

Full Length Research Paper

An examination of the impact of safe school funding on the incidences of violent behaviors in the school environment of a rural and urban school district

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Received 6 May, 2012, Accepted 14 July, 2014

The purpose of this study was to determine the impact of additional revenues for safe school programs and services on the incidences of violent behaviors in the educational environment of a rural and urban school retrieving data from the fourth and final calculation of the Florida Education Finance Program (FEFP) for the 2001 to 2002, 2002 to 2003, 2003 to 2004, school years through the Florida Department of Education (FLDOE). The data for the independent variables were abstracted from the Division of K-12 Public Schools. The dependent variable and primary unit of analysis in the study were the mean revenues per pupil for each of the two school districts under examination. The variables examined were the district crime rates for various categories of offense (personal property; harassment; alcohol; tobacco and other drugs; fighting; disorderly conduct; and weapons). This study used descriptive statistics to determine the impact of additional monies on two south Florida school districts in an urban and rural school district. Comparisons were made to determine the effectiveness of state funding to combat violent behaviors in these schools. From this analysis, it was concluded that while the report of specific violent activities decreased; others increased based on the funding received; while still, others had no appreciable difference. An additional finding was that money from the FEFP did not appear to cure the problem of school violence and more attention should be placed on creating strategies and building community support systems for support of schools, parents and students.

Key words: violent behaviors, School Safety and Security, rural and urban school district.

INTRODUCTION

School officials have long used *Zero Tolerance* policies, which have pre-determined disciplinary consequences for students who commit specific offenses (notwith-standing individual circumstances), to counter the proliferation of

drugs and illegal weapons which have become a part of school culture (Underwood and Verstegen 1990). In 1990, the United States Congress passed the *Gun-Free School Zones Act* which made it "unlawful for any individual

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knowingly to possess a firearm at a place that the individual knows, or has reasonable cause to believe, is in a school zone" (18 U.S.C. §922(q)(1)(A)). Two years after the implementation of the statute, the constitutionality of the law is challenged in *U.S. v. Lopez* (1995) in which the Supreme Court found the Act to be beyond the scope of authority of Congress under the Commerce Clause of the United States Constitution. In view of the *Lopez* decision, in 1994 Congress passed the *Gun-Free Schools Act*, which authorized any school district receiving *Elementary and Secondary Education Act* (ESEA) dollars to establish a policy, which called for a mandatory one-year expulsion for any student carrying a firearm on school property (20 U.S.C. § 8921). Legal scholars have often noted that one sanction does not fit all violation policies creating a criminal justice system, which provides little or no constitutional protection for all, regardless of the nature of the offense.

However, these same policies have historically demonstrated a disparate impact upon minority children who have been disproportionately suspended or expelled from their individual learning communities (Stover, 2000). Nevertheless, over the last decade the vast majority of states and their governing authorities have embraced *Zero Tolerance* policies for their schools in an effort to provide a secure and controlled learning environment for its children (Stover, 2000; Russo, 2001). To address the problem of school violence, extra resources have been allocated from Florida to school districts to support programs aimed at decreasing incidences and the presence of school violence.

Extra costs for educational programs were historically related to legitimate differences based on regional characteristics of school districts, type of program in which a student enrolled, or characteristics of student populations such as the learning disabled, students with English as a second language, and the poor (Berne and Stiefel, 1999; Addonizio 2003).

Florida established the Safe School Program aimed at providing funds to primarily large urban districts to combat the problem of school violence. Authorized initially by the *Florida Safe Schools Act* in 1986, the Florida legislature appropriates an annual amount for distribution to all 67 school districts. Each district is guaranteed a minimum of \$30,000.00, from the residual appropriation, 67% is allocated to each based on its latest Florida Crime Index, provided by the Florida Department of Law Enforcement (FDLE); and 33% is allocated to each district based on each its share of the state's total unweighted student enrollment. More specifically, the program is established to support activities for students that include:

1. After school programs for middle school students,
2. Improvement to enhance the learning environment which includes the implementation of conflict resolution,

3. Alternative school programs for adjudicated youth, and
4. Other programs and services designed to make the schools safe places to learn (Florida Department of Education, 2003).

Over the years, it has been assumed that money can lessen the incidents of violent behaviors in school environments. The State of Florida allocates safe school dollars to all the 67 school districts to support safe school programs. Florida has provided resources to its learning communities to support the development of preventive strategies and interventions to counteract the swell in school hostility. Through the Florida Education Finance Program (FEFP), the Florida Legislature allocates Safe School dollars to the 67 school districts to create and maintain safe school environments. However, there has been little discussion or research regarding the impact of the distribution of school resources for students across the State of Florida violent behaviors in schools. Therefore, this study examines the impact of additional revenues for safe school programs and services on the incidences of campus violent and criminal behaviors in the two district settings: rural and urban.

The State Florida

The Florida Department of Education releases the School Environment Safety Incident Report (SESIR) that assessed "school safety" in the State of Florida. The data on school and violent behaviors contains information on 21 incidents of violent acts, and behaviors, disruptions and discipline. The areas focused in the SESIR included:

1. Time of incidents;
2. Persons involved;
3. Location of incidents;
4. Violent acts against persons;
5. Alcohol, tobacco, or other drugs;
6. Property;
7. Harassment;
8. Other non-violent incidents;
9. Fighting;
10. Disorderly conduct; and
11. Weapons possession (SESIR, 2004).

