied and the number of identified bullies in participating schools (Elsea & Smith, 1998).

Secondary Prevention: Threat Assessment

In response to attempts to use profiling in schools as part of zero tolerance efforts, the FBI (O'Toole, 2000), the U. S. Secret Service (Vossekuil et al., 2002), and the U. S. Department of Education (Osher, Dwyer, & Jackson, 2004), all concluded that this strategy for reducing violence would not work. Each of these groups recommended the same alternative to reduce the potential for violence in school. This alternative is threat assessment. . A threat is considered to be an expression of intent to harm someone

(Cornell & Sheras, 2006). The basic principle of threat assessment is that those who are most likely to be seriously violent in schools will communicate their intention first by making a threat. Averting violence might be accomplished by identifying and evaluating the threats that are made. Such threats might be made to a potential victim directly or indirectly to friends, peers or adults. Frequently, threats are not clearly identified or taken seriously by adults. The goals of threat assessment are to maintain safety at school while at the same time working to assess and resolve the underlying problems in the person or the environment responsible for making the threat. Rather than using zero tolerance to suspend or expel students for what they might do, threat assessment seeks to address issues that have already been revealed by a verbal or physical threat. Once a threat is detected it can be evaluated for its potential for being carried out and actions can be taken to safeguard those in harm's way and also address why the threat was made. This approach serves not only to immediately act to protect those in danger, but to examine the circumstances and context of a threat so a plan can be made to deal with the student who made the threat in a more sensitive and systematic way. Efforts must be made to encourage those who hear threats to see reporting them to responsible adults as an attempt to seek help rather than "snitching" on the threatener.

Threat assessment approaches also seek to evaluate the potential that a threat will be carried out. For instance, context and previous behavior history is important in distinguishing as the FBI and Secret Service do (O'Toole, 2000; Vossekul et al., 2002) between threats that are "made" and those that are "posed." Threats can be made in many ways, verbally, in writing, with gestures, but they may not be credible. Consider the First Grader who threatens to bring an "atomic bomb" to blow up the school. A threat

has been made, but is it actually “posed.” Is it likely to be carried out? Threat assessment seeks to determine which threats are not just made but which might actually be carried out (Cornell & Sheras, 2006).

Schools have been encouraged to form threat assessment teams to evaluate and act on threats (O’Toole, 2000; Cornell & Sheras, 2006). Although few schools currently employ formal threat assessment procedures, early evaluations of such programs have shown promise by reducing the likelihood of threats being carried out by those evaluated with a threat assessment model (Cornell et al., 2004). Some programs designed to promote safety in schools attempt to resolve or reduce threats by training students to manage conflict and solve problems (DeLong, 1999; Shapiro, 1999; Osher et al., 2004).

Tertiary Prevention: Restorative Justice

One tertiary approach to reducing violence in schools is the concept and practice of restorative justice (see special edition of *Journal of Social Issues* (“Restorative Justice and Civil Society”, 2006) for emerging evidence and theory of restorative justice).. As a tertiary strategy, restorative justice does not directly prevent violence so much as bring the relationship between the perpetrator and victim back into balance. Rather, by reducing the likelihood of retribution or repeat offending, restorative justice may prevent the escalation of violence.

Like most tertiary strategies, restorative justice makes a contribution to a stronger school climate by increasing student understanding of existing rules, and trust in the enforcement of those rules. As zero tolerance policies by nature do not provide guidance or instruction because they focus directly on punishment, such actions often are seen as unjust and may breed distrust of adult authority figures and nurture adversarial

confrontational attitudes (Civil Rights Project at Harvard University, 2000). In contrast, restorative justice programs are designed to reconcile the perpetrators with the victims creating a feeling of resolution and increasing a sense of safety. Such programs can build a sense of community and create an ability to build social capital (Bazemore, 2001; Karp & Breslin, 2001). As described on their website (www.restorativejustice.org), “Restorative justice is a theory of justice that emphasizes repairing the harm caused or revealed by criminal behaviour.” Restorative justice programs involve a cooperative process that 1) identifies crime and attempts to repair its damage, 2) includes all stakeholders to respond to acts of violence and 3) changes the traditional relationship between the offenders and the victims. Restorative justice programs may include mediation, restitution, victim assistance and community service. Programs are characterized by four key values: Encounter (opportunities for victims, offenders and community members who want to do so to meet to discuss the crime and its aftermath), Amends (offenders attempt to repair the harm they have caused), Reintegration (restoring the victims and the offenders to be whole and contributing members of society), and Inclusion (those with a stake in a crime can participate in its resolution).

Research indicates that supportive relationships between adults and children that provide attention to high risk youth have been shown to be central to prevention programs. By subjecting students to automatic punishments that do not take into account extenuating or mitigating circumstances zero tolerance policies represent a lost moment to teach children respect and a missed chance to inspire their trust of authority figures. A meaningful approach to school discipline is one that treats students and their families with respect throughout the process, seeks to learn from students and to nurture their

learning and growth as human beings and that finds ways to bring students more deeply into the school community and the surrounding community as well (Sandler, Wong, Morales, & Patel, 2000). Restorative justice programs attempt to re-establish these positive relationships with adults and “teach” understanding and empathy to those who have been violent. Restorative and community justice programs in the school setting prioritize activities that try to reduce delinquency and find solutions to delinquent behavior and build a community capacity to respond to problem behavior without resorting to the criminal justice system and to create a safe and supportive learning environment that effectively expresses the values of the culture (Chavis, 1998; Karp & Clear 2000).

Restorative justice programs are relatively new and deal mostly with offenders outside of the school setting.. A meta-analysis of restorative justice practices (Latimer, Dowden, & Muise, 2005) examining more than 30 studies comparing the effectiveness of restorative justice practices to traditional practices. Because restorative justice programs are voluntary, they suffer from self-selection bias, yet Latimer and colleagues concluded that these programs were significantly more effective in terms of victim and offender satisfaction, restitution compliance and recidivism. Mixed successes are reported by other authors examining youth populations exclusively (Crawford & Newburn, 2003). Although further evaluation of the model in school settings controlling for self-selection bias is clearly necessary, emerging data suggest that restorative justice programs may represent a promising alternative to zero tolerance.

Improving the Implementation of Alternatives to Out-of-School Suspension and Expulsion

A number of strategies have been designed to improve implementation of such alternatives and are typically characterized by an attention to the process by which schools implement effective alternatives tailored to local needs. The *Positive Behavior Interventions and Supports* (PBIS) model focuses on providing comprehensive, positive, and locally generated systems of proactive resources to schools, especially classroom teachers (Lewis, Trussell, Sunderland, & Richter, in press). A school PBIS plan is typically created and implemented by a team of local educators, community members, and parents. The team reviews their school's discipline and other relevant data to identify areas of concern, generate positive and support focused intervention suggestions to change the contextual variables hypothesized to be contributing to these concerns, implement selected interventions, and track/modify the effects of the intervention. Tests of implementation have documented decreased rates of office referrals, suspensions, expulsions and improvements on measures of school climate (Rosenberg & Jackman, 2003), as well as decreased time spent on discipline at the administrative level (Scott & Barrett, 2004). A second approach that has shown some success in school-wide restructuring of disciplinary practices is the *Safe and Responsive Schools* (SRS) model (Skiba, Peterson, Miller, Ritter, & Simmons, in press). The goal of the SRS approach has been to increase the knowledge base of teachers and administrators concerning what works in discipline and violence prevention, and to develop school safety plans responsive to student needs. The process leads participating schools through a strategic planning process involving local needs assessment, review of best practices, and tailoring a local plan matching intervention strategies with school concerns. Again, results have been encouraging: highly favorable assessments of the treatment acceptability of the

process were matched by substantial reductions in rates of out-of-school suspension and expulsion (Skiba et al., in press).

Legislative Efforts to Change Disciplinary Policy

In response to the public controversy that has continued to swirl around the applications of zero tolerance policies, some states have begun to consider legislative modifications that might scale back or better define school disciplinary practices, including zero tolerance. In Indiana, lawmakers noted that, under the state's current reporting system, 95% of all suspensions and 75% of all expulsions fell into two behavioral categories: *disruptive behavior* and *other* (Rausch & Skiba, 2004). In order to provide data that could enable a better understanding of how school suspension and expulsion are being used, Indiana P. L. 242-2005, signed into law in May, 2005, expanded the number of behavioral reporting categories from 6 to 16, giving educators and policymakers a more precise index of the type of behaviors for which students are being suspended or expelled. In Texas, legislators held a statewide conference to consider changes to school disciplinary statute, with the intent of rolling back zero tolerance policies in the state. This effort was described by one sponsor (Rep. Rob Eissler) as legislation under which "...the school district will have allowances, it will grant them common sense where now they are mandated and have no option but to expel a student... regardless of the circumstances. The bill would allow a school district to take into consideration such things as self-defense and intent, as well as the student's previous disciplinary history before deciding the appropriate penalty" (Garcia, 2005, p. 1). During the 2005 Texas legislative session, five pieces of legislation were introduced to modify the implementation of zero tolerance in schools. HB 603, allowing district codes

of conduct to include contextual factors in disciplinary decision-making, was signed into law. The remainder of the bills are still under consideration. In Virginia in 2005, legislators also recognized the need for reform of school disciplinary policies. Virginia General Assembly HB 2202 was introduced to amend the Code of Virginia to indicate that “No disciplinary action shall be imposed against students for possession of a bonafide eating utensil or personal grooming device, unless such utensil or device is brandished or employed as a weapon or otherwise to effect or to threaten an act of violence or intimidation against another or against property.” The bill did not pass.

Recommendations

Like any disciplinary approach, if zero tolerance policies cannot provide assurances to teachers, families, and the community that the safety and integrity of our children’s learning environments has been enhanced because of those policies, those policies have no justifiable purpose. As currently implemented, there is a lack of research evidence demonstrating that zero tolerance policies are accomplishing their goals. Nevertheless, some school administrators and communities will doubtless be reluctant to give up policies that have been vigorously implemented for more than a decade. This tension has played itself out repeatedly in schools, in the media, and increasingly in state legislatures.

The goal of any effective disciplinary system must be to ensure a safe school climate without threatening students’ opportunity to learn. Zero tolerance has created controversy by threatening the opportunity to learn for great numbers of students. Moreover, our review of a large data base on school discipline reveals that, despite the removal of large numbers purported troublemakers, zero tolerance policies have still not guaranteed safe school climates that ensure school learning. Clearly, an alternative

course is necessary. Since time spent in learning is among the most critical, if not *the* critical variable, in predicting academic success, the task of rigorous research will be to identify alternative options for school discipline that can guarantee safe and effective school climates while minimizing the need to remove children from the opportunity to learn.

Thus we offer the following recommendations organized into policy, practice, and research. Since there remain some infractions that cannot be allowed in a school environment (e.g., possession of weapons or drugs at school, serious threat or assault) without seriously threatening the safety of students or the integrity of learning, some of these recommendations center around reform of zero tolerance practices, so as to implement stringent consequences effectively *when they are needed*. On the other hand, there appear to be many infractions that do not require the severe and unbending consequences of zero tolerance. Thus, we also recommend a range of alternatives to zero tolerance. Together, these options may help to operationalize the comprehensive approach to school violence prevention that has been widely validated by experts in the fields of violence prevention, school safety, and mental health (APA, 1993; Dwyer, Osher, & Warger, 1998; Elliott et al., 2001; Larson, 1994; Mrazek & Haggerty, 1994; Sprague et al., 2001; Tolan et al., 1995; Walker et al., 1996). By offering an evidence-based and comprehensive approach to school discipline, we hope the following recommendations will help schools and communities meet the critical goal of ensuring safe school climates conducive to learning without removing students from the opportunity to learn.

A. REFORMING ZERO TOLERANCE

A.1 Practice

A.1.1 Apply zero tolerance policies with greater flexibility, taking context and the expertise of teachers and school administrators into account.

Allow teachers and other professional school staff who witness or encounter rule infractions common sense discretion in handling all but the most serious or serial infractions without making an office referral. Just as police officers have wide discretion in using their powers of citation and arrest, especially in the case of misdemeanor offenses, professional school staff on the scene of an infraction are often best equipped to appraise the circumstances and issues surrounding the rule infraction. Teachers and other professional staff who interact with students on a daily or weekly basis not only know the students best, but are the most likely school staff to have a relationship with the parents. This also means that administrators must clarify the expectation that teachers and other professional staff are expected to handle all but the most serious infractions or consistent, serial rule-breakers. Studies of effective principals suggest that they work with their teachers to define which of these offenses should be referred to the office, and which are better handled at the classroom level (Skiba, Rausch, & Ritter, 2004).

A.1.2 Teachers and other professional staff who have regular contact with students on a personal level should be the first line of communication with parents and caregivers regarding disciplinary incidents.

