

EDUCATIONAL PERFORMANCE AND ATTITUDES TOWARD SCHOOL AS RISK-PROTECTIVE FACTORS FOR VIOLENCE: A STUDY OF THE ASIAN/PACIFIC ISLANDER YOUTH VIOLENCE PREVENTION CENTER

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The purpose of this study was to examine whether school experiences, school performance, and other risk-protective factors were related to violence among Hawaiian, Filipino, and Samoan youths residing in Hawai'i. This study analyzed survey data ($N = 325$) collected in three high schools having concentrations of Filipino, Hawaiian, and Samoan youths, as well as a smaller number of Japanese students, which served as a comparison group. The analyses consisted of bivariate and multivariate analyses of risk protection for violence. Two- and three-way interactions were tested to examine whether there were specific gender and/or ethnic effects. The final model explained 29.3% of the variance in violent behavior. Five variables were significant: grade point average, pressure to choose between school and friends, favorable school attitude, feeling safe, and importance of college. Schools serving these populations should focus on fostering positive bonds between teachers and students and building bridges to families and neighborhoods. © 2010 Wiley Periodicals, Inc.

Youth violence continues to be an ongoing public health problem in the United States. Recent studies indicate that the prevalence of physical fighting among high-school students continues to be high (Brenner, Simon, Krug, & Lowry, 1999; Centers for Disease Control and Prevention [CDC], 2003). Youths are also victims of violent crime at more than twice the rate of the general public (Buka, Stichick, Birdthistle, & Earls, 2001; Rosenthal, 2000; Schwab-Stone, 1995). Whereas there is a large literature on risk factors for youth violence, research on schooling variables, which is the focus of this article, is much more limited. Compulsory schooling means that teenagers are forced to spend a large portion of their day in school, regardless of their individual abilities and interests. The school environment may be an opportunity for achievement and development of one's potential, but school experiences can also be threatening to one's self-esteem and alien to what is satisfying in one's life. Furthermore, the friendships of teenagers are largely formed in the context of the school and are also likely to embody shared views of the school environment and attitudes toward the larger community.

Purpose

A large research literature exists on violence regarding African American and Latino youths; however, relatively few studies have examined risk-protective factors for violence among Asian and Pacific Islander adolescents, for example, in the context of Hawai'i's public schools. This article examines whether school experiences and school performance served as risk-protective factors for violence among Hawaiian, Filipino, and Samoan youths in three public schools in Hawai'i. The study also examined whether the relationships of school variables with violence covaried by gender,

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ethnicity, and the variable of mixed ethnicity, which has been shown to be a marker for a variety of psychosocial problems (Udry, Li, & Hendrickson-Smith, 2003).

Review of Literature

Whereas there is a large literature on risk factors for youth violence, the research on the school variables, which are the focus of this article, is much more limited. The available data include a number of variables about school experiences and school performance, which fall into four categories: (1) school variables of placement in special education and stability in the school attended; (2) school performance of students and their friends, and feeling cross-pressured between school and friends; (3) involvement in extracurricular school activities or community activities or having a job while being in school; and (4) set of attitude items toward school and education.

School Placement. Children and youths are sensitive to their status in the eyes of their peers. Having low status in the eyes of other students can be a significant source of psychosocial stress, which threatens the well-being of students and can also possibly lead to alienation and antisocial behavior (Östberg, 2003; Osterman, 2000). Being placed in a special education class, being eligible for nutritional programs, and being a new student in a school can be the basis for social stigma. Transferring among schools has been shown to be a risk factor for low academic achievement, dropping out of high school, and behavioral adjustment problems (Alexander, Entwisle, & Dauber, 1996; Alspaugh, 1991; Marchant & Medway, 1987; Wood, Halfon, Scarlata, Newacheck, & Nissim, 1993). The evidence is not consistent, however. In a 5-year panel study, Alexander and colleagues (1996) found that controlling for background and earlier school performance eliminated most of the relationship between school changes and adverse outcomes.

Academic Performance. Although teenagers may not have specific plans for their future, they are generally aware that doing well in school is valued in our society. They may not like school, but they still realize that their level of academic performance will probably influence their future success. In this context, it is not surprising that low school achievement is associated with negative self-concept and with difficulties in interpersonal relationships (Hinshaw, 1992). Studies in the United States, as well as elsewhere, have found that more than 70% of children referred for academic failure also present internalizing or externalizing behavior problems in a clinical range (Marturano, Ferreira, & D'Avila-Bacarji, 2005; Thompson, Lampron, Johnson, & Eckstein, 1990). One study (Henrich, Schwab-Stone, Fanti, Jones, & Ruchkin, 2004) found that witnessing violence by adolescents was associated with lower academic performance over time, and being a victim of violence was associated with feeling less safe in school, although not with lower academic performance. Internationally, a study of Brazilian children referred for academic and behavioral problems found that training in interpersonal problem-solving skills and in language skills increased academic performance and reduced behavior problems (Elias, Marturano, Motta, & Giurlani, 2003).

