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ABSTRACT

This paper presents findings of a study that examined the effects of a violence-prevention program on students' acquisition of knowledge about violence. The violence-prevention program, an adaptation of the Prothrow-Stith (1987) curriculum model, was implemented in seventh-grade health-education classes in a rural Mississippi River-delta community. Instead of working only with at-risk students, all students received instruction in violence prevention and conflict resolution. In a random, two group pre-test/post-test design, six seventh-grade health-education classes (N=130) were divided into three classes serving as the experimental group (N=64) and three classes serving as the control group (N=66). Students in the experimental group showed a significant gain in test performance, averaging an increase of 7 correctly answered questions on the 40-item test. Experimental-group students answered significantly more items than did control-group students in the areas of violence in society, homicide, risk factors, anger, the expression of anger, fighting, what leads to a fight, and alternatives to fighting. Gains in test scores were positively correlated with students' socioeconomic status, GPA, and SAT composite scores. Gains in test scores were negatively correlated with the number of disciplinary referrals. Four tables are included. (LMI)

VIOLENCE PREVENTION IN THE MIDDLE LEVEL CURRICULUM: STUDENT CHARACTERISTICS AND ACQUISITION OF KNOWLEDGE ABOUT VIOLENCE

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Violence Prevention in the Middle Level Curriculum:

Student Characteristics and Acquisition

of Knowledge About Violence

Violence has become one of society's greatest concerns and is identified as the biggest problem facing our nation's schools (Elam, Rose & Gallup, 1994). Teachers' working environment has become less desirable because of threats of verbal and physical assaults (Calabrese, 1986). School violence may be viewed as a portion of the role of the school counselor (Nuttall & Kalesnik, 1987). As school educators see the need, many are considering adding a violence prevention program in the curriculum (Johnson & Johnson, 1995). In one rural region, principals overwhelmingly (96%) indicated the need for a violence prevention program in their schools (Enger & Howerton, 1993).

In this study a violence prevention program was implemented into the health education curriculum for middle-level students in the seventh grade. Rather than working with just violence-prone at-risk students, all middle-level students were instructed on violence prevention and conflict resolution. The program was an adaptation of the Prothrow-Stith (1987) Violence Prevention: Curriculum for Adolescents. It was introduced as a primary intervention for students to become aware of the consequences of violence and strategies to dissuade violent behavior and addressed the key principles identified in the best school programs in conflict resolution identified by Johnson and Johnson (1995).

Objectives

The objective of this investigation was to examine the effects of a violence prevention program on student acquisition of knowledge about violence. Student behavior, background, and

academic achievement were also examined to determine their relationship to what they knew and learned about violence.

Methods

Design

A randomized two group pre-test/post-test design was used to examine the effects of a violence prevention program on the knowledge gained about violence. Six classes of seventh-grade health education students were randomly assigned to experimental and control groups with three classes receiving the treatment and three classes serving as control. The instruction was staggered so the classes assigned to the control group received the program after the post-test.

Treatment

The school's health education teacher delivered the violence prevention program over a four week period. The curriculum, as outlined in Table 1, was presented in eight units: (1) violence in society; (2) homicide; (3) risk factors; (4) anger; (5) expressing anger; (6) fighting; (7) what leads up to a fight; and (8) alternatives to fighting. During the administration of the program, students were actively engaged in discussions about incidents in their neighborhood and school which related to the topics being presented. The development of web charts sparked the interest of students in generating ideas relevant to the discussion. Also, listings of what's good and bad about fighting and banners depicting the objectives of the program were popular with the students. Invited speakers and panelists served as valuable resources in the community for addressing the concerns raised in the curriculum and issues raised by the students. Videotaped role playing and subsequent viewings were popular with the students and facilitated students' recognition of acts leading to violence and methods to diffuse violent situations.

Measures

A 40-item knowledge test on violence was administered as pretest and post-test measures. The test was constructed to match the 40 objectives written for the violence prevention program. Five test items were written to correspond to five objectives for each of the eight units in the program.