Except in the case of the most egregious rule infractions by a student with no prior history of conduct problems, a school administrator such as a principal or member of the principal's staff should not be the first person to contact caregivers about disciplinary problems at school. Parents do not like surprises regarding children's problems and may react defensively and appropriately question why they were not

consulted much earlier and given the opportunity to partner with the teacher and support staff in changing their child's behavior. It is to the benefit of all parties to avoid adverse relationships between parents and schools.

A.1.3 Define all infractions, whether major or minor, carefully, and train all staff in appropriate means of handling each infraction.

Garibaldi, Blanchard, and Brooks (1996) argued that inadequate reporting and definition allow greater room for individual bias to emerge in the disciplinary process. Carefully drawn definitions of all behaviors subject to the school disciplinary code protect both students from inequitable consequences, and school officials from charges of unfair and arbitrary application of school policy. Professional staff should be trained in multiple methods of behavior management. Classroom management should also be heavily infused into the curriculum of pre-service teachers as well, so that beginning teachers are prepared to handle the majority of misbehavior and minor disruption in their classroom, and to defuse rather than escalate behavioral incidents.

A.1.4 Evaluate all school discipline or school violence prevention strategies to ensure that all disciplinary interventions, programs, or strategies are truly impacting student behavior and school safety.

Evaluate all school discipline policies to ensure that all intervention programs and strategies are implemented intelligently. The implementation of any procedure addressing student behavior or school violence--whether it be zero tolerance, conflict resolution, school security, or classroom management--must be accompanied by an evaluation adequate to determine whether that procedure has indeed made a positive contribution to improving school safety or student behavior. Without such data, there is the danger that time and resources will be wasted on strategies that sound appealing, but in fact do little to decrease a school's chances of disruption or violence. No intervention

should be implemented without collecting data on its outcomes. Toward this end, increasing standardization and improvement in the technology of reporting and analyzing school disciplinary data will facilitate appropriate evaluation of disciplinary and violence prevention strategies.

A.2 Policy

A.2.1 Reserve zero tolerance disciplinary removals for only the most serious and severe of disruptive behaviors.

Reserve expulsion for offenses that place other students or staff in jeopardy of physical or emotional harm. Federal courts have accepted arguments that the State's compelling interest in education is to prevent its citizens from becoming a burden on the State; students expelled from school have an increased probability of becoming such a burden through delinquency or incarceration. It is certainly appropriate to segregate repeat offenders from the general education population to preserve the safety of the school environment, but a focus on keeping students in an active learning environment, even in a separate facility if necessary, should be maintained.

A.2.2 Replace one-size-fits-all disciplinary strategies with graduated systems of discipline, wherein consequences are geared to the seriousness of the infraction.

Provide teachers and other professional staff with a cascade of escalating options for discipline and a clear, common-sense method of making appropriate choices for applying discipline. In response to community concerns about punishments that do not fit the crime under zero tolerance, many school districts are implementing graduated systems of discipline, reserving severe punishment for only the most serious, safety-threatening offenses. Less serious offenses, such as classroom disruption, attendance related behaviors, or even minor fights among students are met with less severe

consequences that might range from in-school suspension to parent contact, reprimands, community service, or counseling. It must be made absolutely clear as part of any disciplinary policy that there are certain behaviors or offenses that are simply unacceptable in school settings under any circumstances. Yet it is important to note that such an understanding does not in and of itself lead to a mandate of school removal for any specific offense. A comprehensive and effective disciplinary policy should specify both a continuum of possible actions and consequences, and provide guidance to school personnel regarding the permissible or recommended consequences for a given severity of behavior.

A.2.3 Require school police officers who work in schools to have training in adolescent development.

For schools who have found a police presence to be valuable for preserving school safety, law enforcement approaches must be consistent with what we know about adolescent development. Adolescence is a time of positive and negative risk-taking that requires responsible adult guidance and support for positive decision making (American Psychological Association, 2002; Berk, 2005). Law enforcement strategies that stress punishment of offenders without understanding adolescent development run the risk of alienating youth from positive adults, thereby increasing the likelihood of maladaptive behavior (see e.g. Casella, 2003). Thus, police officers in schools must be trained to understand that adolescent behavior must be carefully examined to ensure that minor, developmentally influenced misbehavior is not interpreted or treated like a criminal infraction. Further, examination of model disciplinary practices among principals (e.g. Skiba, Rausch, & Ritter, 2004) suggests that effective programs involving police presence define the officer's role as proactively aiding the school in preventing student

misbehavior through activities such as self-protection workshops, discussions of the function of law enforcement, and helping school teams in planning and executing crisis response plans.

A.3 Research

A.3.1 Develop more systematic prospective studies on outcomes for children who are suspended or expelled from school due to zero tolerance policies.

The evidence reviewed in this report suggests that the child outcomes associated with suspension and expulsion are of concern. Yet the field currently lacks individual, comprehensive longitudinal data measuring the direct and indirect effects of zero tolerance policies on school and life outcomes for individual students. Cross-sectional data provide rich descriptions of relationships at one point in time, but cannot show how relationships between policies and outcomes *develop* over time. It is possible, for example, that zero tolerance policies have a differential effect on students based on their prior history, current circumstances, influences of peer groups, or level of cognitive functioning. Further research is needed to describe how zero tolerance policies influence youth outcomes, to identify mechanisms through which district or state policy influences these outcomes, and to explore how characteristics of youth, families, and community might mediate these relationships.

A.3.2 Expand research on the connections between the education and juvenile justice system, and in particular empirically test the support for a hypothesized school-to-prison pipeline.

Evidence illustrating similarities between zero tolerance in the educational and juvenile justice systems (Wald & Losen, 2003), trends toward redefining school misbehavior as criminal infraction (ABA, 2001), the increased use of law enforcement for addressing school-based behavior (Advancement Project, 2005), and the mandatory referral of certain offenses to law enforcement agencies all suggest that zero tolerance policies and suspension/expulsion may create, strengthen, or accelerate youth contact with the juvenile justice system. To date, however, linkages between school discipline and juvenile justice and the mechanisms through which they may influence each other have not been empirically tested. Prospective research that can explore the extent to which student disciplinary removal is related to increased likelihood of contact with juvenile justice systems is necessary in order to better understand to what extent and how these systems influence each other.

A.3.3 Conduct research at the national level on disproportionate minority exclusion, or the extent to which school districts' use of zero tolerance disproportionately targets youth of color, particularly African American males.

Based on available data, African American youth are two to three times more likely than White youth to be suspended or expelled for school infractions. Such disparities cannot be attributed to differences in socioeconomic status or to racial/ethnic differences in rates of misbehavior (Skiba et al., 2002). As a first step toward developing action plans to remedy disproportionate minority exclusion, research is needed to systematically document whether particular school districts engage in zero tolerance policies that disproportionately target youth of color. This research would need to

address contextual factors that could influence disproportionality, including the racial/ethnic composition of schools, geographic location, racial/ethnic background and training of the teaching staff, and presence of law enforcement personnel in the school. This review of the evidence suggests that African American youth are disciplined for less serious infractions or infractions that are based on a more subjective assessment of misbehavior. Further research is needed to explore the contribution of cultural stereotypes about race and antisocial behavior that may operate in as yet unspecified and perhaps unconscious ways.

A.3.4 Conduct research on disproportionate exclusion by disability status, specifically investigating the extent to which use of zero tolerance increases the disproportionate discipline of students with disabilities, and explore the extent to which differential rates of removal are due to intra-student factors versus systems factors.

Most available data suggests that students with disabilities, particularly students with ED, are removed from school at rates higher than their proportion in the school enrollment. Reasons for these higher rates, however, are unclear. Future research should examine the extent to which higher rates of removal are due to social-behavioral shortcomings of students with disabilities (e.g. more frequent or serious misbehaviors), systems factors (e.g. differential perceptions of behaviors or administration of punishments by teachers and administrators, differential administration of zero tolerance policies) or some combination of the two. Research might also address the degree to which current disciplinary practice is consistent with the legal provisions governing the discipline of students with disabilities in IDEA 2004. Such research would necessitate attention to a host of contextual factors, such as rates of removal for students without disabilities, the extent of inclusion of students with disabilities, teacher use of effective

classroom management strategies in general education settings, and the availability and use of resources specifically intended for students with disabilities.

A.3.5. Conduct research to enhance understanding of the potential differential effects of zero tolerance policies by student gender.

While the evidence is consistent that males are overrepresented in school disciplinary indicators, reasons for such disproportionality, including the contribution of school and social contextual factors to gender differences, have not been widely explored to date. Future research should describe any changes in school disciplinary indicators by gender over time, to what degree these changes (if any) are related to changes in systems factors (e.g. zero tolerance) compared to intra-child behaviors (e.g. increases in violence), and to what degree evidence-based programs have a differential impact on by gender.

A.3.6 Conduct econometric studies or cost-benefit analyses designed to explore the relative benefits of school removal for school climate as compared to the cost to society of removal of disciplined students from school.

Removing students from school as a primary or sole intervention tool may have both potential benefits and costs to the school. While available evidence suggests that frequent student removal is associated with a host of negative outcomes, it is unclear what short-term benefits the school and society may gain by removing certain students from school. An empirical question to be addressed is the extent to which the potential benefits of zero tolerance outweigh the costs for schools and society in terms of student alienation, dropout, or juvenile incarceration.

B. ALTERNATIVES TO ZERO TOLERANCE

B.1 Practice

B.1.1 Implement preventive measures that can improve school climate and improve the sense of school community and belongingness.

Invest resources devoted to discipline disproportionately in favor of prevention programs that teach and reinforce appropriate behavioral skills and universal values. Behaviors can be taught as skills just as any academic task can be taught as a skill. As with academic skills, direct instruction, modeling, and guided practice coupled with reinforcement for success are effective in teaching behavioral skills. Osher, Sandler, and Nelson (2001) noted that many of the most effective programs in the nation for dealing with student disruption are characterized by high levels of student support and community. Solutions to the zero-tolerance dilemma might also seek to shift the focus from swift and certain punishment to using research supported strategies like conflict resolution and bullying prevention to improve the sense of school community and belongingness.

B.1.2 Seek to reconnect alienated youth and re-establish the school bond for students at-risk of discipline problems or violence. Use threat assessment procedures to identify the level of risk posed by student words.

When the system does not work effectively for a particular student or a student and/or the family become alienated for other reasons, seek to reconnect students positively with the educational process through such programs as mentoring, anger management, and social skills training. As has been recommended by national experts in threat response, implement threat assessment procedures that can identify the level of seriousness of a given threat, rather than exclusionary procedures that may provide a false sense of security.

B.1.3 Develop a planned continuum of effective alternatives for those students whose behavior threatens the discipline or safety of the school.

The behaviors of the most challenging of youth can seriously disrupt school environments. Alternatives to zero tolerance such as restorative justice, alternative programs, or community service can help reduce the impact of serious disruptive behavior by having an array of planned options available to schools when disruption or violence occurs. At the same time, these planned alternatives may include components, such as lifeskills training that can teach students alternatives to disruption and violence.

B.1.4 Improve collaboration and communication between schools, parents, law enforcement, juvenile justice and mental health professionals to develop an array of alternatives for challenging youth.

The problems faced by disruptive youth and their family often exceed the abilities of any one agency to address them. A system of care and wraparound approaches (Burchard & Clarke, 1990), in which education, mental health, juvenile justice, and other community youth-serving agencies collaborate to develop integrated services, offers promise as a way of providing additional resources to schools to address the most serious and challenging behaviors.

Schools should work together in a coordinated program to assure that juvenile offenders who are not a danger to other students and staff and who receive probationary discipline from the court remain in school. While the general education program will not be appropriate for some such offenders (e.g., those who commit acts of violence), who will require a segregated learning environment, most status offenders should not be barred from attending regular education programs. As we noted in the opening paragraphs of this report, school failure (a higher probability outcome with lengthy

suspensions and expulsion) is a clear path to downward social mobility, poverty, and increases the probability of a student becoming a burden to the state in adulthood.

B.2 Policy

B.2.1 Legislative initiatives should clarify that schools are encouraged to provide an array of disciplinary alternatives prior to school suspension and expulsion and, to the extent possible, increase resources to schools for implementing a broader range of alternatives, especially prevention.

School suspension and expulsion will continue to be part of the disciplinary resources available to schools for handling disruptive and violent behavior, and are in some cases necessary to protect students and teachers from serious disruption and violence. Yet policy should encourage the judicious use of exclusionary discipline, recognizing that students who are removed from school are placed at-risk for a host of negative outcomes. In tight fiscal times, it would be unrealistic to advocate for large outlays for new preventive programs. Yet it is also costly to schools to spend an inordinate amount of staff time on processing suspensions and expulsions, and costly to society to address issues of delinquency and incarceration among youth who are out of school. Bullying prevention initiatives have now been passed in about a third of the nation's state legislatures. Some of these have required no new outlays of state funds. Policies that assist schools in increasing their resources for addressing disruptive or violent behavior can be expected to reduce reliance on school suspension and expulsion, thus increasing students' opportunity to learn.