Involvement in Activities. Social integration of individuals into the schools and the community has also been suggested as a key factor in the prevention of youth violence. Involvement in activities is believed to foster supportive social bonds, a sense of belonging, and positive self-esteem. Youths who are isolated are more prone to drugs, violence, and dropping out of school, whereas having a sense of belonging serves as a protective factor (Battistich & Horn, 1997; Osterman, 2000; Roderick, 1993). A number of studies have shown that student participation in extracurricular activities serves as a protective factor (Eccles & Barber, 1999; Mahoney & Cairnes, 1997). Mahoney and Cairnes (1997) examined participation in prosocial activities (volunteering, community service), school sports, performing arts, other school activities (such as student government), and academic clubs

for a sample of students that the researchers followed from sixth grade into early adulthood. The investigators found that all types of extracurricular involvement were positively associated with academic outcomes and served as protective factors with regard to risky behaviors.

Other research has shown that involvement in community organizations and activities has a positive influence in reducing school dropouts, substance abuse, and behavioral problems and in improving performance in school. These positive results have been found both for purely recreational and social activities as well as for youth programs designed to focus on personal development, such as developing life skills, enhancing self-esteem, and promoting resistance to drugs (Anderson-Butcher, Newsome, & Ferrari, 2003; Catalano, Berglund, Ryan, Lonczak, & Hawkins, 2004; Gambone & Arbreton, 1997; McLaughlin, 2000; National Research Council, 2002).

A minority of studies have found mixed results, however. For example, Fauth, Roth, and Brooks-Gunn (2007) found that sports participation was associated with higher delinquency rates and increased substance use, as compared to participation in arts and student government.

Attitudes Toward School and Education. A positive school climate refers to a cluster of variables regarding high expectations for students, having a safe and orderly environment, and positive relationships among teachers and students (Shann, 1999). West (1985) found school climate related to academic achievement among poor minority children in a sample of urban schools. Maehr and Anderman (1993) found that school climate made the most difference for children with the greatest risk of failure. Weishev and Ping (1993) noted that school-climate variables were associated with risk for problem behaviors. Shann (1999), who studied four urban middle schools drawn from poor minority neighborhoods, found significant differences among schools in the perceptions of caring of teachers for students, prosocial behavior, antisocial behavior, and achievement. Differences by racial group were also found, with Asian Americans having the lowest antisocial behavior and Asian Americans and Latinos reporting the most prosocial behavior compared with Blacks and Whites. Although the present study does not measure school climate, data were available regarding how individual students perceived their school environments and their expectations for education.

Context of Public Schools in Hawai'i

In many respects, Hawai'i is socially and demographically unique, reflecting its distinct history and geographical location. Throughout the 19th century, there was incremental influence and increasing economic dominance by Americans. The Kingdom of Hawai'i existed until 1893, when it was forcibly overthrown by the white elites in collusion with the American Navy. Native Hawaiians today have strong grievances against their colonization, the loss of culture, and loss of power. They are disadvantaged in comparison with the state's population on measures of socioeconomic status and health status and overrepresented with regard to many social problems and in the prisons (e.g., Blaisdell, 1993).

Asian groups, such as Chinese, Japanese, Koreans, and Filipinos, were recruited to work on the sugar and pineapple plantations. The Chinese, Japanese, and Koreans have largely assimilated and enjoy positive socioeconomic and health status and the lowest rates of substance abuse and imprisonment. Filipinos, however, were the last of the plantation workers and continue to lag in socioeconomic status. Filipinos continue to be the largest number of new immigrants to Hawai'i, and the population is about equally divided between locally born descendents of the plantation workers and new immigrants, who typically fill the lowest-paying service jobs in the economy.

The Samoan population in Hawai'i represents families who have recently migrated from American Samoa for the better economic and educational opportunities in Hawai'i. Families typically have lower levels of education and economic status. Samoans tend to live in tight-knit communities in

which they try to preserve their traditional cultural patterns. Youths face the challenge of assimilating into the culture of modern Hawai'i, while still having their roots in their traditional families.

The public school system in Hawai'i is the only statewide system in the nation and reflects the cultural diversity of the island population. Thus, among public schools, the percentage of different ethnic groups of students for the 2007–2008 school year was as follows: 27.6% part-/full-Hawaiian, 20.5% Filipino, 14.7% White, 13.9% "other," 9.2% Japanese, 3.4% Samoan, 3.2% Chinese, 3.2% Hispanic, 2.3% Black, 1.3% Korean, and 0.6% Native American (Department of Education, State of Hawai'i, 2009). The public school system has also been one of the avenues of social mobility for the Asian populations.