The school population in 2000 to 2001 is 2,556,615; the school population in 2001 to 2002 is 2,607,593; and the school population in 2002 to 2003 is 2,650,293. The incidences used as data in this investigation occurred in the school years of 2000 to 2001, 2001 to 2002 and 2003 to 2004. In the 2000 to 2001 school year, 96.11% of school incidents occurred during school hours compared to the 2002 to 2003 school year were 96.76% (SESIR, 2004). In all three years under study, students instead non-students (those individuals who are not in the school system) yielded the highest percentage (93.86% in 2002 to 2003) of school incidents. School incidents

often time occurred on school grounds with 96.15% in the 2001 to 2002 school year (SESIR, 2004). With regard to actual attacks, 11,746 students were victims of battery in 2000 to 2001 compared to 10,305 in 2002 to 2003 school year (SESIR, 2004). In 2001 to 2002, 11,121 students were victims of battery (SESIR, 2004). In terms of property damage, SESIR (2004) reported that vandalism (4,848 in 2000 to 2001) and Larceny/theft (4,797 in 2003 to 2004) occurred more often (SESIR, 2004). Finally, weapons possession is highest in 2000 to 2001 where only 3,596 students incidents were reported compared to 3,360 students incident reported (SESIR, 2004). Lastly, in 2001 under Section 1006.07(6) of the *Florida Statutes* or *Safe Passage Act*, required all 67 school districts to annually make a self-assessment of their safety and security best practices, operations. The self-assessments from the 67 districts are submitted to the Department of Education, where the Office of Program Policy Analysis and Government Accountability (OPPAGA) determine whether or not the districts met each best practice. The school districts that were unable to accomplish safety and security goals would offer strategies and actions to meet the best safety and security practices (OPPAGA, 2004).

The OPPAGA have the responsibility of developing and improving the safety and security best practices assessment instrument. The 29 safety and security best practices involved seven program goal areas which included the following:

- (a) Effectiveness and efficiency.
- (b) Safety planning.
- (c) Discipline practices and code of student conduct.
- (d) School climate and community outreach.
- (e) Safety programs and curricula.
- (f) Facilities and equipment, and
- (g) Transportation.

In a recent report released by OPPAGA (2004), the report revealed the following:

1. Ninety (90) percent of overall districts reported were in compliance of the overall best practices goals;
2. Twenty-nine (29) percent of the districts were not successful in providing the appropriate safety and security equipment to protect property and official records;
3. Twenty (20) percent of the districts were not successful in meeting best practices for safety and security programs;
4. Twenty (20) percent of districts reported not developing better emergency response; and
5. Eighteen (18) percent of districts reported an inappropriate system in place to minimize the risk of students with suicidal behaviors or tendencies.

Safe School Data: Florida

The total of school disciplinary and violent incidence is

the State of Florida for the years under consideration are summarized in Table 1. SESIR incident totals in the areas of Violent Acts Against Person, Alcohol and Tobacco, or Other Drugs, Property, Harassment, Other Non-Violent Incidents, Fighting, Disorderly Conduct, and Weapons Possession for the years under consideration are listed in Table 2. At the same time, Florida is making expenditures to abate violence in the schools. In the 1999 to 2000 school years, total safe school appropriations were the lowest with \$70,350,000.00. From the 2000 to 2001 to 2003 to 2004, the appropriations were the same with \$75,350,000.00 being allocated in each year (Florida Department of Education et al). In terms of allocations to the 67 school districts, only 2000 to 2001 school years received the most funding with \$75,199,219.00 (Florida Department of Education et al). In the 1999 to 2000 school years, safe school funding is the lowest with \$70,242,326.00. Expenditures for Safe Schools were the highest in the 2000 to 2001 school years (Florida Department of Education, 2004). Safety/Security Program activities received the highest percentage of funding in 2001 to 2002, 2002 to 2003, and 2003 to 2004 school years (Florida Department of Education, 2004). More specifically, in the 2002 to 2003 school years, 86% of the safe school funding went towards Safety/Security Program (Florida Department of Education, 2004). Six (6) percent, the lowest percentage of safe school funding, went towards Alternative Placement for Adjudicated Youth in the 2002 to 2003 school years (Florida Department of Education, 2004).

In 2003 to 2004, thirteen Florida school districts used a portion of their funding for after-school programs, which accounted for 7% of the total appropriated dollars expended (Florida Department of Education, 2004). Only four school districts (DeSoto, Duval, Palm Beach and Taylor) spent at least 25% of their total appropriation dollars on after school programming (Florida Department of Education, 2004). In 2003 to 2004 Duval (\$1,478,597.09) and Palm Beach (\$1,657,252.00) School districts spent the most on after school programs (Florida Department of Education, 2004). The alternative placement programs for adjudicated youth represented the second largest category in Safe Schools Appropriations. In 2003 to 2004, Safe School Appropriations supported twelve school districts in a wide range of on- and off-campus alternative programs (Florida Department of Education, 2004).

The Broward county school district spent \$3,025,276.00, the most for on and off campus alternative programs combined. In all three years from 2001 to 2004, Broward County, served the most adjudicated students (Florida Department of Education, 2004). The funding of the School and Safety Security Program Activities is a priority in the State of Florida. Most of the money spent in the school districts support school safety and security program initiatives (Florida Department of Education,

Table 1. SESIR incident summaries.

| State of Florida | 2001-2002 | | 2002-2003 | | 2003-2004 | |
|---|------------------|-----------------|------------------|-----------------|------------------|-----------------|
| Time of Incidents | % | Raw Data | % | Raw Data | % | Raw Data |
| During School Hours | 96.46 | 116,114 | 96.46 | 108,948 | 97.40 | 110,680 |
| Not During School Hours | 2.53 | 3,048 | 2.03 | 2,283 | 1.80 | 2,045 |
| Unknown | 1.01 | 1,211 | 1.21 | 1,365 | 0.80 | 909 |
| Total Number of Incidents | | 120,373 | | 112,596 | | 113,634 |
| Persons Involved | | | | | | |
| Students | 93.45 | 112,493 | 92.86 | 104,552 | 93.84 | 106,631 |
| Non-Students | 1.39 | 1,673 | 2.09 | 2,353 | 1.10 | 1,246 |
| Both Students and Non-Students | 1.36 | 1,643 | 1.78 | 2,008 | 1.40 | 1,589 |
| Unknown | 3.79 | 4,564 | 3.27 | 3,683 | 3.67 | 4,168 |
| Total Number of Incidents | | 120,373 | | 112,596 | | 113,634 |
| Location of Incidents | | | | | | |
| School Grounds | 96.15 | 115,736 | 95.91 | 107,994 | 96.50 | 109,654 |
| School Sponsored Activity | 0.80 | 969 | 0.99 | 1,112 | 0.75 | 847 |
| School Sponsored Transportation | 3.05 | 3,668 | 3.10 | 3,490 | 2.76 | 3,133 |
| Total Number of Incidents | | 120,373 | | 112,596 | | 113,634 |
| Number of Schools Reporting No SESIR Incidents^a | | | | | | |
| Elementary ^b | 23.44 | 391 | 24.08 | 400 | 20.15 | 329 |
| Middle ^c | 1.95 | 9 | 0.86 | 4 | 0.63 | 3 |
| High ^d | 8.17 | 33 | 7.69 | 32 | 5.88 | 25 |
| Total | 20.93 | 18 | 16.44 | 12 | 17.65 | 12 |
| Charter | 72.27 | 159 | 61.64 | 143 | 51.20 | 128 |
| Total Number of Schools | | 610 | | 591 | | 497 |

^aSome schools may have no SESIR incidents.