B.2.2 Increase training for teachers in classroom behavior management and culturally-sensitive pedagogy.

One of the most effective disciplinary strategies is to prevent the occurrence of misbehavior through effective instruction and classroom management, thereby maximizing student opportunity to learn, and reducing disciplinary referrals (Brophy &

Good, 1986; Jones & Jones, 2004). Further, a lack of cultural competence in classroom behavior management can lead to inappropriate disciplinary referrals for particular student subgroups (Weinstein, Tomlinson-Clarke, & Curran, 2004). High overall disciplinary referral rates, and disproportionate rates of office referrals suggest a need for teacher training, at both the pre-service and in-service level, in elements of culturally responsive classroom management and instruction (Gay, 2000; Weinstein et al., 2004). Increasing staff knowledge of the effect of student culture on behavior and increasing the resources available to teachers for managing disruptive behavior hold great promise for maximizing student opportunity to learn and reducing cultural conflict.

B.2.3 Increase training for teachers, administrators and other school personnel to address sensitivity related to issues of race.

The over-representation of students of color, especially African American males, has been widely documented in the literature, and within-child explanations have not proven sufficient to explain wide and consistent racial disparities in discipline (Skiba et al., 2002; Wu et al., 1982). Further research is needed on the reasons for these continuing disparities (see Recommendation A.3.3), but emerging data suggest that cultural misunderstandings (Vavrus & Cole, 2002), discontinuities (Townsend, 2000), and stereotypes (Ferguson, 2001; Graham & Lowery, 2004), are among the factors that contribute to disciplinary disproportionality. Thus, at the level of practice, attention to issues of cultural competence is a promising avenue when evidence of disproportionality is found. In order to develop cultural competence it is important to develop an awareness of one's own culture and how that intersects with the culture of the school, the students at that school and those students' families (Gay, 2000; Villegas & Lucas, 2002). When teachers and administrators are clear about the influence their own background has on the

interactions with students and others in their school community they are better able to shape equitable policy and instruction and discipline that responds to the needs of students.

B.2.4 Increase training on issues related to harassment and sexual harassment for teachers, administrators and other school personnel.

Bullying, harassment, sexual harassment, and racial harassment are all serious issues in our schools that touch the lives of a significant proportion of students, and can have significant emotional and psychological reactions among those who are victimized (American Association of University Women, 2001; Nansel et al., 2001; Graham & Juvonen, 2002). Yet the seriousness of harassment (Oliver, Hoover & Hazler, 1994), the relationship between bullying, harassment, and sexual harassment (Land, 2003), and the appropriate response to incidents of harassment (Craig & Pepler, 1999) are often poorly understood in practice. In conjunction with zero tolerance policies, that misunderstanding may create an over-extension of zero tolerance punishment, as in the case of an elementary school boy suspended for sexual harassment/oral sex for sticking out his tongue at a classmate (Stein, 2001). Lack of awareness of a range of alternatives for addressing harassment may also result in an overuse of suspension and expulsion for any incident of harassment, regardless of the severity of that incident (Stein, 2003). Training for administrators and teachers on recognizing harassment, as well as legal responsibilities and effective interventions for addressing all forms of harassment are important in assisting schools to find appropriate responses that make it clear that harassment is unacceptable without the automatic application of school exclusion for any offense.

B.3 Research

B.3.1 Conduct systematic efficacy research including quasi-experimental and randomized designs to compare academic and behavioral outcomes of programs with and without zero tolerance policies and practices.

Conclusive evidence illustrating a causal effect of zero tolerance, suspension, and expulsion on school, youth, and community outcomes is not available to date. It is highly unlikely that the most rigorous research designs, such as randomized control, could be utilized with typical school disciplinary measures, especially with procedures such as student exclusion from school. It would be possible, however, to conduct quasi-experimental research testing the merits of zero tolerance and its alternatives. As schools continue to reform existing disciplinary policies and practices, with varying emphases on the extent to which they will adhere to a zero tolerance approach, these changes provide abundant opportunities for case study research (Yin, 2002), and the development of more rigorous research designs over time. Ultimately such research will enable stronger statements in regard to the causal effects of zero tolerance and other forms of school discipline.

B.3.2 Increase attention to research regarding the implementation of alternatives to zero tolerance. What are the best and most logistically feasible ways to implement alternative programs in schools?

Unfortunately, the existence of an extensive and relatively consistent data-base on school-based intervention for violence prevention does not in any way guarantee that those strategies will be implemented as intended in actual school settings. Gottfredson et al (2000) surveyed a nationally representative sample of school principals and teachers regarding the implementation of prevention programs at their school, and found that implementation of prevention activities was typically at a level that would be considered unacceptable for guaranteeing efficacy.

It has been suggested that the problem of implementation of evidence-based violence prevention programs in school settings may lie with research, rather than practice—that the majority of evidence-based practices have been developed under “test tube conditions” that fail to mirror the realities of school settings (Shoenwald and Hoagwood, 2001). Thus, increased attention must be paid to issues of implementation of evidence-based prevention practices, and particularly to those variables that predict effective diffusion and implementation. Jensen, Hoagwood, and Trickett (1999) have suggested that it may be necessary for prevention researchers to reverse their priorities; that is, to begin by developing treatments that are “sensible..., feasible, flexible, and palatable” (p. 209), and to move on to the demonstration of experimental control only after such practical concerns are met.

B.3.3 Conduct outcome research focused on the effects and effectiveness of various approaches to school discipline, not only for schools, but also for families and the long-term functioning of children.

It remains unclear to what extent different approaches to school discipline (e.g. zero tolerance policies and prevention programs) contribute to different important short- and long-term developmental outcomes for youth, families and communities. Of critical importance for the research community is the generation of strong and compelling research illustrating to what extent these and other approaches to school discipline contribute to or detract from societal goals for developing youth: health, safety, and opportunity for productive and meaningful participation in society.

Conclusions

The duty of schools to preserve the safety and integrity of the learning environment is incontrovertible. There is no disagreement with the universal goals that zero tolerance shares with any school disciplinary system: to preserve a safe climate, to

encourage a positive and productive learning climate, to teach students the personal and interpersonal skills they will need to be successful in school and society, to reduce the likelihood of future disruption. It is the means to these ends that have created controversy around zero tolerance policies. Ultimately, an examination of the evidence shows that zero tolerance policies as implemented have failed to achieve the goals of an effective system of school discipline.

It seems intuitive that removing disruptive students from school will make schools better places for those students who remain, or that severe punishment would improve the behavior of the punished student or those who witness that punishment. But the available evidence consistently flies in the face of these beliefs. Zero tolerance has not been shown to improve school climate or school safety. Its application in suspension and expulsion has not proven an effective means of improving student behavior. It has not resolved, and may have exacerbated, minority over-representation in school punishments. Zero tolerance policies as applied appear to run counter to our best knowledge of child development. By changing the relationship of education and juvenile justice, zero tolerance may shift the locus of discipline from relatively inexpensive actions in the school setting to the highly costly processes of arrest and incarceration. In so doing, zero tolerance policies have created unintended consequences for students, families, and communities.

The accumulated evidence points to a clear need for change in how zero tolerance policies are applied, and toward the need for a set of alternative practices. These alternatives rely upon a more flexible and common-sense application of school discipline, and on a set of prevention practices that have been validated in ten years of school

violence research. It is time to make the shifts in policy, practice, and research to implement policies that can keep schools safe *and* preserve the opportunity to learn for all students.

References

- Abrahms, S. (1998, June 21). Discipline of 9 seniors is evaluated: Headmaster defends 'zero tolerance' stance. *Boston Globe*, p. 1.
- Advancement Project. (2003). *Derailed: The schoolhouse to the jailhouse track*. Washington, D.C.: Advancement Project.
- Advancement Project. (2005, March). *Education on lockdown: The schoolhouse to jailhouse track*. Washington, DC: Advancement Project.
- Advancement Project and Civil Rights Project. (2000). *Opportunities suspended: The devastating consequences of zero tolerance and school discipline policies*. Cambridge, Mass.: Harvard Civil Rights Project.
- Alberto, P.A., & Troutman, A.C. (2003). *Applied behavior analysis for teachers*. Upper Saddle River, NJ: Merrill/Prentice Hall.
- American Association of University Women [AAUW]. (2001) *Hostile hallways: Bullying, teasing, and sexual harassment in school*. Washington, DC: Author.
- American Bar Association. (2001). *Zero tolerance policy report*. Washington, DC: American Bar Association, Juvenile Justice Committee.
- American Psychiatric Association (1994). *Diagnostic and statistical manual of mental disorders* (4th edition). Washington, D.C.: Author.
- American Psychological Association. (2004). *Bylaws of the American Psychological Association*. Washington, DC: Author.
- American Psychological Association. (n.d.). *Warning signs of teen violence*. Retrieved November 15, 2004, from <http://www.apahelpcenter.org/featuredtopics/feature.php?id38&ch=3>.
- American Psychological Association. (1993). *Violence and youth: Psychology's response*. Washington, D.C.: Author.
- American Psychological Association (2002). *Developing adolescents*. Washington, D.C.: Author. [Online]. Available at <http://www.apa.org/pi/pii/develop.pdf>
- Annual Report on School Safety. (1998). *Annual report on school safety 1998*. Washington, D.C.: U.S. Departments of Education and Justice.
- Arnett, J. (1992). Reckless behavior in adolescence: A developmental perspective. *Developmental Review*, 12, 339-343.
- Associated Press. (2001, March 22). Second-graders facing charges. *Newday*, p. A33.
- Bacos, L., Brock, S., Caragines, C., Chadwick, M., Hamel, P., & Kailan, R. (2003). *Supporting at-risk students* (pp. 8-11). Dorchester, MA: Project for School Innovation.

- Bain, A., & MacPherson, A. (1990). An examination of the system-wide use of exclusion with disruptive students. *Australia and New Zealand Journal of Developmental Disabilities, 16*, 109-123.
- Baird, A., & Fugelsang, J. (2004). The emergence of consequential thought. *Royal Society of London, 359*, 1797-104.
- Ballard, M., Argus, T., & Remley, T.P. (1999). Bullying and school violence: A proposed prevention program. *NASSP Bulletin, 83*; 38-47.
- Bargh, J.A., & Chartrand, T.L. (1999). The unbearable automaticity of being. *American Psychologist, 54*, 462-479.
- Barnett, W. S. (1995). Long-term effects of early childhood programs on cognitive and school outcomes. *The Future of Children, 5*(3), 25-50.
- Bazemore, G. (2001). Young people, trouble, and crime: Restorative justice as a normative theory of informal social control and social support. *Youth & Society, 33*(2), 199-226.
- Bear, G. C., Webster-Stratton, E., Furlong, M. J., & Rhee, S. (2000). Preventing school violence. In K. M. Minke & G. C. Bear (Eds.), *Preventing school problems - Promoting school success: Strategies and programs that work* (pp. 1-69). Bethesda, MD: National Association of School Psychologists.
- Berk, L. (2005). *Child development* (7th edition). Boston: Allyn & Bacon.
- Bickel, F., & Qualls, R. (1980). The impact of school climate on suspension rates in the Jefferson County Public Schools. *Urban Review, 12*, 79-86.
- Bickford, S. (2001). *Alternative education for at-risk youth: An analysis of specific legislation from 1995-1999 in Pennsylvania*. ERIC UD 034685
- Blair, F. E. (1999). Does Zero Tolerance work? *Principal, 79* (1), 36-37.
- Blair, I. (2002). The malleability of automatic stereotypes and prejudice. *Personality and Social Psychology Review, 6*, 242-261.
- Blankstein, A. (1999, October 26). Parents, school officials talk about violence at Grant High; Hundreds pack auditorium at campus where tensions flared between Armenian and Latino students. Principal vows 'Zero Tolerance' for fighting. *Los Angeles Times*, p. B2.
- Borg, M.G. (1998). The emotional reactions of school bullies and their victims. *Educational Psychology, 18*, 433-444.
- Boulton, J.J., & Underwood, K. (1992). Bullying/victim problems among middle school children. *British Journal of Educational Psychology, 62*, 73-87.
- Bowditch, C. (1993). Getting rid of troublemakers: High school disciplinary procedures and the production of dropouts. *Social Problems, 40*, 493-507.