The public school teaching staff, however, is dominated by Japanese-Americans (28.9%) and Whites (22.8%), with no other specific ethnic group being more than 10% (Department of Education, State of Hawai'i, 2009). Whereas the number of Filipino teaching staff has been increasing (5.7%), there are still relatively small percentages of teaching staff of Native Hawaiian (9.4%) and Samoan ethnicity (0.3%) when considering the student population.

Relatively minimal research has been done in the public schools in Hawai'i, and little is known about how the school context affects the lives of Native Hawaiian, Filipino, and Samoan youths, including the risk and protective factors related to youth violence. These groups were the focus of study because they tend to be at greater risk for violence and delinquency, including being over-represented in Hawai'i's juvenile justice system, whereas Japanese-American youths tend to have lower rates of violence perpetration and victimization and are under-represented in Hawai'i's juvenile justice system (Hishinuma et al., 2001, 2005; Hishinuma, Miyamoto, Nishimura, & Nahulu, 2000; Kassebaum et al., 1995; Mayeda, Hishinuma, Nishimura, Garcia-Santiago, & Mark, 2006). For example, one retrospective study found that, of the 269 youths who had been placed at the Hawai'i Youth Correctional Facility—the only such facility in the State of Hawai'i—only 1 (0.4%) was of full-Japanese-American ancestry (Kim et al., 2001). Given these disparities, it is important to determine whether there is generalizability to these under-researched adolescent populations.

Research Questions

The specific research questions to be investigated were as follows: (1) Is placement in special education classes or having frequent moves between schools associated with youth violence? (2) Does high academic achievement serve as a protective factor against engaging in violence, and does having friends with similar or different academic performance serve as a protective factor? (3) Does being involved in extracurricular school activities and/or in community activities or having a job while in school serve as a protective factor against violent behavior? (4) Do positive attitudes toward one's school and toward education serve as a protective factor against violent behavior? (5) Are the relationships among the schooling variables and violence similar or different by gender and by ethnicity for Hawaiian, Filipino, and Samoan youths and by students of mixed ethnicity?

METHODS

Data were from a quantitative, cross-sectional survey by the Asian/Pacific Islander Youth Violence Prevention Center of adolescents in three public high schools in the City and County of Honolulu. These high schools were selected because they have concentrations of Hawaiian, Filipino, and Samoan youths. In these schools, a small sample of Japanese students—an ethnic group found to have low levels of behavioral and psychological problems, including in the current sample (Mayeda et al., 2006)—served as a comparison group.

Survey Instrument

The research instrument was an adapted version of a survey used in the Denver Youth Study, Pittsburgh Youth Study, and Rochester Youth Development Study (Thornberry, Krohn, Lizotte, Smith, & Tobin, 2003). The instrument was composed of 24 parts (e.g., demographics, self-reported delinquency, self-reported substance use, family background) consisting of 296 items.

Six focus groups were conducted in the spring of 2002 with Hawaiian, Samoan, and Filipino community leaders and teenagers to elicit feedback on the proposed research instrument. One community leader focus group and one teenager focus group were held for each of the three ethnic groups, with a total of 25 community leaders and 13 teenagers. After making needed modifications, the instrument was thereafter field tested with adolescent participants (total $N = 20$) of Hawaiian, Samoan, and Filipino ancestry in the fall of 2002. Final revisions incorporated minor formatting changes.

Procedures

Students of Hawaiian, Samoan, Filipino, European, and Japanese ethnic backgrounds were randomly selected in each of the three high schools as potential participants. The ethnic background information was available because parents or guardians must indicate one ethnic background for their child for school records.

After eligible students were given standard information (e.g., purpose, protocol, confidentiality, and voluntary participation), those interested signed a form and were asked to obtain their parents' permission to participate in the study. Parents received a written parental permission form that included standard information on the study. Students were offered a \$25.00 money order as compensation for undertaking the survey. The University of Hawai'i Committee on Human Studies (i.e., Institutional Review Board) approved all research procedures.

For each survey, the following protocol was employed. First, school teachers and administrators excused students from approved classes to take the survey on a one-to-one basis in a private area of the school campus. Trained research associates reviewed the contents of the assent form, which included reminding participants (1) that all information was to be kept confidential, (2) of their right to skip questions, and (3) that they could stop taking the survey at any time without penalty if they felt uncomfortable in continuing. The entire instrument was read to each participant, and all responses were recorded by the interviewers. On rare occasions, because of language barriers, selected words were translated into participants' native language by interviewers. One entire survey was read to a Samoan participant in Samoan. The average interview lasted approximately 1 hour.