^bElementary includes kindergarten through grade five.

^cMiddle includes grades six through eight.

^dHigh includes grades nine through twelve.

^eCombination includes schools combining elementary, middle, or high groupings or overlap grade levels, e.g., K-6, 6-12, or K-12.

Please note that schools report SESIR incidents by incidents, not by individual student

2004). Table 2 illustrates that in 2003 to 2004, 97% of school districts spent Safe Schools Appropriation funds on school safety and security programs (Florida Department of Education, 2004). Approximately, 69% of the school districts spent 100% (\$30.1 million) see table of their Safe Schools Appropriation Funds on Safe and Security programs (Florida Department of Education, 2004).

The majority of the Florida school districts spent more on School Resource Officers from 2000 to 2004 (Florida Department of Education, 2004). Very few districts funded metal detectors, Teen Court, guidance services, trained dogs to search for drugs/gun, and student crime watch activities. In 2003 to 2004, Dade county school district spent the most of its allocated funds in the area of safety and security, \$12,694,218.00 (Florida Department of Education, 2004). In the area of Critical Safety Issues, it is reported in 2003 to 2004 three categories received top

priority in these districts—disrespect toward teachers, controlling aggressive student behavior, and controlling access to campus (Florida Department of Education, 2004). Lack of security equipment and controlling drugson campus were not viewed as priority. In summary, from 2000 to 2006 Safe Schools Appropriations has remained at \$75,350,000.00. School districts carried forward approximately \$7.8 million funding appropriation to assist, support, and strengthen school safety efforts (Florida Department of Education, 2004). At the end of the 2003-2004, \$11.3 million went unspent in the school districts, which is rolled forward (Florida Department of Education, 2004). In 2003 to 2004, most districts expended the majority of their Safe Schools Appropriations funds on After School programs (\$5.2 million), Alternative Placement Programs (\$5.2 million), and Safety and Security (\$6.2 million) to make Florida school districts safe (Florida

Table 2. SESIR totals.

| State of Florida | 2001-2002 | | 2002-2003 | | 2003-2004 | |
|----------------------------------|--------------|-------------|--------------|-------------|--------------|-------------|
| Student Population | 2,607,593 | | 2,650,293 | | 2,705,674 | |
| | Per 1,000 | Raw Data | Per 1,000 | Raw Data | Per 1,000 | Raw Data |
| Violent Acts Against Persons | 4.43 | 11,549 | 4.05 | 10,732 | 3.68 | 9,969 |
| Homicide | 0.00 | 0 | 0.00 | 3 | 0.00 | 5 |
| Sexual Battery | 0.05 | 139 | 0.05 | 128 | 0.05 | 123 |
| Robbery | 0.11 | 277 | 0.11 | 283 | 0.09 | 249 |
| Battery | 4.26 | 11,121 | 3.89 | 10,305 | 3.54 | 9,585 |
| Kidnapping | 0.00 | 12 | 0.00 | 13 | 0.00 | 7 |
| Alcohol, Tobacco, or Other Drugs | 6.08 | 15,843 | 5.59 | 14,804 | 5.71 | 15,452 |
| Drugs | 2.31 | 6,032 | 2.19 | 5,798 | 2.40 | 6,505 |
| Alcohol | 0.42 | 1,086 | 0.42 | 1,112 | 0.48 | 1,300 |
| Tobacco | 3.35 | 8,725 | 2.98 | 7,894 | 2.83 | 7,647 |
| Breaking/Entering | 0.48 | 1,241 | 0.49 | 1,290 | 0.39 | 1,064 |
| Larceny/Theft | 1.78 | 4,630 | 1.81 | 4,797 | 1.75 | 4,747 |
| Motor Vehicle Theft | 0.03 | 81 | 0.04 | 97 | 0.04 | 110 |
| Arson | 0.08 | 210 | 0.09 | 228 | 0.08 | 214 |
| Vandalism | 1.59 | 4,146 | 1.54 | 4,069 | 1.32 | 3,571 |
| Harassment | 4.87 | 12,710 | 3.98 | 10,548 | 3.75 | 10,146 |
| Threat/Intimidation | 3.70 | 9,646 | 3.06 | 8,120 | 2.80 | 7,582 |
| Sexual Harassment | 1.18 | 3,064 | 0.92 | 2,428 | 0.95 | 2,564 |
| Other Non-Violent Incidents | 2.73 | 7,123 | 2.42 | 6,421 | 2.57 | 6,944 |
| Sexual Offense | 0.64 | 1,656 | 0.62 | 1,650 | 0.61 | 1,646 |
| Trespassing | 0.44 | 1,136 | 0.44 | 1,168 | 0.46 | 1,247 |
| Other Major | 1.66 | 4,331 | 1.36 | 3,603 | 1.50 | 4,051 |
| Fighting | 20.35 | 53,056 | 19.02 | 50,408 | 18.86 | 51,032 |
| Disorderly Conduct | 2.45 | 6,382 | 2.20 | 5,842 | 2.22 | 6,014 |
| Weapons Possessions | 1.30 | 3,402 | 1.27 | 3,360 | 1.62 | 4,371 |
| Total | 46.16 | 120,373 | 42.48 | 112,596 | 42.00 | 113,634 |

Department of Education, 2004).