- Boylan, E.M. and Weiser, J. (2002). *Survey of key education stakeholders on zero tolerance student discipline policies*. Newark, NJ: Education Law Center.
- Brantlinger, E. (1991). Social class distinctions in adolescents' reports of problems and punishment in school. *Behavioral Disorders, 17*, 36-46.
- Bridges, G. S., & Steen, S. (1998). Racial disparities in official assessments of juvenile offenders: Attributional stereotypes as mediating mechanisms of juvenile offenders. *American Sociological Review, 63*, 554-571.
- Brophy, J.E. (1988). Research linking teacher behavior to student achievement: Potential implications for instruction of Chapter 1 students. *Educational Psychologist, 23*, 235-286.
- Brophy, J., & Good, T. (1986). Teacher behavior and student achievement. In M.C. Wittrock (Ed.), *Handbook of research on teaching* (3rd Edition) (pp. 328-375). New York, NY: Macmillan Publishers.
- Browne, J. A., Losen, D. J., & Wald, J. (2002). Zero tolerance: Unfair, with little recourse. In R. J. Skiba & G. G. Noam (Eds.), *New directions for youth development (no. 92: Zero tolerance: Can suspension and expulsion keep schools safe?)* (pp. 73-99). San Francisco: Jossey-Bass.
- Burchard, J.D., & Clarke, R.T. (1990). The role of individualized care in a service delivery system for children and adolescents with severely maladjusted behavior. *Journal of Mental Health Administration, 17*, 48-60.
- Burke, E., & Herbert, D. (1996). Zero tolerance policy: Combating violence in schools. *NASSP Bulletin, 80*(579), 49-54.
- Cambron-McCabe, N.H., McCarthy, M.M., & Thomas, S.B. (2004). *Public school law: Teachers' and students' rights* (fifth edition). Boston, MA: Pearson.
- Campbell, D.T., & Stanley, J.C. (2005). *Experimental and quasi-experimental designs for research*. New York: Houghton Mifflin Company.
- Casella, R. (2003). Zero tolerance policy in schools: Rationale, consequences, and alternatives. *Teachers College Record, 105*, 872-892.
- Catalano, R.F., Haggerty, K.P., Oesterle, S, Fleming, C.B., & Hawkins, J.D. (2004). The importance of bonding to school for healthy development: Findings from the social development research group. *Journal of School Health, 74*, 252-261.
- Cauffman, E., & Steinberg, L. (2000). (Im)maturity of judgment in adolescence: Why adolescents may be less culpable than adults. *Behavioral Sciences and the Law, 18*, 741-760.
- Centers for Disease Control (CDC). (June 2002), Retrieved 02/14/2005 from the World Wide Web: <http://www.cdc.gov/ncipc/factsheets/yvprevention.htm>

- Chavis, D. (1998). Building community capacity to prevent violence through coalitions and partnerships. In D.R. Karp (Ed.). *Community Justice: An emerging Field*. 81-94
- Children's Defense Fund (1975). *School suspensions: Are they helping children?* Cambridge, MA: Washington Research Project.
- Civil Rights Project at Harvard University. (2000) *Opportunities suspended: The devastating consequences of zero tolerance and school discipline policies*. Report from a national summit on zero tolerance [proceedings] (Washington, DC, June-15-16, 2000). ERIC UD 034234.
- Coalition for Juvenile Justice (2001). *Abandoned in the back row: New lessons in education and delinquency prevention*. Washington, D.C.: Author
- Comer, J., & Poussaint, A. (1992). *Raising black children*. New York: PLUME
- Cooley, S. (1995). *Suspension/expulsion of regular and special education students in Kansas: A report to the Kansas State Board of Education*. (ERIC Document Reproduction Service, ED 393403).
- Cornell, D. G., & Sheras P. L. (2006). *Guidelines for responding to student threats of violence*. Boston: Sopris West Educational Services.
- Cornell, D. G., Sheras, P.L., Kaplan, S., McConville, D., Douglass, J., Elkon, A., McKnight, L., Branson, C., & Cole, J. (2004). Guidelines for student threat assessment: Field-test findings. *School Psychology Review*, 33(4) 527-546.
- Correll, J., Park B., Judd, C. M., Wittenbrink, B. (2002). The police officer's dilemma: Using ethnicity to disambiguate potentially threatening individuals. *Journal of Personality and Social Psychology*, 83, 1314-1329.
- Costenbader, V. K., & Markson, S. (1994). School suspension: A survey of current policies and practices. *NASSP Bulletin*, 78, 103-107.
- Costenbader, V., & Markson, S. (1998). School suspension: A study with secondary school students. *Journal of School Psychology*, 36, 59-82.
- Craig, W.M., & Pepler, D.J. (1999). Observations of bullying and victimization in the school yard. *Canadian Journal of School Psychology*, 13, 41-60.
- Crawford, A., & Newburn, T.(2003). *Youth offending and restorative justice: Implementing reform in youth justice*. Cullompton, UK: Willan Publishing
- Crosby, J. (1994, December 14). Teachers, parents back school weapons policies: A 5-year-old faces expulsion from the Centralia district over a razor blade. *The Orange County Register*, p. B1.
- Crowther, C. (1997). Policing the underclass: A critical consideration of the current agenda. Leicester, UK: Scarman Centre for the Study of Public Order.
- Davis, A. (1999, November 18). 'Zero tolerance' ignites debate in Hartford: Meeting on drug problem draws hundreds to school; Expulsions are hot topic. *Milwaukee Journal Sentinel*, p. 1.

- Davis, J.E., & Jordan, W.J. (1994). The effects of school context, structure, and experiences on African American males in middle and high schools. *Journal of Negro Education, 63*, 570-587.
- DeFour, D.C. (2005). Gender and ethnicity issues in school violence. In F. Denmark, H.H. Krauss, R.W. Wesner, E. Midlarsky, & U.P. Gielen (Eds), *Violence in schools: Cross-national and cross-cultural perspectives* (pp. 85-99). New York: Springer.
- DeJong, W. (1999). *Building the Peace: The resolving conflict creatively program*. Washington D.C.: National Institute of Justice
- Devine, P. G., & Elliot, A. J. (1995). Are racial stereotypes really fading? The Princeton trilogy revisited. *Personality and Social Psychology Bulletin, 21*, 1139-1150.
- DeVoe, J.F., Peter, K., Kaufman, P., Miller, A., Noonan, M., Snyder, T.D., & Baum, K. (2004). *Indicators of school crime and safety: 2004*. U.S. Departments of Education and Justice. Washington, D.C.: U.S. Government Printing Office.
- Ditzhazy, E.R. & Burton, E.M. (2003). Bullying: A perennial school problem. *The Delta Kappa Gamma Bulletin, 70*, 43-48.
- Dohrn, B. (2001). "Look out kid/it's something you did": Zero tolerance for children. In W. Ayers, B. Dohrn, & R. Ayers (Eds.), *Zero tolerance: Resisting the drive for punishment in our schools* (pp. 89-113). New York: The New Press.
- Donahue, E., Schiraldi, V., & Ziedenberg, J. (1998). *School house hype: School shootings and the real risks kids face in America*. Washington, D.C.: Justice Policy Institute.
- Driscoll, M.P. (2000). *Psychology of learning for instruction (2nd ed.)*. Boston: Allyn & Bacon.
- Drizin, S. (2001). Arturo's case. In W. Ayers, B. Dohrn, & R. Ayers (Eds.), *Zero tolerance: Resisting the drive for punishment in our schools* (pp. 31-41). New York: The New Press.
- Drug probe hits submarine. (1983, July 3) *Washington Post*, p. B7.
- Dunbar, C., Jr, & Villarruel, F. A. (2004). What a difference the community makes: Zero tolerance policy interpretation and implementation. *Equity and Excellence in Education, 37*(4), 351-359.
- Duncan, G. J, Brooks-Gunn, J., & Klebanov, P. K. (1994). Economic deprivation and early childhood development. *Child Development, 65*, 296-318.
- Dwyer, K., & Osher, D. (2000). *Safeguarding our children: An action guide. Implementing early warning, timely response*. Washington, D.C.: National Association of School Psychologists.
- Dwyer, K., Osher, D., & Warger, C. (1998). *Early warning, timely response: A guide to safe schools*. Washington, D.C.: U. S. Department of Education.

- Eccles, J. (2004). Schools, academic motivation, and stage-environment fit. In R. Lerner & L. Steinberg (Eds.), *Handbook of adolescent psychology* (pp. 125-153). Hoboken, N.J.: John Wiley.
- Eccles, J., & Midgley, C. (1989). Stage-environment fit: Developmentally appropriate classrooms for young adolescents. In C. Ames & R. Ames (Eds.), *Research on motivation in education, Vol. 3* (pp. 139-186). San Diego, CA: Academic Press.
- Eckenrode, J., Laird, M., & Doris, J. (1993). School performance and disciplinary problems among abused and neglected children. *Developmental Psychology, 29*, 53-62.
- Educational intolerance (2001, May 14). *St. Petersburg Times*, p. 8A.
- Ekstrom, R.B., Goertz, M.E., Pollack, J.M., & Rock, D.A. (1986). Who drops out of high school and why?: Findings from a national study. *Teachers College Record, 87*, 357-73.
- Elliott, D., Hatot, N.J., Sirovatka, P., & Potter, B.B. (2001). *Youth violence: A report of the Surgeon General*. Washington, D.C.: U.S. Surgeon General.
- Elliott, D.S., Hamburg, B., and Williams, K.R. (Eds.). (1998). *Violence in American schools*. New York: Cambridge University Press.
- Ellis, M. (2003, November 28) Student recalls strife caused by toy pistol. *Columbus Dispatch*, p. 01F.
- Elsea, M., & Smith, P.K. (1998). The long-term effectiveness of anti-bullying work in primary schools. *Educational Research, 40*, 203-218
- Espelage, D. L., & Swearer, S. M. (2003). Research on school bullying and victimization: What have we learned and where do we go from here? *School Psychology Review, 32*; 365-383.
- Ewing, C.P. (2000, January/February). Sensible zero tolerance protects students. *Harvard Education Letter*. [Online]. Retrieved July 21, 2004 from <http://www.edlettr.org/past/issues/2000-jf/zero.shtml>
- Fasko, D., Grubb, D.J., & Osborne, J.S. (1995, November). *An analysis of disciplinary suspensions*. Paper presented at the annual meeting of the Mid-South Educational Research Association. Biloxi, Mississippi (ERIC Document Reproduction Service, ED 393169).
- Fein, R., & Vossekuil, F. (1999). Assassination in the United State: An operational study of recent assassins, attackers, and near-lethal approaches. *Journal of Forensic Sciences, 44*, 321-333.
- Fein, R., Vossekuil, F., & Holden, G. A. (1995). *Threat assessment: An approach to prevent targeted violence* (NCJ 155000) Washington, DC: National Institute of Justice. Available: http://www.secresevice.gov/ntac/ntac_threat.pdf
- Feinberg, T. (2003). Bullying prevention and intervention. *Principal Leadership* (High School Edition), 4, 10-14.

- Ferguson, A.A. (2001). *Bad boys: Public schools and the making of black masculinity*. Ann Arbor, Michigan: University of Michigan Press.
- Fine, M. (1986). Why urban adolescents drop into and out of public high school. *Teachers College Record*, 87, 393-409.
- Fiore, T.A., & Reynolds, K.S. (1996). *Analysis of discipline issues in special education*. Research Triangle, Park, NC: Research Triangle Institute.
- Fisher, C.W., Berliner, D.C., Filby, N.N., Marliave, R., Cahen, L.S., & Dishaw, M.M. (1981). Teaching behaviors, academic learning time, and student achievement: An overview. *Journal of Classroom Interaction*, 17, 2-15.
- Fiske, S. T. (1998). Stereotyping, prejudice, and discrimination. In D. T. Gilbert, S. T. Fiske, & G. Lindzey (Eds.) *Handbook of social psychology* (4th ed., pp. 357-411). New York: McGraw-Hill.
- Fiske, S. T., & Taylor, S. E. (1991). *Social cognition* (2nd ed.). New York: McGraw Hill.
- Fizzell, R., & Raywid, M. A. (1997). If alternative schools are the answer... What's the question? *Reaching Today's Youth: The Community Circle of Caring Journal* 1(2):7-9.
- Fuentes, A. (2003). Discipline and punish: Zero tolerance policies have created a 'lockdown environment' in schools. *The Nation Magazine*.
- Gagnon, J.C., & Leone, P.E. (2001). Alternative strategies for youth violence prevention. In R.J. Skiba & G.G. Noam (Eds.), *New Directions for Youth Development* (no. 92; Zero tolerance: Can suspension and expulsion keep school safe?), (pp. 101-125). San Francisco: Jossey-Bass.
- Garibaldi, A., Blanchard, L., & Brooks, S. (1996). Conflict resolution training, teacher effectiveness, and student suspension: The impact of a health and safety initiative in the New Orleans public schools. *Journal of Negro Education*, 65, 408-413.
- Gardner, M., & Steinberg, L. (2005). Peer influence on risk taking, risk preference, and risky decision making in adolescence and adulthood: An experimental study. *Developmental Psychology*, 41, 625-635.
- Gay, G. (2000). *Culturally responsive teaching: Theory and practice*. New York: Teachers College Press.
- Giedd, J., Blumenthal, J. Jeffries, N., Castellanos, F., Liu, H., Zijdenbos, A., et al. (1999). Brain development during childhood and adolescence: A longitudinal MRI study. *Nature Neuroscience*, 10, 861-863.
- Ginsburg, C. G. & Loffrodo, L. (1993). Violence-related attitudes and behaviors of high school students, New York City, 1992. *Morbidity and Mortality Weekly Report*, 42, 773-777.
- Glackman, T., Martin, R., Hyman, I., McDowell, E., Berv, V., & Spino, P. (1978). Corporal punishment, school suspension, and the civil rights of students: An