Participants

The overall participant inclusion rate was 37.3% (339 participants' surveys collected of 908 participants recruited). There was no significant difference in the rate across ethnicity (based on school records). The rate, however, was significantly higher for girls (42.0%) than for boys (32.4%). For the present study, data from one full Hawaiian, six full Whites, and eight "Mixed Others" were omitted from the analyses given the purpose of the study and small n size of these groups. Table 1 presents the sample description of the total N of 325.

Participants were categorized by ethnic group based on self-reports of students as follows: Hawaiians = some Hawaiian ancestry because the large majority of Hawaiians are of mixed ancestry. Therefore, as defined in this study, Hawaiian youths could be mixed with other ancestries such as Filipino, Samoan, Japanese, and White. Filipino = at least some Filipino ancestry, but no Hawaiian or Samoan heritage. Samoan = at least some Samoan ancestry, but no Hawaiian or Filipino heritage. Japanese = at least some Japanese, but no Hawaiian, Filipino, or Samoan heritage. In addition, a

Table 1
Sample Description (N = 325)

		Ethnic Group														
		Part or Full Filipino (No Hawaiian, Samoan)		Part Hawaiian		Part or Full Japanese (No Hawaiian, Filipino, Samoan)		Part of Full Samoan (No Hawaiian, Filipino)		Total						
Demographic Variable	Levels	Column		Column		Column		Column		Column						
		<i>n</i>	%	<i>n</i>	%	<i>n</i>	%	<i>n</i>	%	<i>n</i>	%					
Total (Row %)		110	33.9	99	30.5	33	10.2	83	25.5	325	100.0					
Full vs. Mixed																
Ethnicity	Mixed	34	30.9	99	100.0	14	42.4	27	32.5	174	53.5					
	Full	76	69.1	0	0.0	19	57.6	56	67.5	151	46.5					
Gender	Male	43	39.1	44	44.4	12	36.4	37	44.6	136	41.9					
	Female	67	60.9	55	55.6	21	63.6	46	55.4	189	58.2					
Grade Level	9th	25	22.9	24	24.2	7	21.2	20	24.1	76	23.5					
	10th	40	36.7	31	31.3	7	21.2	19	22.9	97	29.9					
	11th	24	22.0	25	25.3	10	30.3	25	30.1	84	25.9					
	12th	20	18.4	19	19.2	9	27.3	19	22.9	67	20.7					
Age		<i>n</i>	<i>m</i>	<i>sd</i>	<i>n</i>	<i>m</i>	<i>sd</i>	<i>n</i>	<i>m</i>	<i>sd</i>	<i>n</i>	<i>m</i>	<i>sd</i>			
		108	16.17	1.22	98	16.17	1.06	33	15.86	1.30	82	16.32	1.13	321	16.18	1.16
Main Effects:						Interaction Effects with Ethnicity:										
Ethnicity = $\chi^2(3, N = 325) = 42.7, p < .0001$.						Full vs. Mixed Ethnicity = $\chi^2(3, N = 325) = 124.9, p < .0001$.										
Full vs. Mixed Ethnicity = $\chi^2(1, N = 325) = 1.6, p = .2020$.						Gender = $\chi^2(3, N = 325) = 1.3, p = .7339$.										
Gender = $\chi^2(1, N = 325) = 8.6, p = .0033$.						Grade Level = $\chi^2(9, N = 324) = 6.8, p = .6564$.										
Grade Level = $\chi^2(3, N = 324) = 6.0, p = .1116$.						Age = $F(3, 317) = 1.20; R^2 = .011; p = .3084$.										

new variable was constructed to indicate whether each participant was of mixed or full ancestry (i.e., mixed-versus-full ancestry construct). Hawaiians had the highest proportion of those with mixed ancestry, as compared to the Filipino, Japanese, and Samoan youths. Due to the intended focus of the study, the sample over-represented Hawaiian, Filipino, and Samoan adolescents compared to their proportions in the total population. The sample of respondents included significantly more female than male students.

Measures of Risk Factors

Data for potential risk or protective factors in this analysis were available from questions that asked about gender, number of schools attended, whether the student had ever been in special education classes, whether he or she has had a job in the past 12 months, whether he or she participates in noncore school activities, whether he or she participates in community activities, current grade point average (GPA), whether friends' grades were better or worse or about the same as one's own, and the following question, "Do you ever feel pressure to choose between doing well in school and being accepted by your friends?"

School Attitudes. One of the goals of this article is to explore the role of school attitudes as a risk or protective factor in relation to youth violence. The survey included 31 items in the general domain of attitudes toward school and education taken from a large survey of adolescent attitudes and behaviors by Thornberry and colleagues (2003).