Conceptual framework

This study examines the districts' violent behaviors within schools as it relates to the infusion of resources and the increase or decrease of violent behaviors on-campus. Figure 1 below illustrates the Conceptual Framework by displaying the sequence of activities. The issue to be answered is whether Safe School Program Resources have an impact on violent behaviors on campus.

METHODOLOGY

Research questions and hypotheses

This research examined the allocation of money in a rural and urban county in the State of Florida—Glades and Miami-Dade. The

research question explored was what are the effects of the allocation of additional revenues from the Safe School Programs on violent behaviors in schools in the counties under consideration?

The research hypotheses are:

1. HO₁: There is a positive relationship between the implementation of strategies and the incidences of violent behaviors in a rural and urban school district;
2. HO₂: There is a significant difference between incidences of violent behaviors in a rural area and urban school district; and
3. HO₃: The allocation (decreases and increases) of monies to a rural and urban school district results in different effects on the school environment.

Research design

This study is Ex Post Facto study utilizing information from the Florida Department of Education are their website. Therefore, the researcher analyzed external data from the agency to draw conclusions, trends and patterns. These external documents were

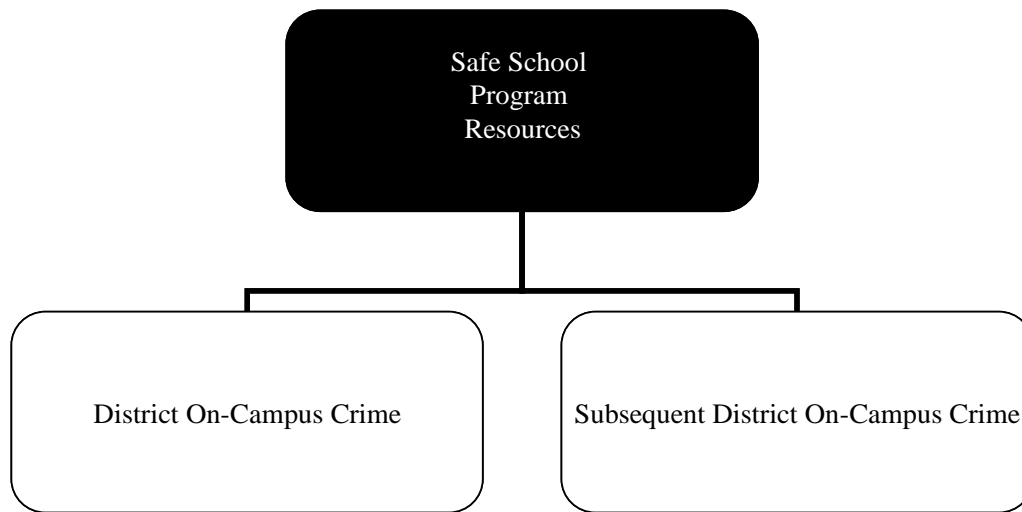


Figure 1. Conceptual framework analysis model.

indicators of the agency's fiscal support of Safe School programs, as well as their monitoring mechanisms. The current project utilizes an analysis of district on-campus violent and criminal behavior rates and Safe School Program funding, comparing an urban and a rural district. It examined the district's violent and criminal behavioral rates as they relate to financial resources.

Random sampling

The theoretical framework of random sampling as a precursor to statistical analysis is as follows. The population is the group of interest to the researcher and is the group to which the results of the study intend to be generalized. It is from this target population that the sample is drawn. The aim of random sampling is to create a sample, which represents the population from which it is drawn. In this study the population is defined as the 67 counties that comprise the State of Florida. The desired sample is two counties. The 67 counties were divided into urban and rural counties as per the definitions provided by the US Census Bureau. Following the stratification into urban and rural counties, Miami-Dade County (urban) and Glades County (rural) were randomly selected for analysis.

Statistical analysis

This study employed descriptive statistics to compare and contrast the difference in funding and violent behaviors between two county school districts, Miami-Dade County (urban) and Glades County (rural). In addition, series of paired samples *t*-tests were utilized to compare groups for significant difference in Hypothesis₂. In this instance, county funding is paired by year, county paired percent change in offenses and county as well as year paired offences in each year of analysis. Furthermore, the Pearson correlation coefficient was calculated to identify if a significant relationship existed between variables. For this study, this correlation coefficient examined offenses committed in (a) 2001 to 2002 and (b) 2003 to 2004 as compared across counties. A *z* test for difference in proportion is used to address HO₃. The data were collected from external documents created by the Florida Department of Education.

The information derived from the data is useful in understanding FLDOE's Safe Schools Programs in the districts under investigation, as well as the agency's perspective of the programs' overall effectiveness in Miami-Dade and Glades counties. Since the information derived from were already classified and summarized by FLDOE, it is evaluated by the researcher to discover trends and patterns between the disbursement of monies and the decrease or increase in violent behaviors in the districts under consideration to draw conclusions about the program's overall effectiveness. Of critical importance were the trends in funding allocation and violent behaviors from the 2001 to 2002 academic year to the 2003 to 2004 academic year. In order to mitigate the large discrepancy in populations between the two districts, changes were reported in terms of percent increase or decrease from the first year in question to the third.

Reliability and validity

Reliability refers to whether a particular technique applied repeatedly to the same object will yield the same or similar outcomes each time (Salkind, 2001). Researchers generally would prefer a measurement instrument to have a reliability of .80% or above, which would give some assurance of acceptable stability. Validity refers to whether an empirical measurement reflects what it is intended to measure. In reviewing the self-survey evaluation, there is no mention of how reliable and valid the instrument is in gathering information. This research uses surveys and reports as the foundational data of this research. Surveys can be useful in understanding the broad picture under study, efficient in the collection of data, and in some instances reveal accurate results (Salkind, 2001). However, to extrapolate or interpret information from a self-survey evaluation report without factoring in the effect of interviewer bias would lessen the meaning of the information gathered.

FINDINGS

The analysis of the data is presented in this section. The

first part of this section is a presentation of research hypotheses.