- analysis of Office for Civil Rights school surveys. *Inequality in Education*, 23, 61-65.
- Gordon, R., Della Piana, L., & Keleher, T. (2000). *Facing the consequences: An examination of racial discrimination in U. S. Public Schools*. Oakland, CA: Applied Research Center.
- Gottfredson, D. (1997). School-based crime prevention. In L. Sherman, D. Gottfredson, D. MacKenzie, J. Eck, P. Ruter, & S. Bushway (Eds.), *Preventing crime: What works, what doesn't, what's promising: A report to the United States Congress* (pp. 1-74). Washington, D.C.: U. S. Department of Justice, Office of Justice Programs.
- Gottfredson, D.C., & Gottfredson, G.D. (2002). Quality of school-based prevention programs: Results from a national survey. *Journal of Research in Crime and Delinquency*, 39, 3-35.
- Gottfredson, D.C. (2001). *Delinquency prevention in schools*. New York: Cambridge University Press.
- Gottfredson, G.D., Gottfredson, D.C., Czeh, E.R., Cantor, D., Crosse, S., & Hantman, I. (2000). *The national study of delinquency prevention in schools*. Ellicott City, MD: Gottfredson Associates.
- Graham, S., & Juvonen, J. (2002). Ethnicity, peer harassment, and adjustment in middle school: An exploratory study. *Journal of Early Adolescence*, 22, 173-199.
- Graham, S., & Lowery, B. (2004). Priming unconscious racial stereotypes about adolescent offenders. *Law and Human Behavior*, 28, 483-504.
- Gray-Adams, K., & Sinclair, B. (2004). *Report on the implementation of the gun-free schools act in the states and outlying areas: School Year 2001-2002*. Rockville, MD: Westat.
- Greenberg, M.T., Weissberg, R.P. O'Brien, M.U., Zins, J.E., Fredericks, L., Resnik, H., & Elias, M.J. (2003). Enhancing school-based prevention and youth development through coordinated social, emotional, and academic learning. *American Psychologist*, 58, 466-474.
- Greene, A. (1986). Future time perspective in adolescence: The present of things future revisited. *Journal of Youth and Adolescence*, 15, 99-113.
- Greenwald, A. G., & Banaji, M. R. (1995). Implicit social cognition: Attitudes, self-esteem, and stereotypes. *Psychological Review*, 102, 4-27.
- Greenwood, C.R. (1996). The case for performance-based models of instruction. *School Psychology Quarterly*, 11, 283-296.
- Greenwood, C.R., Delquadri, J., & Hall, R.V. (1984). Opportunity to respond and student academic performance. In W. Heward, T. Heron, D. Hill, & J. Trapporfer (Eds.), *Behavior analysis in education* (pp.58-88). Columbus, OH: Merrill.

- Greenwood, C.R., Horton, B.T., & Utley, C.A. (2002). Academic engagement: Current perspectives on research and practice. *School Psychology Review, 31*, 328-349.
- Gregg, S. (1998). Schools for disruptive students: A questionable alternative? *Policy Briefs*. Charleston, WV: Appalachia Educational Laboratory, Inc. 1-10 [<http://www.ael.org/rel/policy/disrstd.htm>].
- Gregory, J. F. (1997). Three strikes and they're out: African American boys and American schools' responses to misbehavior. *International Journal of Adolescence and Youth, 7*(1), 25-34.
- Gregory, J.F. (1996). The crime of punishment: Racial and gender disparities in the use of corporal punishment in U.S. public schools. *Journal of Negro Education, 64*, 454-462.
- Greif, J. (2003). Reaching and American consensus: Reactions to the special issue on school bullying. *The School Psychology Review, 32*, 456-470.
- Grenz, C. (2001, March 31). Accused student to return to class. *Topeka Capital-Journal*
- Grisso, T., & Schwartz, R. (Eds.). (2001). *Youth on trial: A developmental perspective on juvenile justice*. Chicago: University of Chicago Press.
- Grisso, T., Steinberg, L., Woolard, J. Cauffman, E., Scott, E., Graham, S., Lexcen, F., Reppucci, N., & Schwartz, R. (2003). Juveniles' competence to stand trial: A comparison of adolescents' and adults' capacities as trial defendants. *Law and Human Behavior, 27*, 333-363.
- Hall, M. E. (1997). The "War on Drugs": A continuation of the war on the African American family. *Smith College Studies in Social Work, 67*, 609-621.
- Hansen, M. (1988, June 22). ACLU studies fight of zero tolerance. *Los Angeles Times*, p. B3.
- Havemann, J. (1986, September 16). Reagan sets drug tests for sensitive U.S. jobs; \$900 million proposal sent to Congress. *Washington Post*, p. A1.
- Hawkins, J. D., Doueck, H. J., & Lishner, D. M. (1988). Changing teaching practices in mainstream classrooms to improve bonding and behavior of low achievers. *American Educational Research Journal, 25*, 31-50.
- Hearth, A.H. (1990, December 16). Yonkers schools act on discipline. *New York Times*, p. 27.
- Heaviside, S., Rowand, C., Williams, C., & Farris, E. (1998). *Violence and discipline problems in U.S. Public Schools: 1996-97*. (NCES 98-030). Washington, D.C.: U.S. Department of Education, National Center for Education Statistics.
- Hellman, D.A., & Beaton, S. (1986). The pattern of violence in urban public schools: The influence of school and community. *Journal of Research in Crime and Delinquency, 23*, 102-127.

- Hooper, C., Luciana, M., Conklin, H., & Yarger, R. (2004). Adolescents' performance on the Iowa Gambling Task: Implications for the development of decision making and ventromedial prefrontal cortex. *Developmental Psychology, 40*, 1148-1158.
- Horne, A.M. & Socherman, R. (1996). Profile of a bully: Who would do such a thing? *Educational Horizons, 74*, 77-83.
- Howlett, D.(2000, January 12). Illinois students' expulsions upheld Jackson promises further protests in wake of ruling. *USA Today*, p. 4A.
- Hyman, I.A. & Perone, D.C. (1998). The other side of school violence: Educator policies and practices that may contribute to student misbehavior. *Journal of School Psychology, 30*, 7-27.
- Imich, A.J. (1994). Exclusions from school: Current trends and issues. *Educational Research, 36*, 3-11.
- Jensen, P.S., Hoagwood, K., & Trickett, E.J. (1999). Ivory towers or earthen trenches? Community collaborations to foster real-world research. *Applied Developmental Science, 3*, 206-212.
- Johnson, D. (1999, November 17). Jackson arrested in protest over expulsions of students. *New York Times*, p. A16.
- Johnson, T., Boyden, J. E., & Pittz, W. J. (2001). *Racial profiling and punishment in U.S. public schools: How zero tolerance policies and high stakes testing subvert academic excellence and racial equity*. Research report [and] executive summary.
- Johnston, L. D., Bachman, J. G., & O'Malley, P. M. (2005). *Monitoring the Future: Questionnaire responses from the nation's high school seniors, 2003*. Ann Arbor, MI: Institute for Social Research.
- Jones, V. & Jones, L. (2004). *Comprehensive classroom management: Creating communities of support and solving problems* (7th edition). Boston: Allyn and Bacon.
- Kaeser, S.C. (1979). Suspensions in school discipline. *Education and Urban Society, 11*, 465-484.
- Kansas Department of Education (2004). *Biennial performance report: Performance goals and indicators*. Online. Available at <http://www.ksbe.state.ks.us/Welcome.html>
- Karlin, S.L., & Harnish, D. (1995). *An evaluative assessment of two Crossroads Alternative Schools Program Sites in Georgia: Case Study*. Athens, GA: The University of Georgia. ERIC Document #393 238, pp 3-54.
- Karp, D. R., & Breslin, B. (2001). Restorative justice in school communities. *Youth & Society, 33*(2), 249-272.

- Karp, D.R. & Clear, T.R. (2000). Community justice: A conceptual framework. In *Boundaries changes in criminal justice organizations (Vol. 2)*. Washington, D.C.: National Institute of Justice 323-368.
- Kelling, G., & Wilson, J. (1982, March). Broken windows: The police and neighborhood safety. *The Atlantic Monthly*, 249 (3), 29-38.
- Kingery, P. M. (2000). *Zero tolerance and school safety: A critical analysis*. The Hamilton Fish Institute.
- Kingery, P., Biafora, F., & Zimmerman, R. (1996). Risk factors for violent behaviors among ethnically diverse urban adolescents: Beyond Race and Ethnicity. *School Psychology International Journal* 17(2):171-186.
- Kingery, P., Murphy, L., & Minogue, N. (1998). *Promising strategies for school violence prevention*. Rosslyn, VA: Hamilton Fish National Institute on School and Community Violence [www.HamFish.Org].
- Koch, K. (2000, March). Zero tolerance: Is mandatory punishment in schools unfair? *Congressional Quarterly Researcher*, 10(9), 185-208.
- Kochhar, C. (1998). *Review of literature on schools and programs for chronically disruptive, violent, and delinquent youth*. Unpublished manuscript. Rosslyn, VA: Hamilton Fish National Institute on School and Community Violence.
- Krueger, J. (1996). Personal beliefs and cultural stereotypes about racial characteristics. *Journal of Personality and Social Psychology*, 71, 536-548.
- Land, D. (2003). Teasing apart secondary students' conceptualizations of peer teasing, bullying, and sexual harassment. *School Psychology International*, 24, 147-165.
- Lane, K.L., Bocian, K.M., MacMillan, D.L., Gresham, F.M. (2004). Treatment integrity: An essential—but often forgotten—component of school-based interventions. *Preventing School Failure*, 48, 36-44.
- Larson, C.L., & Ovando, C.J. (2001). Racial conflict in a divided community: An illustrative case study of socio-political conflict. In C.L. Larson & C.J. Ovando, *The color of bureaucracy: The politics of equity in multicultural school communities* (pp. 31-60). Belmont, CA: Wadsworth.
- Larson, J. (1994). Violence prevention in the schools: A review of selected programs and procedures. *School Psychology Review*, 23, 151-165.
- Latimer, J, Dowden, C. & Muise, D. (2005). The effectiveness of Restorative Justice Practices: A meta-analysis. *Prison Journal*. 85 (2). Pp. 127-144.
- Leone, P.E., Mayer, M.J., Malmgren, K., & Meisel, S.M. (2000). School violence and disruption: Rhetoric, reality, and reasonable balance. *Focus on Exceptional Children*, 33, 1-20.
- Leone, P.E., Mayer, M.J., Malmgren, K., & Meisel, S.M. (2000). School violence and disruption: Rhetoric, reality, and reasonable balance. *Focus on Exceptional Children*, 33, 1-20.