Given the uniqueness of the present sample, exploratory factor analyses were conducted. Factor analyses were performed on the larger data set for students who had complete scores ($N = 330$). Maximum likelihood and promax rotations were used with variations in the number of factors specified. A 19-item, five-factor solution resulted based on the screen test (plot of eigenvalues), changes in chi-square values regarding the test of sufficiency, simple factor structure (using .40 as a cutoff for the standardized coefficients), and meaningfulness of the factors: Factor 1 = Favorable School Attitudes: 8 items (Cronbach's alpha [α] = .79); Factor 2 = High School and College Aspirations: 3 items ($\alpha = .79$); Factor 3 = Feel Safe: 4 items ($\alpha = .62$); Factor 4 = Importance of College: 2 items ($\alpha = .93$); Factor 5 = Negative Attitudes Toward School Fairness: 2 items ($\alpha = .80$).

Measure of Youth Violence

Youth violence was the dependent variable in this analysis. A nine-item series of questions on self-reported violent behavior was constructed from several studies on juvenile delinquency (Thornberry et al., 2003). The introductory instructions stated, "The next set of questions asks you how often you have done things that may be illegal. I want to remind you that everything you tell me is confidential, meaning that I will not tell anybody, including your parents, school, police, or the court. I'm going to list several different behaviors. For each one, tell me if you've done it and, if so, how many times in the last six months, and with whom." The nine items were (1) hit a family member or boyfriend/girlfriend; (2) thrown objects such as rocks or bottles at people; (3) robbed someone; (4) attacked someone with the idea of seriously hurting them or killing them; (5) used a weapon or force to get money or things from people; (6) physically hurt or threatened to hurt someone to get them to have sex with you; (7) purposely set fire to a house or building or tried to do so; (8) made threatening or nasty phone calls; and (9) been involved in gang fights.

Each item was coded 0 for "no" and 1 for "yes." The mean among the nine items represented the overall violence score. Because there were missing data for some items, the total violence score for a student was calculated as the mean among the items completed for that respondent ($\alpha = .52$; $N = 339$).

Data Analysis

To determine the relationships among the independent variables, inter-correlations were calculated. Bivariate and multiple logistic regression analyses were performed to ascertain the associations between the independent variables with each of the individual violence items. Bivariate and multiple linear regression analyses were conducted to determine the relationship between the independent variables and the overall violence mean. Subsequently, a series of multiple linear regressions were performed to reveal any significant two-way and three-way interaction effects that involved ethnicity, gender, or both, along with each of the other independent variables.

RESULTS

Table 2 displays the statistically significant results of the bivariate and multiple logistic regression analyses on the individual violence items. On a bivariate level, all significant associations of school attitudes with the violence items were negative except for the relationships regarding Factor 5, Negative Attitudes Toward School Fairness. GPA was negatively associated with five of the six

Table 2
 Statistically Significant Bivariate and Multivariate Logistic Regression Associations with Each Violence Item

Independent Variables	Bivariate					Multivariate (N = 291)	
	N	χ^2	r^{2a}	β	p	R^{2a}	p
<i>Hit a Family Member or Boyfriend/Girlfriend</i>							
Job in Past Year (0 = no; 1 = yes)	325	4.7	.021	0.59	*	.004	
School Attitudes							
Factor 1 = Favorable School Attitudes	325	7.5	.033	-0.66	**	.009	
Total						.095	
<i>Thrown Objects Such as Rocks or Bottles at People</i>							
Part vs. Full Ethnicity (0 = part; 1 = full)	325	0.6	.004	0.29		.020	*
Gender (0 = male; 1 = female)	325	4.4	.028	-0.77	*	.002	
Number of Schools Attended in Past 2 Years	324	0.6	.004	0.24		.022	*
GPA	307	17.8	.115	-1.06	****	.022	*
Pressure to Choose Between School and Friends	325	7.7	.048	0.64	**	.023	*
School Attitudes							
Factor 1 = Favorable School Attitudes	325	18.9	.116	-1.49	****	.030	*
Factor 2 = High School and College Aspirations ^b	325	5.9	.037	-0.97	*	.008	
Factor 4 = Importance of College	325	18.3	.112	-1.30	****	.036	**
Total						.309	****
<i>Robbed Someone</i>							
Gender (0 = male; 1 = female)	325	9.1	.102	-2.00	**	.050	*
GPA	307	8.3	.095	-1.10	**	.010	
Friends' Grades (0 = different; 1 = same)	320	5.9	.066	-1.51	*	.026	
Job in Past Year (0 = no; 1 = yes)	325	8.5	.096	1.76	**	.016	
Pressure to Choose Between School and Friends	325	7.7	.086	0.91	**	.018	
School Attitudes							
Factor 1 = Favorable School Attitudes	325	13.0	.144	-1.90	***	.028	
Factor 4 = Importance of College	325	7.5	.084	-1.17	**	.016	
Factor 5 = Negative Attitudes Toward School Fairness	324	0.7	.008	-0.36		.039	*
Total						.504	****
<i>Attacked Someone with the Idea of Seriously Hurting Them or Killing Them</i>							
Gender (0 = male; 1 = female)	325	6.4	.063	-1.40	*	.026	
GPA	307	5.0	.050	-0.77	*	.008	
Job in Past Year (0 = no; 1 = yes)	325	7.5	.073	1.48	**	.017	
Pressure to Choose Between School and Friends	325	8.0	.078	0.86	**	.030	
Total						.245	
<i>Made Threatening or Nasty Phone Calls</i>							
Part vs. Full Ethnicity (0 = part; 1 = full)	325	2.3	.030	1.02		.070	*
Ever in Special Education (0 = no; 1 = yes)	324	0.3	.004	0.45		.062	*
GPA	307	7.2	.093	-1.12	**		.034
Job in Past Year (0 = no; 1 = yes)	325	4.9	.063	1.45	*	.031	
School Attitudes							
Factor 1 = Favorable School Attitudes	325	15.9	.199	-2.30	****	.049	*
Factor 3 = Feel Safe	325	7.2	.091	-1.11	**	.058	*
Factor 4 = Importance of College	325	14.6	.182	-1.67	***	.061	*
Total						.517	***