Information regarding student behavior, background and academic achievement were collected from school records and school personnel. Background measures included the students' home situations and socioeconomic status of their families. Student grades were based on a four-point system (4=A, 3=B, 2=C, 1=D, 0=F) and course grades in English, mathematics, science, and social studies were averaged to produce a global measure of school achievement. Normal curve equivalent scores were recorded from school records for the Stanford Achievement Tests. Student disciplinary measures were acquired from school assertive discipline records.

Data Source

Six seventh-grade health education classes (N = 130) were divided into three classes serving as experimental (N = 64) and three as control (N = 66). These students lived in a rural community located in the Mississippi River delta. They were divided about equally on gender. About 35% of the students were African-Americans and 65% were white. About 58% of these seventh graders lived at home with both parents, 40% lived in a single-parent home, and 2% had other guardians. The family paid for the lunch of 58% of the students; 42% received a free or reduced-price subsidized lunch.

These students had an overall grade point average of 2.44 on the 4-point scale. The grade averages from high to low were: 2.82 in social studies, 2.49 in mathematics, 2.37 in

science, and 2.13 in English. Their average complete battery score on the Stanford Achievement Tests was an NCE score of 48.5, about average nationwide. The average individual test scores from high to low were: 57.4 in science, 53.1 in language, 47.7 in social science, 47.4 in math, and 42.7 in reading.

For the approximately 1200 class periods throughout the school year, each student received an average of 39 disciplinary referrals. According to the assertive discipline records, 85% of the students had been tardy at least once during the school year. The average was six times. Disciplinary referrals for physical contact with another student (through hitting or fighting) were recorded for 53% of the students and averaged 1.9 incidents per student for the school year. Using abusive language was cited for 31% of the students and averaged 0.65 incidents per student. For gum chewing, talking and eating candy in class, 94% of the students had been cited at least once during the year. Students averaged 30 of these infractions over the year.

Results

Performance on the Pre-Test

Overall, students averaged 22.39 questions correct on the violence prevention pretest. Students scored higher on the 40-item pre-test if they had both parents at home ($t = 2.47$, $p = .015$) and came from higher socio-economic families ($t = 5.33$, $p = .000$). Also, significant positive correlations were found between pre-test scores and GPA ($r = .64$, $p < .000$) and SAT composite performance ($r = .79$, $p < .000$); a significant negative correlation was found between pretest scores and disciplinary referrals ($r = -.26$, $p < .003$). Students assigned to experimental and control groups were not significantly different on the 40-item pre-test ($t = 1.79$, $p = .076$), as shown in Table 2.

Performance After Treatment

The Experimental Group performed significantly higher than the Control Group on the 40-item knowledge test ($t = 6.76$, $p = .000$), as shown in Table 3. Significantly more items were answered correctly ($p < .05$) by the Experimental Group than by the Control Group for all eight units: violence in society ($t = 4.41$); homicide ($t = 8.08$); risk factors ($t = 3.87$); anger ($t = 2.52$); expressing anger ($t = 3.50$); fighting ($t = 5.38$); what leads up to a fight ($t = 5.70$); and alternatives to fighting ($t = 4.99$).

Student Characteristics and Knowledge Gains

Students in the Experimental Groups showed a significant gain in test performance, averaging an increase of 7.4 questions on the total test, as shown in Table 4. Subtest analyses revealed significant gains in seven of the eight unit subtests. No significant gain was noted in the unit on anger.

No significant difference in gain scores on the total test were noted for students having both parents at home than other situations ($t = .79$, $p = .432$). However, students from higher socio-economic levels had greater gain scores than those from lower levels ($t = 2.24$, $p = .027$). Gain performance was positively correlated with GPA ($r = .232$, $p = .009$) and SAT composite scores ($r = .196$, $p = .022$). Gain performance on the violence prevention knowledge test was negatively correlated with disciplinary referrals ($r = -.183$, $p = .029$).

Educational Significance of the Study

With the increasing concern about violence in society and schools, school personnel are becoming more attentive to effective violence prevention programs. The present study assessed the effectiveness of a violence prevention program with middle level students. Characteristics of students who benefit more from such a prevention program also adds to our understanding

of the strengths and limitations of implementing a school-based violence prevention program into the curriculum.