The second part presents the statistical analysis as well as the description of the overall status of safety programs in the form of self-assessment reports. The final part examines the self-assessment reports for Miami-Dade and Glades County under the *School Safety and Security Best Practices with Their Associated Indicators* for 2003 to 2004.

Hypothesis results

The research question explored in this study was what is the impact of the allocation of additional revenues from the Safe School Programs on violent and criminal behaviors in schools? The findings concerning each hypothesis are:

HO₁: There is a positive relationship between the implementation of strategies and the incidences of violent behaviors in a rural and urban school district.

The Efficiency and Effectiveness and Safety Programs and Curricula sections of the self-assessment of the *School Safety and Security Best Practices with Their Assorted Indicators* revealed that Miami-Dade County School district met the criteria for successful implementation and operation of programs aimed at promoting safe school environments through substance abuse, anti-violence and social programs. Furthermore, the results from the Miami-Dade County school districts suggested an overall increase in total incidents; however, there were no supporting documents, which described these programs or their strategies or interventions. According to the Efficiency and Effectiveness and Safety Programs and Curricula sections of the self assessment of the *School Safety and Security Best Practices With Their Assorted Indicators* for the Glades County school district, there were no procedures in place to assess performance of programs in terms of efficiency and cost, nor did the school district promote preventative educational programs important in improving school culture and climate. In addition, the school district did not have the educational components in place to teach each grade level violence prevention, conflict resolution, and decision-making skills. The results from the Glades County school district revealed that many of the incident categories experienced a significant increase in percentage changes when funding is decreased.

HO₂: There is a significant difference between incidences of violent behaviors in a rural area and urban school district.

A series of paired samples *t*-tests were utilized to

compare groups for significant differences. In this instance, county funding is paired by year, county paired percent change in offenses and county as well as year paired offences in each year of analysis.

Furthermore, the Pearson correlation coefficient was calculated to identify if a significant relationship existed between variables. For this study, this correlation coefficient examined offenses committed in (a) 2001 to 2002, and (b) 2003 to 2004, as compared across counties. Paired samples *t*-tests resulted in no significant difference being found. The following relationships were examined:

- (a) Annual funding in Miami-Dade county and Glades county paired by academic year,
- (b) Percent change in offences paired by county,
- (c) Offences in the 2001 to 2002 academic year paired by county,
- (d) Offences in the 2003 to 2004 academic year paired by county,
- (e) Offense in Glades county paired by academic year, and
- (f) Offenses in Miami-Dade county paired by academic year.

The Pearson correlation coefficient calculations yielded two statistically significant results. When the offences committed in the 2001 to 2002 academic year were correlated at the county level, a .818 correlation is found to exist between Miami-Dade and Glades counties ($p = .013$). This is statistically significant at the .05 level. Furthermore, when the offences committed in the 2003 to 2004 academic year were correlated at the county level, a .883 correlation is found to exist between Miami-Dade and Glades counties ($p = .004$). This is statistically significant at the .01 level.

HO₃: The allocation (decreases and increases) of monies to a rural and urban school district results in different effects on the school environment.

A *z* test for difference in proportion is used to address *HO₃*. The *z* test formula is the following where p_2 is the proportion of behaviors after the resource reduction and p_1 is the proportion before the change. The student population, before and after the resource reduction is denoted by n_1 and n_2 , respectively:

$$p_2 - p_1 Z = \sqrt{P(1-P)(1/n_1 + 1/n_2)}$$

The results of the analysis of data illustrated that four out of the nine categories (property, harassment, other non-violent incidents and disorderly) conduct were significant. Total incidents decrease; however, it is not significant. A significant decrease in property crimes is observed after the resource reduction ($p = .05$). Harassment decreased

Table 3. Changes in funding from 2001 to 2002 to 2003 to 2004.

| County | 2001-2002 | 2003-2004 | Percent (%) Change |
|------------|-----------------|-----------------|--------------------|
| Glades | \$ 61,602.00 | \$ 57,411.00 | -7% |
| Miami-Dade | \$13,802,205.00 | \$12,693,067.00 | -8% |

and is significant at $p < .001$. Other non-violent incidents increased and are significant at $p < .001$. Reported disorderly conduct is significantly less after the resource reduction ($p = .05$). The results from Glades County revealed that total incidents increased and are significant at $p < .01$. Harassment incidents increased and are significant at $p < .02$. There is a significant decrease in fighting incidents ($p = .04$). Weapons crimes increased and is significant at $p = .02$. Total incidents and resources decreased in Miami-Dade County, while total incidents in Glades County increased and resources decreased. A possible explanation may be found in the analysis of HO_1 , which indicated that programmatic strategies in the Miami-Dade County school district could have mitigated the kind of increases in the incidences of violent behaviors that were seen in Glades County. The troubled areas for Miami-Dade County school district appeared to be property, harassment, other nonviolent and disorderly conduct. Glades County district troubled areas appear to be harassment, fighting and weapons

Statistical analysis

Table 3 is a comparison of percent change in funding and incidents. Table 3 indicates the change in funding in both school districts. The results of the calculation reveal that percentage change in funding from 2001 to 2004 for both districts decreased. Table 4, represents a comparison of percent change in funding and incidents between 2001 to 2002 and 2003 to 2004 for Miami-Dade and Glades School Districts. However, between 2001 to 2002 and 2003 to 2004 is the base for Miami-Dade, and Glades School Districts base year is 2001 to 2002. The data indicated that two categories in Glades County have zero incidents. Consequently, it is impossible to calculate a percent change. For the sake of comparison with Miami-Dade County, the data used for percent change in these two categories is taken from the 2002 to 2003 academic year. These categories are marked with an (*). This adjustment in base year for these two categories is not reflected in the total incidents calculation. The analysis in this study consisted of the safe school funding for the years 2001 to 2004. For 2001 to 2002, the funding is \$13,802,205.00, for 2002-2003 the funding is \$13,026,380.00, and for 2003 to 2004 the funding is \$12,693,067.00. The safe school funding is generated by the fourth and final calculation of the Florida Education Finance Program

(FEFP). The school district population numbers and incidences were produced from the Student Environmental Safety Incident Reporting System (SESIR). The task is to analyze the changes in incidents for each of the SESIR categories.

