

Brief Research Reports

Prevalence and Consequences of Students Exposure to Firearms in Traditionally "Safe" High Schools

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The availability and use of guns plague American high school students (U.S. Department of Education, 1998). Firearm homicide ranks as the second leading cause of death for all adolescents between the ages of 15 to 19 and are the primary cause of death for African-Americans for that age group (Garbarino & Dubrow, 1992). Available data suggest the extreme vulnerability of all adolescents to assault injury. For example, 47% of males and 22% of females reported easy access to handguns. A survey of gun related violence around inner city schools reported that 20% of the students had been threatened with a gun and 12% had been shot at (Kim & Trent, 1998). Firearms have become intertwined with the lives of high-school students (Martinez & Richters, 1993).

Because most of the research has been conducted with inner city schools, the primary objective of this research is to explore the prevalence of firearms on a traditionally "safe" campus with no previous incidence of gun violence, and the psychological effects this exposure to firearms has on these students. The research questions are: 1) What percent of high school students have easy access to guns? 2) What are the demographics variables related to having easy access to a firearm? 3) How many students knew someone killed by gunfire? and 4) How does knowing someone killed by gunfire effect one's future outlook?

Method

Participants

The participants were 569 students enrolled in a high school located in a middle-high SES area of Los Angeles. The mean age was 16.24, $SD = 1.14$ (range: 14 to 18). Slightly more than one-half were females (53%). The student population was ethnically diverse: 28% White; 8% Asian; 31% Latino; and 33% African-American.

Instrumentation

Assessment of access to gun, knowing someone who was killed by gunfire, feeling safe at school, and perceived future outlook levels were accomplished with the *Student Survey of Adolescent Risk Assessment (SSARA)* (Caty, 1996). This survey contains 36 items which participants answer either "yes" or "no".

Results and Discussion

Fifty-one percent of the students reported that they had easy access to firearms. Males were significantly more likely to have access (56%) than females (44%), $\chi^2 = 16.34, p < .001$. African-Americans, Latinos, and Whites were slightly more than twice as likely to have access to guns than Asians (56% to 25%, $\chi^2(3) = 21.04, p < .001$, Phi Cramer's $V = .191, p < .001$). These students were almost four times more likely to have experimented with drugs or alcohol (79% to 21%, $\chi^2 = 36.56, p < .001$). Interestingly, those students reporting that they have access to weapons were significantly less likely to report that they engage in physical fights (45% to 55%, $\chi^2 = 26.54, p < .001$).

Forty-nine percent of the students reported that they knew someone who had been killed by gunfire. No significant gender differences were reported (52% for males and 47% for females, $\chi^2 = 1.344, p = .246$). There was a significant ethnic difference, Phi Cramer's $V = .423, p < .001$. African-Americans and Latinos were twice as likely to have known someone killed by gunfire than Whites and Asians (63% to 26%, $\chi^2 = 16.45, p < .001$). These students were twice as likely to report that they perceived their future prospects as poor (8% to 4%, $\chi^2 = 12.24, p < .001$) and were twice as likely to report that they did not feel safe at school (24% to 12%, $\chi^2 = 13.76, p < .001$). Surprisingly, those students who reported knowing someone killed were no more likely to have ever been in counseling than those who did not report knowing someone killed by a gunfire, ($\chi^2 = .728, p = .393$).

Further research is needed to assess the external validity of this study. However, in light of the pervasive access to guns and the psychological effects of knowing someone killed with a firearm, this study suggests that "safe" high schools are no longer immune to the devastating effects of the gun culture.

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Educational Myths: Do teachers believe them?

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Teacher educators have long been interested in the beliefs of preservice educators because they are often good predictors of future teaching performance (Bolin, 1990; Wideen, Mayer-Smith, & Moon, 1998). According to Carter (1990), in the 1980s the 'learning to teach' literature shifted from focusing on what preservice teachers should learn in order to become good teachers, to understanding what they actually know. The teachers' belief system is influenced

by teacher characteristics, knowledge of subject matter, knowledge of students, knowledge of pedagogy, knowledge of learning/instruction, teaching experience and reflection (Reffel, Jacobsen & Jacobsen, 1995). Pajares (1992) concluded that beliefs are established before the preservice teacher enters college and are not likely to change. The knowledge base from which the teacher operates may include research and theories but is also likely to include other components as well (Connelly & Elbaz, 1980). Weinstein (1990) also found that preservice elementary teachers' beliefs are resistant to change as a result of their experiences in either the college classroom or in public school field experiences.

According to Greenwood and Parkay (1989), a teacher's belief system is the foundation for their decision making process. Teachers' belief systems include the following (Connelly & Elbaz, 1980):

- 1) Knowledge of context of the specific situation in the classroom;
- 2) Knowledge of educational theories;
- 3) Knowledge of social conditions;
- 4) Self-knowledge; and
- 5) Teaching experience.