(Continued)

Table 2
Continued.

Independent Variables	Bivariate					Multivariate (N = 291)	
	N	χ^2	r^{2a}	β	p	R^{2a}	p
<i>Been Involved in Gang Fights</i>							
Gender (0 = male; 1 = female)	325	9.5	.064	-1.24	**	.026	*
GPA	307	15.5	.108	-1.04	****	.048	**
Pressure to Choose Between School and Friends	325	7.1	.048	0.65	**	.006	
<i>School Attitudes</i>							
Factor 1 = Favorable School Attitudes	325	9.1	.061	-1.09	**	.008	
Factor 3 = Feel Safe	325	7.6	.051	-0.71	**	.022	*
Factor 4 = Importance of College	325	4.3	.029	-0.69	*	.001	
Factor 5 = Negative Attitudes Toward School Fairness	324	5.6	.038	0.62	*	.017	
Total						.298	***

Notes. The following individual violence items were not analyzed due to low occurrence: used a weapon or force to get money or things from people (3 occurrences); physically hurt or threatened to hurt someone to get them to have sex with you (1 occurrence); purposely set fire to a house or building or tried to do so (1 occurrence).

* $p < .05$; ** $p < .01$; *** $p < .001$; **** $p < .0001$.

^a Maximum variance accounted for (R^2).

^b Each multivariate slope was in the same direction as its respective bivariate slope, except for this item. The multivariate slope was 0.73, but not statistically significant.

violence items. Boys more than girls responded affirmatively to four of the six items. For both (1) job in the past year and (b) pressure to choose between school and friends were positively related to four of the six items. Having the same grades as friends was negatively related to having robbed someone.

For the multiple logistic regressions, the overall model was statistically significant for four of the six violence items, with variances accounted for (maximum R^2) ranging from .095 (nonsignificant) to .517 (significant). Seven of the significant effects involved the School Attitude Factors, with the unexpected finding of a negative association between Negative Attitudes Toward School Fairness and robbed someone. One or more violence items were associated with GPA, male gender, full ethnicity, pressure to choose between school and friends, number of schools attended, and ever in special education.

Table 3 presents the results for the overall violence mean. On the bivariate level, four of the five school attitude factors were negatively related with the outcome. Pressure to choose between school and friends, having a job in the past year, being a male, and lower GPA were also associated with the violence mean. The multiple linear regression accounted for a total 29.7% of the variance ($p < .0001$). Three of the five school attitude factors (i.e., Favorable School Attitudes, Feel Safe, and Importance of College) remained statistically significant within the multiple linear regression analysis. Lower GPA and pressure to choose between school and friends remained significant correlates.

The effects were examined for each two-way interaction with ethnicity (15 tests) and for each three-way interaction with ethnicity and gender (14 tests). For each two-way analysis, the model included all 16 main effects (independent variables, including ethnicity) and the two-way interaction effect being tested. For each three-way analysis, the model included all 16 main effects, two two-way analyses (e.g., ethnicity \times variable in question, gender \times variable in question), and the three-way interaction being tested (e.g., ethnicity \times gender \times variable in question). Given the total number of tests, α was lowered to .01.