Miami-Dade County total incidents and funding

The total number of incidents for 2001 to 2002 is 24,445 and 23,834 for 2003-2004. This change represented a 2.5% decrease in total incidents. A breakout of the incidents by category is elucidated in the accompanying charts and graphs. Total revenue decreased 8% from 2001 to 2002 to 2003 to 2004 (\$13,802,205.00 to \$12,693,067.00).

Glades County total criminal incidents and Reported Acts Against Persons (VAAP)

Total incidents for 2001 to 2002 were 57, 47 for 2002 to 2003, and 90 for 2003 to 2004. The incident rate is 45.67% for the 2001 to 2002, 38.40% for 2002 to 2003, and 72.99 percent for 2003 to 2004. The total revenue decreased 6.5% in 2002 to 2003 from the previous year; however, there appears a major increase of 90.1% in total incidents for the 2003 to 2004 school year. VAAP incidences for 2001 to 2002 are 13, 5 for 2002 to 2003, and 11 for 2003 to 2004. The incident rate is 10.42% for the 2001 to 2002, 4.08% for 2002 to 2003, and 8.92% for 2003 to 2004. Total revenue decreased to 6.5% in 2002 to 2003 from the previous year; however, there appears to be a major increase of 118.4% in VAAP incidents for the 2003 to 2004 school year.

ANALYSIS

Miami-Dade County

As previously mentioned, Miami-Dade County has the largest population of students out of the 67 school districts. Therefore, one would assume that there would be more overall incidences in the Miami-Dade County system than in Glades. However, it is worth noting a few of the most glaring illustrations. First, total incidences were 2.5% for Miami-Dade County, which appears to be

Table 4. A Comparison of percent change in funding and incidents.

| Between 2001-2002 and 2003-2004 for Miami-Dade and Glades School Districts | | |
|---|-------------------|---------------|
| | Miami-Dade | Glades |
| Funding | - 8% | - 7% |
| Total Incidents | - 2.5% | + 58% |
| Violent Acts Against Persons | - 3% | - 15% |
| Alcohol, Tobacco and Other Drugs | + 5% | + 14% |
| Property | - 6% | +400% |
| Harassment | - 34% | +183% |
| Other Non-Violent Incidents | + 18% | - 67% |
| Fighting | - 2% | + 40% |
| Disorderly Conduct | - 15% | 0% * |
| Weapons Possession | + 11% | +500% * |

relatively low for a district with the largest number of students in the state. Yet, when separating out violent behaviors into categories, there appears to be an issue in the areas of disorderly conduct (15.1 %), non-violent incidences (26% increase), and weapons possession (41.5% increase). If funding is the only factors affecting the increasing or decreasing, then policymakers would suggest that school funding in these areas should increase in order to bring the increased percentage rates into a more acceptable range within the goals and objectives of the school district and the state mandate. Although, the revenue change for all the categories is the same, some incidences experienced a relatively small or no change. For example, violent behaviors against persons experienced a 0.0% or no change. Similarly, there is a relatively small increase in harassment incidences (1.1%), in fighting (1.4%), and in alcohol, tobacco, and other drugs (7.7%). From 2001 to 2004, the number of harassment and fighting separately decreased by 200, which demonstrates that some strategy or intervention has occurred over that three-year period to effect this change. If a Miami-Dade County School administrator uncovered the same outcome with regard to these categories, it would be considered good news. There is only one instance where funding decreased and the incidences decreased and that is in property crime (-8.5%). Do these results mean that property crime is not a problem? Again, more in depth inquiry has to be employed to understand the issue more fully.

Self-evaluation

When the 2003 to 2004 self-assessment form and the statistical analysis outcomes of this study are compared, it appears that the Miami-Dade County school district has met practically all the criteria for the School Safety and Security Best Practices (Chapter 2004-268, Laws of

Florida). With regard to the overall efficiency and effectiveness of district, the district's assessment procedures contained the following:

- (a) District goals are clearly stated for safe and security programs.
- (b) Benchmarks are set for programs.
- (c) Performance assessment are regularly conducted.
- (d) Data is collected and process for the SESIR, and
- (e) The district has ensured the reliability of the SESIR through an Automated Reporting Case Management System.

With regard to safe programs and curricula, the district described the following goals:

1. Safe and security curriculum includes pro social skills, character education, conflict resolution and peer mediation;
2. Students are exposed to surveys consistent with the SESIR categories;
3. The school board and each school adopt violence and drug prevention, safety and health curricula, and programs designed to reduce violence, increase safety, and reduce the number of violence risk factors;
4. The district regularly reviews the performance of its intervention programs and revises, eliminates, or adds programs accordingly; and the self assessment for the 2003 to 2004 Miami-Dade County school district reported that the successful implementation of these initiatives depended upon the following curriculum: a Life Skills curricula, Peer Counseling/Mediation, Substance Education curricula (Grades PreK-5), Parenting for Drug Prevention curricula, Alternative to Indoor Suspension curricula, PIN (Proudly Infusing Nonviolence) curricula (Grades K, 2, 4, 6, 9), Peace Education Foundation curricula (Grades K-12), Elementary and secondary school support groups, Substance Education Program

(TRUST—To Reach Ultimate Success Together), Youth Crime Watch Programs, D.A.R.E. program, D-FY-IT (Drug Free Youth In Town) (Grades 6 to 12), S.W.A.T. (Students Working Against Tobacco), S.A.D.D. (Students Against Destructive Decisions) (Grades 9 to 12).

Glades County

The apparent large changes in incidences given the SESIR categories must be viewed with extreme caution because the percent change is based on small absolute numbers of crime. For example, the increased percentage change for total incidents (90%), violent acts against persons (118.4%), weapons possession (495.6%), and harassment (237.5%) did not reflect an accurate representation of these acts occurring in the Glades County school district. In the case of disorderly conduct, weapons possession, and property crimes there were incidents that went from 0 to 1 or 1 to 3. Therefore, the analysis is compromised as it relates interpreting given the very small numbers of incidents data. Statistical data indicates that there were increases in five of the nine chart areas while at the same time funding decreased. Property crime incidents were the only category that revealed a substantial decrease in percent change (205% to 65%).