Teacher beliefs focus on the control over conditions of student involvement and more freedom to make decisions (Lortie, 1975). Educational researchers believe that the most important teaching skill is decision making (Schon, 1983). Westerman (1990) argues that as teachers gain experience they become better decision makers and are able to adapt to student needs during teaching. If beliefs are challenged during a field experience students may, at least temporarily, reconsider their beliefs (McDiarmid, 1990).

What teachers' beliefs are influenced by myths? Since teachers' decision-making processes are influenced by their belief systems (Greenwood & Parkay, 1989), erroneous beliefs may lead to poor decisions. Berliner and Biddle (1997) discuss myths about achievement, aptitude and American schools. Their work provides a foundation for the present research and describes several educational myths. Berliner and Biddle (1997) carefully dispute each myth with education research, solid arguments, and careful interpretation. Some educational myths disputed by Berliner and Biddle (1997) include the following: 1) Student achievement has recently fallen across the nation; 2) Student intelligence is determined only by inheritance; 3) American schools fail in comparative studies of school achievement; 4) America spends a lot more money on education than other countries; 5) American schools are generally incompetent; 6) Because of inadequate schooling, American industries must spend vast amounts for remedial training of their workers; 7) American citizens are unhappy with their schools; and 8) Private schools are inherently better than public schools. Berliner & Biddle (1997) state that the media and well-intentioned educational reformers repeatedly present many of these myths. None of the above statements are supported by the available evidence (Berliner & Biddle, 1997).

The primary goal of this research was to identify myths

which may be a part of teachers' belief systems. Teachers may be influenced by what they read and hear in the news media and from well-meaning educational reformers. At the same time, teachers have experience and an educational knowledge base that may help them temper what they read and hear. By determining which myths are believed, teacher educators can target these myths. By presenting counter evidence that disputes educational myths, teacher educators can provide teachers with a more solid knowledge base.

Method

Participants

One hundred nineteen preservice and inservice teachers volunteered to participate in this study. Ninety-two subjects were preservice teachers in one of two undergraduate courses. Nineteen subjects were in a course in educational psychology and 73 were in a course in early childhood education. Twenty-seven subjects were inservice teachers at both the elementary and secondary levels. Almost all ($n = 92$) of the subjects were female in the elementary education program.

Materials and Procedures

Subjects completed a Likert-type survey asking them to read eighteen educational myths and report their level of agreement on a five-point scale with each statement. The five choice scale of strongly agree, agree, undecided, disagree, or strongly disagree followed each statement. The reliability tested using Cronbach's coefficient alpha ($\alpha = .77$) was adequate for group comparisons.

Results and Discussion

The individual items were analyzed in terms of the

percentage of teachers stating that they agreed or strongly agreed with the item. Fortunately, the analyses of items provide support that most myths are not part of the teachers' belief system, however, substantial percentages of teachers do believe some of the myths. The dispute of these myths needs additional attention during teacher preparation and inservice. For example, the following myths were believed by over 40% of the respondents:

- 1) Student achievement has recently fallen across the nation.
- 2) American schools fail in comparative studies of school achievement.
- 3) Costs in education have recently skyrocketed wastefully.
- 4) American education doesn't produce enough scientists, mathematicians, and engineers.
- 5) American public schools and textbooks no longer promote moral values.

Future research could determine how these myths are influencing the decision making process in the classroom.

When compared to preservice teachers, inservice teachers more often disagreed with the following educational myths as shown in Table 1.

It appears that inservice teachers are more likely to disagree with some myths. Preservice teachers seem to lack the experience necessary to make realistic judgments concerning some of the myths. Connelly & Elbaz (1980) emphasize that self-knowledge and teaching experience are critical contributors to the knowledge base. The differences between preservice and inservice teachers may be a result of fewer educational experiences. Preservice teachers may also be somewhat removed from the issues and may view these myths from the standpoint of the student rather than the teacher's perspective.

While few teachers hold strongly to the educational myths, these teachers could benefit from the critical examination of their belief system. According to Morine-Dersheimer and Corrigan (1997) four conditions are essential

Table 1
Differences in reported support of myths between preservice and inservice teachers

| Myth | χ^2 |
|---|----------|
| America spends a lot more money on education than other countries | 10.70* |
| American workers are not productive and the schools are at fault | 10.97* |
| Because of inadequate schooling, American industries must spend vast amounts for remedial training of their workers | 14.36** |
| American education doesn't produce enough scientists, mathematicians, and engineers | 14.29** |

* $p < .05$. ** $p < .01$.