Table 3
Bivariate and Multivariate Linear Regression Associations with the Overall Violence Mean

Independent Variables	Bivariate					Multivariate (<i>N</i> = 291)	
	<i>N</i>	<i>F</i>	(<i>df</i>)	<i>r</i> ²	<i>b</i> ^a	<i>F</i> ^b	<i>R</i> ²
Part vs. Full Ethnicity (0 = part; 1 = full)	325	0.1	(1, 323)	.000	0.00	1.3	.003
Gender (0 = male; 1 = female)	325	11.6	(1, 323)	.035	-0.04***	3.4	.009
Number of Schools Attended in Past 2 Years	324	0.9	(1, 322)	.003	-0.01	0.1	.000
Ever in Special Education (0 = no; 1 = yes)	324	2.3	(1, 322)	.007	0.03	2.3	.006
GPA	307	29.7	(1, 305)	.089	-0.04****	5.7	.015*
Friends' Grades (0 = different; 1 = same)	320	2.7	(1, 318)	.008	-0.02	0.3	.001
Job in Past Year (0 = no; 1 = yes)	325	14.0	(1, 323)	.042	0.05***	2.9	.007
Noncore School Activities (0 = no; 1 = yes)	324	0.1	(1, 322)	.000	0.00	1.7	.004
Community Activity (0 = no; 1 = yes)	317	2.0	(1, 315)	.006	0.02	2.7	.007
Pressure to Choose Between School and Friends	325	18.8	(1, 323)	.055	0.04****	9.9	.025**
School Attitudes							
Factor 1 = Favorable School Attitudes	325	40.0	(1, 323)	.110	-0.07****	11.7	.030***
Factor 2 = High School and College Aspirations	325	6.2	(1, 323)	.019	-0.03*	1.2	.003
Factor 3 = Feel Safe	325	13.0	(1, 323)	.039	-0.03***	8.1	.021**
Factor 4 = Importance of College	325	32.4	(1, 323)	.091	-0.07****	13.3	.034***
Factor 5 = Negative Attitudes Toward School Fairness	324	1.6	(1, 322)	.005	0.01	0.6	.002
Total						7.7	.297****

^a Each multivariate slope was either in the same direction as its corresponding bivariate slope or not statistically significant.
^b *df* = 1, 275 for main effects; *df* = 15, 275 for total.

* *p* < .05; ** *p* < .01; *** *p* < .001; **** *p* < .0001.

Only one two-way interaction was statistically significant: ethnicity × school attitude Factor 1 (Favorable School Attitudes) ($F[3, 269] = 4.9$, $R^2 = .034$, $p = .0024$), with the following regression slopes for each ethnic group (other main effects controlled for): Filipino = $-.074$; Hawaiian = $.000$; Japanese = $-.051$; and Samoan = $-.093$. These findings indicate that having a favorable attitude toward school was negatively related to violent behavior (i.e., served as a protective factor) for Samoan, Filipino, and Japanese youths in comparison to Hawaiian adolescents, where no relationship was found.

DISCUSSION

Building on prior research, this study examined the association of school performance and school experiences as risk or protective factors of violence among a sample of Filipino, Hawaiian, and Samoan youths, using Japanese students as a comparison group. This study is unique as it is one of the only epidemiological studies of youth violence in Asian American and Pacific Islander adolescent populations.

In revisiting the five research questions, the following results are noted:

- (1) Although placement in special education was associated with “making threats” (Table 2), and frequent moves between schools was related to “thrown objects” (Table 2), the variables of special education placement and frequent moves were not associated with overall youth violence (Table 3).

- (2) School achievement, in the form of GPA, was a protective factor against overall youth violence (Table 3) and for five of the six violence items (Table 2). Friends' academic performance, however, was not demonstrated to be a protective factor against overall violence (Table 3), and although friends' grades as a variable was protective against "robbed someone," this relationship was not statistically significant in the multiple regression analysis (Table 2).
- (3) Although having a job in the past year was associated with overall youth violence (Table 3) and with four of the six violence items (Table 2), and thus, a risk factor or marker for violence, these relationships were not statistically significant when the other independent variables were in the model (Tables 2 and 3). Extracurricular activities and community activities were associated with neither overall youth violence (Table 3) nor individual violence items (Table 2).
- (4) The following variables were associated with lower overall youth violence: favorable school attitudes, high school and college aspirations, feeling safe, importance of college, and less pressure to choose between school and friends (Table 3). A similar pattern was evidenced for the individual violence items (Table 2).
- (5) The findings varied by ethnic group for only one relationship, whereby having a favorable attitude toward school was negatively related to violent behavior (i.e., served as a protective factor) for Samoan, Filipino, and Japanese youths in comparison to Hawaiian adolescents, where no relationship was found.

The study generally confirms previous findings in the literature that both positive school performance and positive attitudes toward school are negatively associated with youth violence. In contrast to some studies, involvement in activities, either in school or in the community, were not found to be protective factors against violence either at the bivariate or multivariate level. In addition, having a job in the past year was actually found to be a risk factor or marker for youth violence. This finding suggested that perhaps these adolescents were working not by choice, but to help support their families, as opposed to working for extra spending money. Although working at a job might serve to prevent youths from "getting into trouble," including perpetrating violence, having to work may be a marker for lower socioeconomic status, greater exposure to violence, and so on. These conjectures are consistent with the subsequent findings that having a job was no longer statistically significant when simultaneously considering the other variables in the model.