Self-evaluation

The 2003 to 2004 Glades self-assessment report differed from the Miami-Dade County assessment in a couple areas. First, in the Efficiency and Effectiveness section of the report, it revealed that the district did not regularly conduct an assessment of performance and cost of safety program (Florida Department of Education, 2007). Second, the assessment report revealed that Glades County schools did not have a curriculum and/or programs for improving the school culture and crime such as pro-social skills, character education, conflict resolution and peer mediation. The Glades County School Board have not adopted or implemented violence and drug prevention curriculum and programs to reduce incidence of violence (Florida Department of Education, 2007).

Third, students in Glades County schools did not participate in the planning and implementation of violence and drug prevention programs (Florida Department of Education, 2007). Finally, Glades County students were not exposed to issues of violence prevention, conflict resolution, and communication/ decision making skills (Florida Department of Education, 2007). Although, it appears that some of the outcome responses from the self-assessment maybe consistent with some parts of the analysis more research is needed to confirm any links.

CONCLUSION

As mentioned earlier in the Literature Review, the issue of safety schools has come to the forefront of America's consciousness since the Columbine shootings. The nation's reaction and response reverberated throughout schools in this country. This study is just one in a multitude of studies attempting to understand school violence. The results from the Miami-Dade County school district suggested an overall decrease in total incidents and funding. A review of non-violent incidents and weapons possession revealed increases in incident percentage rates with a simultaneous decrease in funding. Analysis of the data indicated that there is a substantial decrease in percentage change in violent acts against persons and property while funding decreased.

However to the infusion of Safe School Funding, the Miami-Dade School District has already implemented interventions and strategies to control its school population. Since 1966, Miami-Dade County Public Schools have its own police department that has a stated responsibility to develop a partnership with members of the school community to improve relationships, reduce tensions, and increase trust. Miami-Dade also has more Student Arrests Referrals to the Juvenile-Justice System than the two counties that board it, Broward and Palm Beach. In 2004 to 2005, there were 130,030 suspensions (both in- and out-of-school), an average of one for every 2.8 students in the District. The results from the Glades County school district revealed an overall decrease in funding; however, there is a substantial increase in incidents. Five incidents categories experienced a significant increase in percentage changes when funding is decreased. Again, the statistical analysis demonstrated that large changes in crime categories occurred given the fact the percentage change is based on small absolute numbers of crimes.

The statistical analysis of Miami-Dade and Glades County mirrored the national statistics. A *t*-test is administered to determine significance in Hypothesis₂. There is a significant increase in weapon possession in both counties. The possession of weapons on school campuses poses a tremendous risk to the health and well being of student populations and this problem is highlighted in several of the court challenges to *Zero Tolerance* procedures. The increased presence of weapons on school campuses undermines the ability of school districts to adequately address incidences of school violence and its fatalities. Therefore, the data indicates that with the increase of weapons possession in both districts *Zero Tolerance* policies are not being effectively implemented to decrease the level of weapons in these individual school settings. The results of Hypothesis₃ indicate that four out of the nine categories were significant. Total incidents decreased however and were not significant. A significant decrease in property crimes

is observed after the resource reduction ($p = .05$). Harassment decreased and is significant at $p < .001$. Other non violent incidents increased and are significant at $p < .001$. Reported disorderly conduct is significantly less after the resource reduction ($p = .05$). Total incidents and resources decreased in Miami-Dade while total incidents in Glades County increased and resources decreased. From the data studied, there appears to be a relationship between a decrease in safe school funding in each of the years analyzed and an increase in school violent behaviors. Given these increases, each district has to ask two questions:

1. What is an acceptable amount of monies to address the educational needs of their students?
2. What type of program would be most effective to curb violent behaviors in their respective districts?

Legal challenges both in Federal and State supreme courts have tried over the years to arrive at a suitable and equitable remedy to funding schools regardless of their socio-economic status (Odden and Piccus, 2000). However, FEFP funds do not appear to be adequate to significantly decrease this social problem. The fact that no statistically significant difference is found with respect to funding indicated that the slight decline in funding between the first year of analysis and the second year of analysis is minor and should not have led to any crucial change in behavior. This conclusion is borne out by the fact that there is no significant change in offenses from the first year of analysis to the second. Additionally, the fact that there is no significant difference between counties as to offenses indicated that a main distinction between the counties with respect to offenses is not the type of illicit behavior, but rather the sheer volume. In essence the behavioral problems which plague the public schools of South Florida are the same; be it a rural or urban environment. This conclusion is supported by the fact that, when offenses in Miami-Dade County during 2001 to 2002 were compared to the offences in Glades County during 2001 to 2002, the results essentially mirrored each other, as the Pearson correlation coefficient is a robust .818. Moreover, for the 2003 to 2004 academic year, this relationship proved to be even stronger, with the associated correlation being computed to be .883.

In Florida's school finance program (FEFP), Safe Schools Funds are an essential part of the overall formula to bring safety and security in schools across the state, but how do you create safe schools? In this study, it is determined that there is a disconnection between the increase of school incidences of violent behavior and the appropriate amount of funding needed to decrease of these incidences. The Efficiency and Effectiveness and Safety Programs and Curricula sections of the self assessment of the School Safety and Security Best

Practices with their Assorted Indicators were used to ascertain a general idea as to the inner workings of both (the urban and rural school districts) safe school programs. However, the State allows each district to conduct its own self-evaluation. Upon evaluation, it appears that the Miami-Dade County School district met the criteria for successful implementation and program operation with program aimed at promoting safe school environments through substance abuse, anti-violence, and social programming. However, there is no clear indication of what these programs consisted of or any real description of their strategies or interventions. However, Glades County school district did not have a procedure to assess performance of their programs in terms of efficiency and cost, nor did the school district promote preventative educational programs important in improving school culture and climate. In addition, the school district did not have educational component to teach each grade level violence prevention, conflict resolution, and decision-making skills.