- Lewis, T.J., Newcomer, L.L., Trussell, R., & Richter, M. (in press). School-wide positive behavior support: Building systems to develop and maintain appropriate social behavior. In C.M. Evertson & C.S. Weinstein (Eds.), *Handbook of classroom management: Research, practice, and contemporary issues*. Lawrence Erlbaum Associates.
- Lietz, J. J., & Gregory, M. K. (1978). Pupil race and sex determinants of office and exceptional education referrals. *Educational Research Quarterly*, 3(2), 61-66.
- Litke, C. (1996). When violence came to our rural school. *Educational Leadership*, 54, 77-80.
- Luna, B., Garver, K., Urban, T., Lazar, N., & Sweeney, J. (2004). Maturation of cognitive processes from late childhood to adulthood. *Child Development*, 75, 1357-1372.
- Luna, B., & Sweeney, J. (2004). The emergence of collaborative brain function: fMRI studies of the development of response inhibition. *Annals of the New York Academy of Science*, 1021, 296-309.
- Lusane, C., & Desmond, D. (1991). Pipe dream blues: Racism and the war on drugs. Boston, MA: South End Press.
- Maag, J.W. (2001). Rewarded by punishment: Reflections on the disuse of positive reinforcement in schools. *Exceptional Children*, 67, 173-186.
- Martin, R. C. (2001). Zero tolerance policy. *American Bar Association*.
- Maryland State Department of Education. (2000, January). *Suspensions from Maryland public schools (1998-1999)*. Baltimore: Maryland State Department of Education Information Management Branch.
- Massachusetts Advocacy Center (1986). *The way out: Student exclusion practices in Boston Middle Schools*. Boston, MA: Author.
- Mayer, M. and Leone, P. (1999). A structural analysis of school violence and disruption: implications for creating safer schools. *Education and Treatment of Children*, 22(3)
- McCarthy, J. D. & Hoge, D. R. (1987). The social construction of school punishment: Racial disadvantage out of universalistic process. *Social Forces*, 65, 1101-1120.
- McFadden, A. C, Marsh, G. E, Price, B. J., & Hwang, Y. (1992). A study of race and gender bias in the punishment of school children. *Education & Treatment of Children*. 15, 140-146.
- McLoyd, V. C. (1998). Socioeconomic disadvantage and child development. *American Psychologist*. 53, 185-204.
- McNeely, C., Nonnemaker, J., & Blum, R. (2002). Promoting student connectedness to school: Evidence from the National Longitudinal Study of Adolescent Health. *Journal of School Health*, 72, 138-147.

- Mears, D.P., Ploeger, M. & Warr, M. (1998). Explaining the gender gap in delinquency: Peer influence and moral evaluations of behavior. *Journal of Research in Crime and Delinquency*, 35, 251-266.
- Mendoza, M. (2002, March 19). Honor student expelled over bread knife in truck. *Fort Worth Star-Telegram*, p. A20.
- Michigan Public Policy Initiative (2003). *Zero tolerance policies and their impact on Michigan students*. [Online]. Retrieved July 28, 2004 at http://www.mnaonline.org/pdf/spotlight%202002_12.pdf
- Mihalic, S., Irwin, K., Elliott, D., Fagan, A., & Hansen, D. (2001, July). *Blueprints for violence prevention* (OJJDP Juvenile Justice Bulletin). Washington, D.C.: U.S. Department of Justice, Office of Juvenile Justice and Delinquency Prevention.
- Miller, D. W. (2001, Feb. 9). Poking holes in the theory of 'broken windows': Many scholars say an influential idea about crime rests on dubious assumptions and minimal research. *Chronicle of Higher Education*, A14.
- Morgan-D'Atrio, C., Northrup, J., LaFleur, L., & Spera, S. (1996). Toward prescriptive alternatives to suspensions: A preliminary evaluation. *Behavioral Disorders*, 21, 190-200.
- Morley, R. E. (1991). *Alternative education: Dropout prevention research reports*. Clemson, SC: National Dropout Prevention Center, Clemson University. (ERIC Document Reproduction Service No. ED 3429 652)
- Morrison, G.M., & D'Incau, B. (1997). The web of zero-tolerance: Characteristics of students who are recommended for expulsion from school. *Education and Treatment of Children*, 20, 316-335.
- Morrison, G.M., Anthony, S., Storino, M., Cheng, J., Furlong, M.F., & Morrison, R.L. (2001). School expulsion as a process and an event: Before and after effects on children at-risk for school discipline. *New Directions for Youth Development: Theory, Practice, Research*, 92, 45-72.
- Mrazek, P.J., & Haggerty, R.J. (Eds.) (1994). *Reducing risks for mental disorders: Frontiers for preventive intervention research*. Washington, D.C.: National Academy Press.
- Mukuria, G. (2002). Disciplinary challenges: How do principals address this dilemma? *Urban Education*, 37, 432-453.
- Nansel, T.R., Overpeck, M., Pilla, R.S., Ruan, W.J., Simons-Morton, B., & Scheidt, P. (2001). Bullying behaviors among US youth: Prevalence and association with psychosocial adjustment. *Journal of the American Medical Association*, 285, 2094-2100.
- NASP Delegate Assembly. (2001). *Position statement on school violence*. National Association of School Psychologists.

- National Association of Secondary School Principals, (2000, February). *Safe schools*. Position paper adopted by Board of Directors. San Antonio, TX. Available at http://www.principals.org/s_nassp/sec.asp?CID=33&DID=47111
- National School Safety Center. (1998). *Checklist of characteristics of youth who have caused school-associated violent deaths*. Westlake Village, CA: Retrieved from <http://www.nssc1.org>.
- Nelson, C. (2003). Neural development and lifelong plasticity. In R. Lerner, E. Jacobs, & D. Wertlieb (Eds.), *Handbook of applied developmental science* (Vol. 1). Thousand Oaks, CA: Sage.
- Noguera, P. A. (1995). Preventing and producing violence: A critical analysis of responses to school violence. *Harvard Educational Review*, 65, 189-212.
- North Carolina Education and Law Project. (1997). *Alternative Schools: Sort-term Solution with Long-Term Consequences*. Second Edition. Raleigh, NC: Author.
- O'Toole, M.E., & the Critical Incident Response Group (2000). *The school shooter: A threat assessment perspective*. Quantico, VA: Federal Bureau of Investigation. <http://www.fbi.gov/library/school/school2.pdf>
- Oliver, R., Hoover, J. H., & Hazler, R. (1994). The perceived roles of bullying in small Midwestern schools. *Journal of Counseling and Development*, 72, 416-420.
- Olweus, D. (1979). Stability of aggressive reaction patterns in males: A review. *Psychological Bulletin*, 86, 853-875.
- Olweus, D. (1993). *Bullying at school: What we know and what we can do*. Cambridge, MA: Blackwell Publishers
- Olweus, D., & Limber, S. (1999). Bullying prevention program. In D.S. Elliot (Ed.), *Blueprints for violence prevention*. Denver, CO: C&M Press.
- One headache cured. (2004, January 13). *Times-Picayune* (New Orleans, LA), p. 4.
- Orpinas, P., Horne, A.M., & Staniszewski, D. (2003). School bullying: Changing the problem by changing the school. *School Psychology Review*, 32; 431-444.
- Osher, D, Dwyer, K, & Jackson, S. (2004). *Safe, supportive, and successful schools step by step*. Longmont, CO: Sopris West.
- Osher, D.M., Quinn, M.M., Poirier, J.M., & Rutherford, R.B. (2004). Deconstructing the pipeline: using efficacy, effectiveness, and cost-benefit data to reduce minority youth incarceration. In J. Wald & D.J. Losen (Eds.), *New directions for youth development* (no. 99; *Deconstructing the school-to-prison pipeline*) (pp. 91-120). San Francisco: Jossey-Bass.
- Parke, R.D., & Slaby, R.G. (1983). The development of aggression. In E.M. Hetherington (Ed.), P.H. Hussen (Series Ed.) *Handbook of child psychology, Volume 4: Socialization, personality, and social development* (pp. 547-641). New York: Wiley.

- Patterson, G.R. (1995). Coercion: A basis for early age of onset for arrest. In J. McCord (Ed.), *Coercion and punishment in long-term perspective* (pp. 81-105). New York: Cambridge University Press.
- Patterson, G.R., Capaldi, D.M., & Bank, L. (1991). An early starter model for predicting delinquency. In D.J. Pepler & K.H. Rubin (Eds.), *The development and treatment of childhood aggression* (p. 139-168). Hillsdale, NJ: Lawrence Erlbaum Associates.
- PBS Frontline. (2002). *Inside the teen brain*. Online at: www.pbs.org/wgbh/pages/frontline/dhows/teenbrain/
- Pettit, B., & Western, B. (2004). Mass imprisonment and the life course: Race and class inequality in U.S. incarceration. *American Sociological Review*, 69, 151-169.
- Poland, S. (2004). School crisis teams. In A. P. Goldstein & J. C. Conoley (Eds.), *School violence intervention: A practical handbook*, 2nd edition (pp. 127-159). New York: Guilford.
- Poppen, J. (2005, April 1). Adams City High suspensions may violate policy. *Rocky Mountain News* (Denver, CO), p. 26A.
- Potts, K., Njie, B., Detch, E.R., & Walton, J. (2003). *Zero tolerance in Tennessee schools: An update*. (ERIC ED481971). Nashville: Office of Education Accountability, State of Tennessee.
- Public Agenda. (2004). *Teaching interrupted: Do discipline policies in today's public schools foster the common good?* http://www.publicagenda.org/research/research_reports_details.cfm?list=3
- Public Law 107-110. (2002). *The no child left behind act of 2001*. SEC. 9101, 20 USC 7801.
- Radcliffe, D. (1985, July 2). Seafarer Nancy Reagan. *Washington Post*, p. C2.
- Raffaele-Mendez, L.M. (2003). Predictors of suspension and negative school outcomes: A longitudinal investigation. In J. Wald & D.J. Losen (Eds.), *New directions for youth development* (no. 99; Deconstructing the school-to-prison pipeline) (pp. 17-34). San Francisco: Jossey-Bass.
- Raffaele-Mendez, L. M., & Knoff, H. M. (2003). Who gets suspended from school and why: A demographic analysis of schools and disciplinary infractions in a large school district. *Education & Treatment of Children*. 26, 30-51.
- Raffaele-Mendez, L.M., Knoff, H.M. & Ferron, J.F. (2002). School demographic variables and out-of-school suspension rates: A quantitative and qualitative analysis of a large, ethnically diverse school district. *Psychology in the Schools*, 39, 259-277.
- Rausch, M.K., & Skiba, R.J. (2004). *Unplanned outcomes: Suspensions and expulsions in Indiana*. Bloomington, IN: Center for Evaluation and Education Policy. [Online]. Retrieved July 21, 2004 at <http://ceep.indiana.edu/ChildrenLeftBehind>

- Rausch, M.K., Skiba, R.J. (2005, April). *Zero tolerance as a risk factor: The relationship between school exclusion and school achievement*. Paper presented at the American Educational Research Association Conference, Montreal, Canada.
- Raywid, M. A. (1994). Alternative schools: The state of the art. *Educational Leadership* 52(1), 26-31.
- Restorative justice and civil society [Special Issue]. (2006). *Journal of Social Issues*, 62(2).
- Reynolds, C. R., & Kamphaus, R. W. (2004). *Behavior assessment system for children*, 2nd Edition. Circle Pines, MN: American Guidance Service.
- Richart, D., Brooks, K., & Soler, M. (2003). *Unintended consequences: The impact of "Zero Tolerance" and other exclusionary policies on Kentucky students*. [Online]. Retrieved July 21, 2004 at <http://www.buildingblocksforyouth.org>
- Robertson, A. S. (2000). "Zero Tolerance": What parents should know. *Parent News Offline, Spring*. Parent Information Network. Available at: http://www.spannj.org/BridgeArchives/zero_tolerance.htm
- Rodriguez, C. (2005, April 5). \$1 candy theft a misdemeanor? *Denver Post*, p. F-01.
- Rodriguez, Y. (2000, September 28). Cobb school calls wallet chain a weapon, suspends girl, 11. *Atlanta Constitution*, p. 1A.
- Roland, E., & Galloway, D. (2002). Classroom influences on bullying. *Educational Research*, 44 (3), 299-312.
- Roper v. Simmons*, 000 U.S. 03-633 (2005).
- Rose, L.C., & Gallup, A.M. (2005). The 37th annual Phi Delta Kappa/Gallup Poll of public's attitudes toward the public schools. *Phi Delta Kappan*, 87(1), 41-57. Available online at <http://www.pdkintl.org/kappan/k0509pol.htm>
- Rosenberg, M.S. & Jackman, L.A. (2003). Development, implementation, and sustainability of comprehensive school-wide behavior management systems. *Intervention in School and Clinic*, 39, 10-21.
- Ruck, M., & Wortley, S. (2002). Racial and ethnic minority high school students' perceptions of school disciplinary practices: A look at some Canadian findings. *Journal of Youth and Adolescence*, 31, 185-195.
- Sandler, S., Wong, F., Morales, E., & Patel, V. (2000). *Turning "to" each other not "on" each other: How school communities prevent racial bias in school discipline. A preliminary report*. Justice Matters Inst., San Francisco, CA; Applied Research Center, Oakland, CA., 2000 (ED454342)
- Schiraldi, V., & Ziedenberg, J. (2001). *Schools and suspensions: Self-reported crime and the growing use of suspensions*. Justice Policy Institute Policy Brief.