It is worth noting that the results of the two-way interaction analysis with ethnicity showed that, as favorable school attitudes increased, overall violence decreased for Filipino, Samoan, and Japanese youths, but less so for Hawaiian adolescents. For some Hawaiians, schooling may be seen as a Western, alien institution from their traditional culture and lifestyle preferences. Other studies have shown that Hawaiian youths may perceive a conflict in values between family and school, and they give greater priority to their families (Ferreira & Ka'anoi, 1987; Goebert et al., 2004). A perceived social and cultural distance thus may be more typical of Hawaiian students regardless of their risk for violence. Bridging this distance probably requires more Hawaiian presence among the staff of schools and incorporation of Hawaiian cultural content and modes of learning.

The results revealed that students of full ethnicity were somewhat more likely to engage in violence, although once other variables were controlled, mixed-versus-full ethnicity was no longer a statistically significant variable. In contrast to studies on other populations, gender also failed to be significant in the final model when considering the overall violence mean, although boys had higher rates on some individual violence items.

Limitations

This study is limited by a relatively small sample size of 325 students. As a consequence, some small cell sizes existed when broken down by ethnic group and gender. The sample was drawn from three schools having concentrations of the ethnic groups that were the focus of this study, but the

neighborhoods serving these schools may not be representative of the total population of youths from these ethnic groups. Thus, the ability to generalize may be decreased.

Participation in the study was also contingent on the willingness of the students and permission from their parents. As a consequence, the sample was probably not representative of the students in the selected schools, but may be biased toward students who were more conforming and less alienated. There has been some evidence, however, that shows that the impact of having to obtain written parental permission is minimal when estimating adolescent risk behaviors in a school-based setting (Dent, Sussman, & Stacy, 1997).

Implications and Future Research

Five variables emerged as important in the final analysis: GPA, feeling pressures to choose between school and friends, having a favorable school attitude, feeling safe, and believing in the importance of college. It is not surprising that higher achieving students and those believing in the importance of college would be less likely to engage in violence. These findings conform to the results found for other populations as reviewed earlier.

Important implications for this particular population of Asian American and Pacific Islander youths, however, are perhaps suggested by the role of the other variables. Not all youths are high academic achievers or are oriented toward college. Independent of academic performance, however, the results show a relatively strong association between having positive feelings toward school and perceiving the school to be safe, as protection against violence. Thus, the results suggest that fostering positive social bonds among students and teachers may be as important to well-being and protection against alienation and violence as is academic achievement for Asian American and Pacific Islander adolescents.

Finally, the finding that feeling pressure to choose between school and friends is a risk factor for violence suggests the tension some youths in these schools experience between their close interpersonal environment and schooling. Although academic achievement may be understood as desirable in our society, it may not be perceived as so important to self-esteem and to well-being by students in this sample as for middle-class youths. Adolescents look to their immediate peer relationships for acceptance; conformity to the norms of their peer group is a necessary means of obtaining approval. Doing well in school may be problematic in neighborhoods having concentrations of adolescents from diverse backgrounds. Other kinds of activities and behaviors, some of which may be antisocial, may serve as ways of achieving status in the eyes of one's peers. Several studies have highlighted the significance of "context" or cultural milieu (Chaney, Hunt, & Schultz, 2000; Cohen, 1998), arguing that, in some peer groups, violence may be considered a normative and even an "honorable" response to provocation. Furthermore, many parents may not place a top priority on the value of schooling given the other critical issues that are being faced (e.g., poverty), and youths may have adult role models who have low levels of formal education. These ideas have been examined thoroughly in the sociological literature on social class and delinquency.

What are the implications for schools? Programs fostering more positive bonds between teachers and students in the school environment may have positive effects in reducing behavioral problems. Positive relationships are most likely where bridges are created between the school and the particular neighborhood communities they serve. Changing culturally based attitudes that are largely due to issues of poverty, for example, poses a significant challenge because they reflect the overall "disadvantaged" status of populations in the socioeconomic structure of the society. Thus, interventions to reduce violence and other delinquent behaviors are unlikely to succeed unless schools are perceived as addressing the adverse conditions of the communities that they serve.

Any preventive approach to reducing violence must consider the various systems (e.g., family, schools, social) that shape children's lives. Consultation with the community is needed in creating school programs that support a safe environment, prevent drug use by students, prevent violence, and create a disciplined environment conducive to learning (Peacock, McClure, & Agars, 2003). Indeed, it has been demonstrated that the most effective programs are those that promote family, school, and community partnerships. Wright and Stegelin (2003) in their book, *Building School and Community Partnerships Through Parent Involvement*, argue for the need for communities, educational institutions, and community-based programs to work together to identify and address the unique needs of at-risk youths and families, and they provide a myriad of excellent examples of how to build community, school, and family linkages.

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