One of three problems in the Florida's school finance program assessment procedures appears to be the self-evaluation surveys. Self-evaluations are processes of collecting and analyzing relevant information about a particular subject. The evaluation of programs is an essential aspect of demonstrating the existence of school improvement (Carter, 2006). It underlines the need for accountability in a governmental system that increasingly emphasizes local control and autonomy. The objective of evaluation methods is to extrapolate useful information so that decision makers can develop and implement cost-effective programs but information contained from self-evaluation is often biased and colored by the experiences of the evaluator (Gay et al., 2006). Further, information extrapolated from a checklist is scarce at best, and does not describe the strategies or interventions taking place in the school. For the purpose of this study, it is difficult to ascertain if the self-evaluations are consistent with evaluation goals or objectives because little information is provided. For example, there is some mention of prevention programs; however, there is no mention of their strengths and weaknesses. The checklist attempts to place the information in an informational format, but the description, goal and objectives, as well as promised results, management of program staff, and common standards for service are lacking (Carter, 2006). Miami-Dade included the following programs:

1. Life Skills curriculum—encourages students to make positive decisions relating to drugs and alcohol.
2. Peer Counseling/Mediation—encourages students to find constructive ways to resolve conflicts.
3. Substance Education curricula (Grades Pre-K to 5) —teaches students the dangers of harmful substances.
4. Parenting for Drug Prevention curriculum—geared toward educating parents about drugs to discuss with

their youth.

5. Alternative to Indoor Suspension curriculum—alternative approaches to indoor suspension by education students through activities about disruptive behaviors.
6. Proudly Infusing Nonviolence (Grades K, 2, 4, 6, 9) —activities to promote the benefits of solving conflicts with nonviolence.
7. Peace Education Foundation curriculum (Grades K to 12) —foundation offerings deal with creative conflict solving and mediation for many different grades.
8. TRUST-To Reach Ultimate Success Together—school-based program to combat substance abuse.
9. Youth Crime Watch Program encourages the reporting of crimes.
10. D.A.R.E. Program—a highly acclaimed program that gives kids the skills they need to avoid involvement in drugs, gangs and violence.
11. D-FY-IT (Drug Free Youth In Town) (Grades 6 to 12). a nationally recognized, community-based substance abuse prevention program that focuses on recognizing and rewarding students who choose to live a healthy, drug-free lifestyle.
12. S.W.A.T. (Students Working Against Tobacco) —empowers and unite youths to resist and expose big tobacco's lies while changing current attitudes about tobacco.
13. S.A.D.D. (Students Against Destructive Decisions) (Grades 9 to 12)—a peer-to-peer youth education and substance abuse use prevention programs.

Glades County programs are the following:

1. Conflict resolution— teaches people new ways to work through and resolve disputes that do not involve violence.
2. Peer mediation—encourages students to find constructive ways to resolve conflicts.
3. Character education courses—classroom instructions that sometimes include religious lessons, relating to character development.

Prevention programs in Glades County were funded through a grant until 2003 to 2004 and the grant have expired and there is no funding available to continue programming. Therefore, the questions presented by these data sets are:

1. Did these interventions, strategies and/or programs meet the needs of Miami-Dade and Glades County?
2. Are strategies effectively implemented to curb violent behaviors in Miami-Dade and Glades County?

Research indicates that early intervention is important, however, there is no evidence of other early childhood violence prevention programs (Tolan and Guerra, 1994). According to the CDC, these programs must begin early and involve parents in order to be effective. Early

childhood interventions employing an ecological violence prevention approach may help reduce violence (Tolan and Guerra, 1994). This approach promotes social competence through providing hope for improving educational competencies in other developmental areas (Tolan and Guerra, 1994). Therefore, strategies and intervention must be directed to the major educational stages:

- (a) Early childhood (ages 2 to 5).
- (b) Middle childhood (ages 6 to 11),
- (c) Early adolescence (ages 12 to 14), and
- (d) Middle adolescence (ages 15 to 18).

In each educational stage of development, schools provide an important environment for overall developmental success. In early childhood development, aggressive violent behaviors can occur; therefore, it is important that children are assisted with developing self-regulation controls during the preschool years (Tolan and Guerra, 1994). In middle school settings, it is important for children to be introduced to tasks that promote a child's normative beliefs about aggression. School contextual factors that have influenced development at the middle childhood stage are:

- (a) Interpersonal relations with peers and classmates.
- (b) Teachers' perceptions of children's aggression, and
- (c) The probability of exposure to antisocial youth.

However, school-based violence prevention programs are not enough to show a significant decrease of violence in school environments. Changes in school policies and the way in which violent incidences are classified and resolved are also necessary. There is no evidence in the reports that these types of interventions are occurring in the two school districts analyzed. Money is not the only component in fighting school violence although vital for programming. Understanding and preventing youth violence requires attending to the interconnectedness between families, schools, and their neighborhoods. The interconnections between social contexts and their impact on schools environments also have major implications for prevention efforts or programs. A comprehensive strategy that underscores the multiple social contexts in which school-aged students live and function has much greater promise for successfully stopping or reducing youth violence. Therefore, schools, communities, governments, etc. must connect the social network available to students to assist them in solving their individual and communal problem.

Zero Tolerance policies and procedures in school settings provide school administrators with a mechanism to address and penalize students who engage in harmful behavior (Skiba, 2000). Research suggests that school violence influences school policies regarding discipline, security, and dropping out, and by small group inter-

actions that develop within the school encourages youth to respond violently to routine provocations. However, for the most part, these problems begin in the community. Therefore, the conclusions of this study are that the

- (a) Florida's school finance program should include an holistic evaluation process which includes self-evaluation and state monitoring of the program.
- (b) Goals and objectives for school violence and drug prevention programs in school districts should be reported to the State in greater detail.
- (c) Prevention programs should be assessed and evaluated for their utility in decreasing school violence.
- (d) Level of safe school funding has to be consistent with varying levels in school incidences.
- (e) Violence and behavior interventions should include the school, the community and the parents.
- (f) Definitions of incidence categories should be standardized across the state; and
- (g) The State should adopt a public health approach to school violence approach to school violence.

Conflict of Interests

The authors have not declared any conflict of interests.

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