- Schuman, H., Steeh, C., Bobo, L., and Krysan, M. (1997). *Racial attitudes in America: Trends and interpretations*. Cambridge: Harvard University Press.
- Schwartz, R., & Rieser, L. (2001). Zero tolerance as mandatory sentencing. In W. Ayers, B. Dohrn, & R. Ayers (Eds.), *Zero tolerance: Resisting the drive for punishment in our schools* (pp. 126-135). New York: The New Press.
- Scott, T.M., & Barrett, S.B. (2004). Using staff and student time engaged in disciplinary procedures to evaluate the impact of school-wide PBS. *Journal of Positive Behavior Interventions*, 6, 21-27.
- Sentencing Project. *Facts about prisons and prisoners* (Briefing Fact Sheet 1035). Washington DC: Author.
- Sewell, K.W., & Mendelsohn, M. (2000). Profiling potentially violent youth: Statistical and conceptual problems. *Children's Services: Social Policy, Research and Practice*, 3, 147-169.
- Schoenwald, S. K., & Hoagwood, K. (2001). Effectiveness, transportability, and dissemination of interventions: What matters when? *Psychiatric Services*, 52, 1190-1197.
- Schweinhart, Lawrence. (2003). *Benefits, costs, and explanation of the High/Scope Perry Preschool Program*. Retrieved November 18, 2005 from: <http://www.highscope.org/Research/PerryProject/Perry-SRCD-2003.pdf>
- Shapiro, J. (1999). *The Peacemakers Program: Effective violence prevention for early adolescent youth*. Bethesda MD: Communique: National Association of School Psychologists
- Shaw, S.R., & Braden, J.P. (1990). Race and gender bias in the administration of corporal punishment. *School Psychology Review*, 19, 378-383.
- Sheets, R.H. (1996). Urban classroom conflict: Student-teacher perception: Ethnic integrity, solidarity, and resistance. *The Urban Review*, 28, 165-183.
- Sherling, K. (1998). *National Association of School Resource Officers: Basic Course Manual*. Florida: NASRO, Inc.
- Sherman, L.W., Gottfredson, D.C., MacKenzie, D.L., Eck, J., Reuter, P., & Bushway, S.D. (Eds.) (1997). *Preventing crime: What works, what doesn't, what's promising. A report to the United States Congress* (NCJ 171676). Washington, DC: U.S. Department of Justice, Office of Justice Programs.
- Sinclair, B. (1999). *Report on state implementation of the Gun-Free Schools Act: School year 1997-98*. Rockville, MD: Westat.
- Skiba, R. J., & Peterson, R. (1999). The dark side of zero tolerance: Can punishment lead to safe schools? *Phi Delta Kappan*, 80(5), 372-382.
- Skiba, R. & Peterson, R. (2000). School discipline at a crossroads: From zero tolerance to early response. *Exceptional Children*, 66, 335-346.

- Skiba, R.J., & Rausch, M.K. (in press). Zero tolerance, suspension, and expulsion: Questions of equity and effectiveness. In C.M. Evertson & C.S. Weinstein (Eds.), *Handbook of classroom management: Research, practice, and contemporary issues*. Mahwah, NJ: Lawrence Erlbaum Associates.
- Skiba, R. J., Rausch, M.K., & Ritter, S. (2004). "Discipline is always teaching": *Alternatives to zero tolerance in Indiana's schools*. Bloomington, IN: Center for Evaluation and Education Policy. [Online]. Retrieved July 21, 2004 at <http://ceep.indiana.edu/ChildrenLeftBehind>
- Skiba, R.J., Michael, R.S., Nardo, A.C. & Peterson, R. (2002). The color of discipline: Sources of racial and gender disproportionality in school punishment. *Urban Review*, 34, 317-342.
- Skiba, R.J., Peterson, R., Miller, C., Ritter, S., & Simmons, A. (in press). The safe and responsive schools project: A school reform model for implementing best practices in violence prevention. In S. Jimerson & M. Furlong (Eds.), *Handbook of school violence and school safety: From research to practice*. Mahwah, NJ: Lawrence Erlbaum Associates.
- Skiba, R.J., Peterson, R.L., & Williams, T. (1997). Office referrals and suspension: Disciplinary intervention in middle schools. *Education and Treatment of Children*, 20, 295-316.
- Skiba, R.J., Simmons, A.B, Staudinger, L.P., Rausch, M.K., Dow, G. & Feggins, L.R. (2003). *Consistent removal: Contributions of school discipline to the school-prison pipeline*. Paper presented at the Harvard Civil Rights Conference School-to-Prison Pipeline Conference, Cambridge, MA.
- Skinner, B. F. (1953). *Science and human behavior*. New York: Free Press.
- Smith, A. C. (1998, November 14). Court casts doubt on 'zero tolerance' policy. *St. Petersburg Times*, p. 1B;
- Sowell, E., Trauner, D., Gamst, A., & Jernigan, T. (2002). Development of cortical and subcortical brain structures in childhood and adolescence: A structural MRI study. *Developmental Medicine and Child Neurology*, 44, 4-16.
- Sprague, J., Walker, H.M., Stieber, S., Simonsen, B., Nishioka, V., Wagner, L. (2001). Exploring the relationship between school discipline referrals and delinquency. *Psychology in the Schools*, 38, 197-206.
- Staniszewski, D. (2003). School bullying: Changing the problem by changing the school. *The School Psychology Review*, 32 (3) 431-444.
- State of Florida Department of Juvenile Justice. (1999, May). *Challenge Grant Program Evaluation Project Phase I: An examination of 11 alternatives to suspension and expulsion prevention programs*, Management Report #99-9. <http://www.djj.state.fl.us/rnd/>

- Stein, N. (2003) Bullying or sexual harassment? The missing discourse of rights in an era of zero tolerance. *University of Arizona Law Review*, 45, 783-799.
- Stein, N. (2001). Sexual harassment meets zero tolerance: Life in K-12 schools. In W. Ayers, B. Dohrn, & R. Ayers (Eds.), *Zero tolerance: Resisting the drive for punishment in our schools* (pp. 143-154). New York: New Press.
- Steinberg, L., & Scott, E. (2003). Less guilty by reason of adolescence. *American Psychologist*, 58, 1009-1018.
- Stepp, D. R. (1999, October 12). Cobb expels student for packing gun. *Atlanta Constitution*, p. 3C.
- Sternberg, N. (2001, April 6). Paranoid times chill fair play. *Chicago Sun-Times*, p. 3.
- Streitmatter, J. L. (1986). Ethnic/racial and gender equity in school suspensions. *High School Journal*. 69, 139-143.
- Tailer, H., & Detch, E. R. (1998). *Getting tough on kids: A look at zero tolerance*. Nashville, TN: Tennessee Office of Education Accountability, Comptroller of the Treasury.
- Taylor, M.C., & Foster, G. A. (1986). Bad boys and school suspensions: Public policy implications for black males. *Sociological Inquiry*, 56, 498-506.
- Thornton, T. N., Craft, C. A., Dahlberg, L. L., Lynch, B. S., & Baer, K. (2000). *Best practices of youth violence prevention: A sourcebook for community action*. Atlanta: Centers for Disease Control and Prevention, National Center for Injury Prevention and Control.
- Thornton, C. H., & Trent, W. (1988). School desegregation and suspension in East Baton Rouge Parish: A preliminary report. *Journal of Negro Education*, 57, 482-501.
- Thorson, S. (1996). The missing link: Students discuss school discipline. *Focus on Exceptional Children*, 29(3), 1-12.
- Tobin, T., Sugai, G., & Colvin, G. (1996). Patterns in middle school discipline records. *Journal of Emotional and Behavioral Disorders*, 4(2), 82-94.
- Tolan, P.H., Guerra, N.G., & Kendall, P.C. (1995). Prediction and prevention of antisocial behavior in children and adolescents. *Journal of Consulting and Clinical Psychology*, 63, 515-517.
- Torpy, B. (2005, May 7). Teen punished for taking Iraq cell call; Chat with Army mom violated school policy. *Atlanta Journal-Constitution*, p. 1A.
- Townsend, B. (2000). Disproportionate discipline of African American children and youth: Culturally-responsive strategies for reducing school suspensions and expulsions. *Exceptional Children*, 66, 381-391.
- U.S. Department of Education (2000). *21st annual report to congress on the implementation of the individuals with disabilities education act*. Washington, D.C.: Government Printing Office.

- U.S. Department of Education (2004). *The 2002-2003 elementary and secondary school survey: National and state projections*. Washington, D.C.: U.S. Government Printing Office. [Online]. Retrieved January 14, 2006 at <http://vistademo.beyond2020.com/ocr2002r/>
- U.S. General Accounting Office (2001). *Student discipline: Individuals with disabilities education act*. Washington, D.C.: Government Printing Office.
- Vavrus, F., & Cole, K. (2002). "I didn't do nothin'": The discursive construction of school suspension. *The Urban Review*, 34, 87-111.
- Verdugo, R. R. (2002). Race-ethnicity, social class, and zero-tolerance policies: The cultural and structural wars. *Education and Urban Society*, 35(1), 50-75.
- Villegas, A. M. & Lucas, T. (2002). Preparing culturally responsive teachers: Rethinking the curriculum. *Journal of Teacher Education*, 53, 20-32.
- Vossekuil, B., Fein, R. A., Reddy, M., Borum, R., & Modzeleski, W. (2002) *United States Secret Service Safe Schools Initiative: An interim report on the prevention of targeted violence in schools*. Washington, D.C.: U.S. Department of Education.
- Vossekuil, B., Fein, R.A., Reddy, M., Borum, R., & Modzeleski, W. (2002). *Final report and findings of the Safe Schools Initiative: Implications for the prevention of school attacks in the United States*. Washington, D.C.: United States Secret Service and United States Department of Education.
- Wagner, M., Kutash, K., Duchnowski, A.J., Epstein, M.H., & Sumi, W.C. (2005). The children and youth we serve: A national picture of the characteristics of students with emotional disturbances receiving special education. *Journal of Emotional and Behavioral Disorders*, 13, 79-96.
- Wald, J., & Losen, D. (Eds.). (2003). *Deconstructing the school-to-prison-pipeline*. Hoboken, New Jersey: John Wiley.
- Wald, J., & Losen, D.J. (2003). Defining and redirecting a school-to-prison pipeline. In J. Wald & D.J. Losen (Eds.), *New directions for youth development (no. 99; Deconstructing the school-to-prison pipeline)* (pp. 9-15). San Francisco: Jossey-Bass.
- Walker, H.M. & Shinn, M.R. (2002). Structuring school-based interventions to achieve integrated primary, secondary, and tertiary prevention goals for safe and effective schools. In M.R. Shinn, H.M. Walker, & G. Stoner (Eds.), *Interventions for academic and behavior problems II: Preventive and remedial approaches* (pp. 1-26). Bethesda, MD: National Association of School Psychologists.
- Walker, H.M., Horner, R.H., Sugai, G., Bullis, M., Sprague, J.R., Bricker, D., Kaufman, M.J. (1996). Integrated approaches to preventing antisocial behavior patterns among school-age children and youth. *Journal of Emotional and Behavioral Disorders*, 4 (4), 194-209.
- Wang, M.C., Haertel, G.D., & Walberg, H.J. (1997). Learning influences. In H.J. Walberg & G.D. Haertel (Eds.), *Psychology and educational practice* (pp. 199-211). Berkeley: McCutchan.

- Wehlage, G. G., & Rutter, R. A. (1986). Dropping out: How much do schools contribute to the problem? *Teachers College Record*, 87, 374-393.
- Weissman, M., Wolf, E., Sowards, K., Abate, D., Weinburg, P., Marthia, C. (2005, April). School yard or prison yard: Improving outcomes for marginalized youth. *Justice Strategies Working Paper*. Syracuse, NY: Center for Community Alternatives.
- Weinstein, C.S., Tomlinson-Clarke, S. & Curran, M. (2004). Toward a conception of culturally responsive classroom management. *Journal of Teacher Education*, 55, 25-38.
- Wiseman, R. (2003). Wider worlds of student bullying. *Education Digest*, 68; 4-11.
- Wu, S.C., Pink, W.T., Crain, R.L., & Moles, O. (1982). Student suspension: A critical reappraisal. *The Urban Review*, 14, 245-303.
- Yell, M.L. (2006). *The law and special education (2nd ed.)*. Upper Saddle River, NJ: Merrill/Prentice Hall.
- Yin, R.K. (2002). *Case study research: Design and methods* (3rd edition). Thousand Oaks, CA: Sage Publications.
- Zero sense. (1998, October 31). *St. Petersburg Times*, p. 16A.
- Zimring, F. (1998). *American youth violence*. Oxford, England: Oxford University Press.
- Zins, J.E., Weissberg, R.P., Wang, M.C., & Walberg, H.J. (Eds.) (2004). *Building academic success on social and emotional learning: What does the research say?* New York, NY: Teachers College Press.
- Zirkel, P.A. (1998). The right stuff. *Phi Delta Kappan*, 79(6), 475-476.