References

Calabrese, R. L. (1986) Teaching as a dehumanizing experience. The High School Journal, 69(4), 255-259.

Enger, J. M. & Howerton, D. L. (1993, November). Principal reports of violence in schools and need for a violence prevention program. Paper presented at the annual meeting of the Mid-South Educational Research Association, New Orleans, LA.

Elam, S. M., Rose, L. C., & Gallup, A. M. (1994). The 26th annual Phi Delta Kappa/Gallup Poll of the public's attitudes toward the public schools. Phi Delta Kappan, 76(1), 41-56.

Johnson, D. W. & Johnson, R. T. (1995). Why violence prevention programs don't work -- and what does. Educational Leadership, 52(5), 63-68.

Nuttall, E. V. & Kalesnik, J. (1987). Personal violence in the schools: The role of the counselor. Journal of Counseling and Development, 65, 372-375.

Prothrow-Stith, D. (1987). Violence prevention: Curriculum for adolescents. Newton, MA: Education Development Center.

Table 1

Violence Prevention Curriculum

Unit	Topic
1	There is a Lot of Violence in Society
2	Homicide Statistics and Characteristics
3	Exploring Risk Factors
4	Anger is Normal
5	There are Healthy and Unhealthy Ways to Express Anger
6	There is More to Lose Than to Gain from Fighting
7	What Happens Leading Up to a Fight
8	Alternatives to Fighting: Practice Throwing a Curve

Adaptation from Prothrow-Stith (1987) Violence Prevention: Curriculum for Adolescents

Table 2

Violence Prevention: Pretest Scores

	Experimental (N = 62)		Control (N = 60)			
	Mean	SD	Mean	SD	t-stat	t-prob
Subtest 1	3.52	1.00	3.45	1.17	0.33	.739
Subtest 2	2.26	.83	2.32	.95	-0.36	.717
Subtest 3	2.81	1.05	2.77	.89	0.23	.822
Subtest 4	3.21	1.23	2.88	1.38	1.38	.171
Subtest 5	3.52	1.34	3.13	1.23	1.65	.102
Subtest 6	2.87	1.51	2.37	1.35	1.94	.054
Subtest 7	1.92	1.31	1.88	1.45	0.14	.886
Subtest 8	3.26	1.28	2.60	1.44	2.66	.009
Total Test	23.35	5.99	21.40	6.06	1.79	.076

Table 3

Violence Prevention: Post-test Scores

	Experimental (N = 55)		Control (N = 62)			
	Mean	SD	Mean	SD	t-stat	t-prob
Subtest 1	4.51	.90	3.66	1.17	4.41	.000
Subtest 2	3.65	1.17	1.97	1.07	8.08	.000
Subtest 3	3.44	1.20	2.61	1.09	3.87	.000
Subtest 4	3.33	1.42	2.63	1.58	2.52	.013
Subtest 5	4.11	1.13	3.29	1.40	3.50	.001
Subtest 6	3.98	1.30	2.58	1.52	5.38	.000
Subtest 7	3.36	1.22	2.06	1.24	5.70	.000
Subtest 8	4.16	1.10	2.97	1.48	4.99	.000
Total Test	30.55	6.88	21.77	7.14	6.76	.000

Table 4

Violence Prevention: Gain Scores

	Experimental (N = 53)		Control (N = 56)			
	Mean	SD	Mean	SD	t-stat	t-prob
Subtest 1	1.00	1.09	.18	1.36	3.48	.001
Subtest 2	1.38	1.36	-.39	1.04	7.60	.000
Subtest 3	.68	1.30	-.18	1.19	3.59	.001
Subtest 4	.25	1.21	-.20	1.26	1.87	.064
Subtest 5	.62	1.46	.11	1.33	1.93	.057
Subtest 6	1.08	1.11	.29	1.33	3.38	.001
Subtest 7	1.43	1.25	.18	1.30	5.15	.000
Subtest 8	.96	1.48	.32	1.38	2.34	.021
Total Test	7.40	4.46	.30	4.66	8.12	.000