Footnotes

¹ Indeed, it is possible that this earliest zero tolerance incident was a direct precursor to Reagan Administration adoption of zero tolerance policy. First Lady Nancy Reagan appeared aboard a Navy vessel off the coast of Virginia with the Secretary of the Navy to herald the Navy's new zero tolerance policy (Radcliffe, 1985). Shortly thereafter, President Reagan began using the term for drug enforcement issues (Havemann, 1986).

² It is important to note that "broken window theory" as promulgated by Kelling and Wilson did not advocate for zero tolerance policies per se. Rather the theory supported paying close attention to small details in policing before they escalate into critical problems; the theory was especially supportive of the notion of community policing. The link between broken window theory and zero tolerance was apparently developed by Mayor Rudolph Guiliani in his promotion of zero tolerance policing practices in New York City. See Miller (2001) for a description of the development of the theory and more recent evidence concerning the theory.

³ The Supreme Court in *Honig v. Doe* (1988) found that federal law (i.e., Individuals with Disabilities Education Act) explicitly removed the power of schools to permanently remove students with disabilities for disciplinary purposes and stop providing services consistent with the goals of the students Individual Education Plan (IEP). Specific to suspension, in general schools may suspend a student with disability, but in general not longer than one 10 day period or multiple suspensions summing to 10 days (unless removals are based on separate incidents of misconduct). In the rare cases where a student is suspended longer than 10 days, services consistent with the student's IEP must be provided beginning on the 11th day. A student with a disability may be expelled from school, but only if the behavior is not found to be a result of the student's disabling condition (manifestation determination), or not due to inappropriate administration of the students IEP. If the student's behavior leading to expulsion is not found to be due to these reasons, the student may be expelled, but if the expulsion is longer than 10 days, services consistent with the students IEP must still be delivered in whatever setting the student is in. For a fuller discussion see Cambron-McCabe, McCarthy, & Thomas (2004) or Yell (2006).

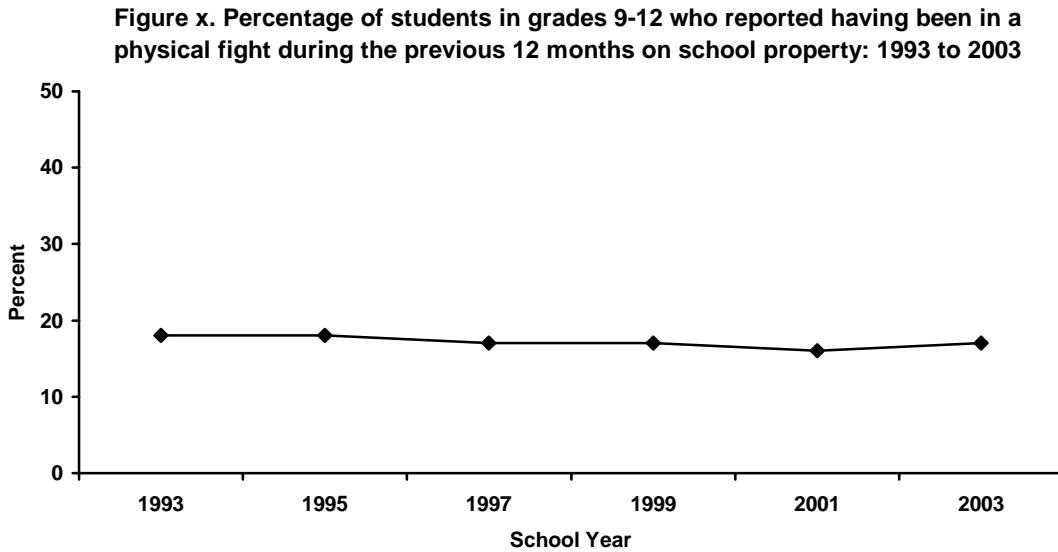
⁴ In contrast, the 21st Annual Report to Congress on the Implementation of the Individuals with Disabilities Education Act (U.S. Department of Education, 2000) cited a 1994 Office for Civil Rights (OCR) report finding no evidence of disproportionality in discipline for students with disabilities. This is the only citation this report examined that failed to report evidence of disciplinary disproportionality for students with disabilities. Given that the 1994 OCR report is currently difficult to access, it is impossible to determine on what evidence the assertion of no disproportionality was based. All more recent reports exploring rates of suspension for students with disabilities have found evidence of disproportionality in those forms of discipline for special education students.

Table 1. Percent of Referrals Resulting in Out-of-School Suspensions across Nineteen Middle Schools in One Urban District ^a

School	Percent of Incidents Suspended
1	11.3%
2	13.9%
3	16.5%
4	17.0%
5	17.2%
6	23.3%
7	26.1%
8	30.3%
9	32.2%
10	32.9%
11	34.0%
12	35.0%
13	37.9%
14	38.4%
15	58.9%
16	86.5%

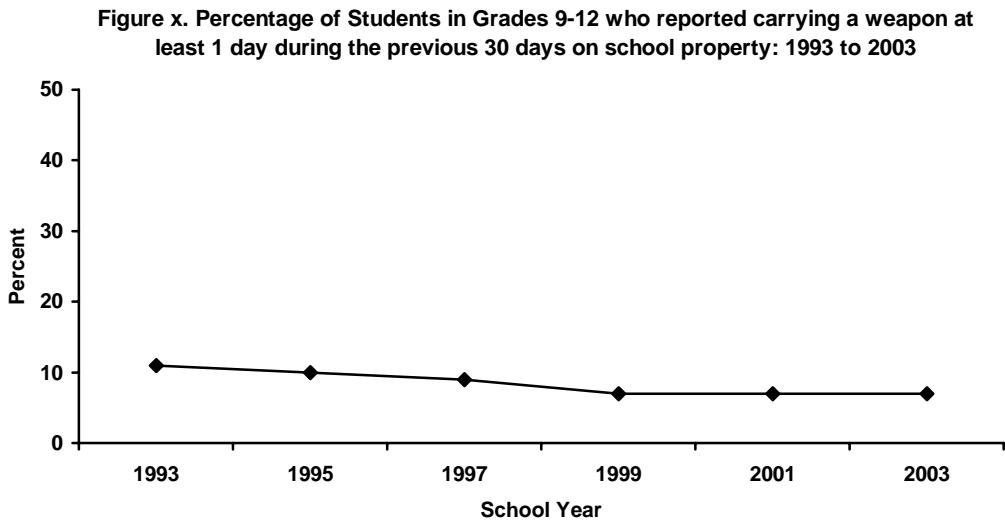
^a Results for all middle schools in one urban school district in the midwest not including alternative or special programs, as reported in Skiba et al. (1997). The right column represents the number of referrals divided by the number of suspensions and might be viewed as an index of the likelihood of suspension given a referral to the office.

Figure 1a. Percentage of students in grades 9-12 who reported having been in a physical fight during the previous 12 months on school property: 1993 to 2003



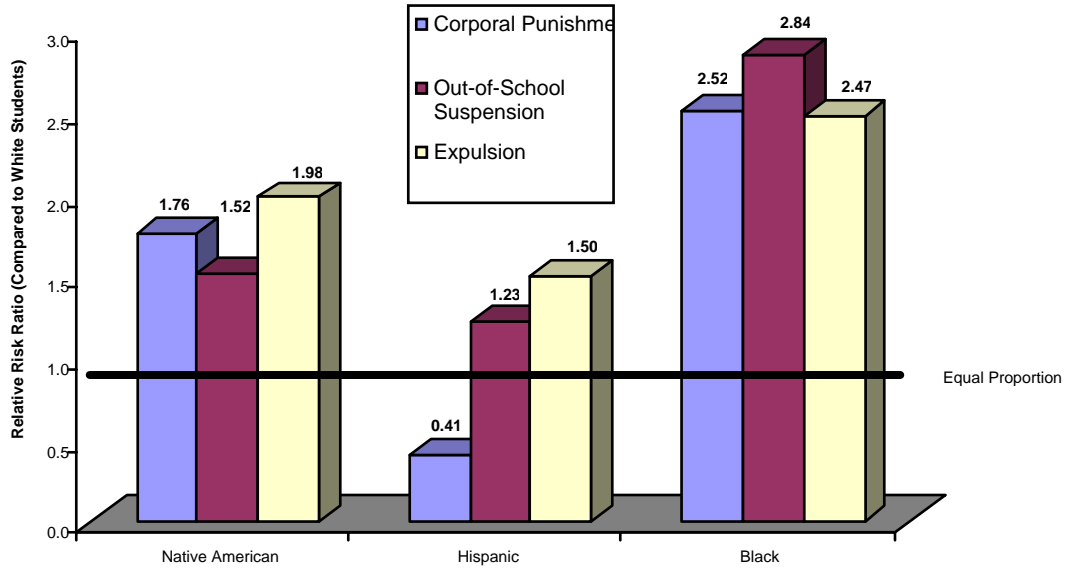
Note: Reprinted from DeVoe et al. (2005). Indicators of school crime and safety, U.S. Departments of Education and Justice. Washington, D.C. The data are drawn from a nationally representative sample of students in grades 9-12, from the Youth Risk Behavior Survey of the Centers for Disease Control and Prevention.

Figure 1b. Percentage of students in Grades 9-12 who reported carrying a weapon at least 1 day during the previous 30 days on school property: 1993 to 2003



Note: Figure reprinted from DeVoe et al. (2005). Indicators of school crime and safety, U.S. Departments of Education and Justice. Washington, D.C.

Figure 2. Relative risk ratios of students experiencing select school discipline indicators by race: 2003 School Year



Note: Data are national estimates from the U.S. Department of Education (2004), Office for Civil Rights 2002-2003 Elementary and Secondary School Survey.

The relative risk ratio is the ratio of the target group’s risk index (percent of group subject to the consequence) compared to the risk ratio on the same measure for White students. A risk ratio of 1.00 indicates exact proportionality. Ratios above 1.00 indicate over-representation in the selected indicator, while ratios under 1.00 indicate under-representation in that indicator.

APPENDIX A
CURRENT PROVISIONS OF THE GUN-FREE SCHOOLS ACT

TITLE 20. EDUCATION
CHAPTER 70. STRENGTHENING AND IMPROVEMENT OF ELEMENTARY AND SECONDARY
SCHOOLS
21ST CENTURY SCHOOLS
SAFE AND DRUG-FREE SCHOOLS AND COMMUNITIES
GUN POSSESSION

20 USCS § 7151 (2005)

§ 7151. Gun-free requirements

(a) Short title. This subpart [this section] may be cited as the "**Gun-Free Schools Act**".

(b) Requirements.

(1) In general. Each State receiving Federal funds under any title of this Act [20 USCS §§ 6301 et seq.] shall have in effect a State law requiring local educational agencies to expel from school for a period of not less than 1 year a student who is determined to have brought a firearm to a school, or to have possessed a firearm at a school, under the jurisdiction of local educational agencies in that State, except that such State law shall allow the chief administering officer of a local educational agency to modify such expulsion requirement for a student on a case-by-case basis if such modification is in writing.

(2) Construction. Nothing in this subpart [this section] shall be construed to prevent a State from allowing a local educational agency that has expelled a student from such a student's regular school setting from providing educational services to such student in an alternative setting.

(3) Definition. For the purpose of this section, the term "firearm" has the same meaning given such term in section 921(a) of title 18, United States Code.

(c) Special rule. The provisions of this section shall be construed in a manner consistent with the Individuals with Disabilities Education Act [20 USCS §§ 1400 et seq.].

(d) Report to State. Each local educational agency requesting assistance from the State educational agency that is to be provided from funds made available to the State under any title of this Act [20 USCS §§ 6301 et seq.] shall provide to the State, in the application requesting such assistance--

(1) an assurance that such local educational agency is in compliance with the State law required by subsection (b); and

(2) a description of the circumstances surrounding any expulsions imposed under the State law required by subsection (b), including--

(A) the name of the school concerned;

(B) the number of students expelled from such school; and

(C) the type of firearms concerned.

(e) Reporting. Each State shall report the information described in subsection (d) to the Secretary on an annual basis.

(f) Definition. For the purpose of subsection (d), the term "school" means any setting that is under the control and supervision of the local educational agency for the purpose of student activities approved and authorized by the local educational agency.

(g) Exception. Nothing in this section shall apply to a firearm that is lawfully stored inside a locked vehicle on school property, or if it is for activities approved and authorized by the local

educational agency and the local educational agency adopts appropriate safeguards to ensure student safety.

(h) Policy regarding criminal justice system referral.

(1) In general. No funds shall be made available under any title of this Act [20 USCS §§ 6301 et seq.] to any local educational agency unless such agency has a policy requiring referral to the criminal justice or juvenile delinquency system of any student who brings a firearm or weapon to a school served by such agency.

(2) Definition. For the purpose of this subsection, the term "school" has the same meaning given to such term by section 921(a) of title 18, United States Code.

Taken from Lexis-Nexus Academic (2006). United States Code Service.