

## VIOLENCIA JUVENIL

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### An Overview of Reported Youth Violence in Puerto Rico

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**Objectives.** The purpose of this paper is to describe the prevalence of school and youth violence in Puerto Rico based on several representative samples surveyed in the Island during the 1990's.

**Background.** Reviewing the available data on youth violence is necessary in order to decide the best strategies to follow in developing new ways to prevent and monitor it.

**Methods.** Three surveys were reviewed in this paper: The Youth Risk Behavior Survey conducted by the Center for Disease Control (1991, 1995, 1997); The Methods for the Epidemiology of Child and Adolescent Mental Disorders Study (1991); and the Youth Survey (1997-98).

**Results.** It was found that the prevalence of reported school violence in Puerto Rico tends to be somewhat lower than the prevalence reported in other sites of the U.S.A. Age and gender has a dramatic influence in the reports

of youth violence in Puerto Rico. Male students are three times as likely to carry weapons than females and almost twice as likely to report hurting someone than females. Less than 10% of the male students ages 12-13 report carrying a weapon while fully 30% of those 18 year olds reported carrying a weapon. Being arrested also increases from only 3% in the youngest students surveyed to 10% on the oldest group (18 or older).

**Conclusion.** The CDC has recently reported that since the early 90's there has been a decrease in reported school violence in the U.S.A. This analysis of youth surveys replicated a similar tendency for Puerto Rican youngsters. Implications for prevention programs are discussed.

*Key words:* Youth violence, School violence, Violence behavior prevalence, Puerto Rican adolescents, Puerto Rican youth violence surveys.

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In Puerto Rico, school youth violence in general and school violence in particular are not closely monitored. In contrast, in the United States yearly national surveys of school violence are conducted by the Department of Education and published in reports such as the Indicators of School Crime and Safety (1).

Violence death statistics in the United States and in Puerto Rico (PR) underscore the significance of youth violence. In 1998, homicide was the second leading cause of death for Americans between 15 and 24 years of age and the third for the 10 to 14 years olds (2). Similar statistics were reported for PR where homicides were the third cause of death for adolescents between 15 and 19 and the fourth for children between the ages of 10 and 14 (3). These

statistics are a reliable indicator of all violent crimes since they are usually measured accurately.

In the USA, youth violence is not only closely monitored but also highly visible and a priority concern. This fact is reflected in a 1999 special report from the Surgeon General on Youth Violence (4). The surgeon's report indicates surveillance of youth violence is a necessary step for identifying risk factors and for assessing the adequacy of interventions geared to reduce violent behaviors. The report also acknowledges that the two approaches to measure the prevalence of violence in youth: official reports and self-reports have their shortcomings but at the same time provide the only means of monitoring such behavior.

Even though in PR information about youth or school violence is not collected systematically, during the last decade several surveys done in the Island have included items measuring different aspects of youth or school violence. The purpose of this paper is to review such surveys in order to describe the prevalence of school and youth violence based on the available surveys in the Island.

The following surveys are reviewed in this paper: a) the Youth Risk Behavior Survey conducted by the Center for

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Disease Control in 1991, 1995 and 1997 (5-8); b) the Methods for the Epidemiology of Child and Adolescent Mental Disorders Study (MECA) conducted in 1991 and funded by the National Institute of Mental Health (9) c) the Youth Survey (“Consulta Juvenil”), conducted by the Puerto Rico Mental Health and Anti-Addiction Services Administration. (10-12).

### Methods

Table 1 shows the principal characteristics of each of these surveys. It presents the year of completion of the survey, the sample size, the age group studied and the methods of data collection. The studies spanned from

(OA). All differences discussed are statistically significant based on a X<sup>2</sup> test comparing the reported prevalence of each of the behaviors studied in PR with each of the other sites.

The distributions of the three items related to physical fights and carrying a weapon for the three different samples studied in 1991 are shown on Figure 1. The item distribution shows that physical fights were the most prevalent violent behavior reported in the three samples for males (40% or more) and for females (26% or more). The prevalence of fights among male students in PR was similar (43%) to that reported by NYC students (46%) but lower than the prevalence reported by males students in the US sample as a whole (50%). In contrast the proportion of female

**Table 1.** Description of Surveys with Items on School/Youth Violence in Puerto Rico

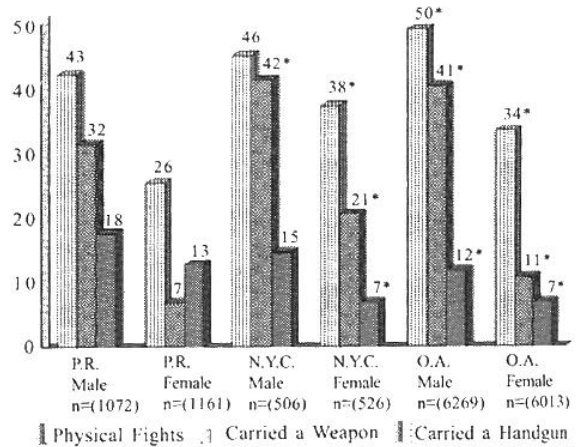
	YRBSS	MECA	“Consulta Juvenil”
Survey Year	1991, 1995 & 1997	1991	1997-1998
Sample Description	Representative sample of all Junior & High Schools in P.R.	Representative sample of households in the S.J. Metropolitan Area	Representative sample of all Junior & High Schools in P.R.
Sample Size	3,103 & 2,711	312	6,700 & 7,500
Age Groups	13-18 years old	9-17 years old	12-18 years old
Data Collection	Self Administered Questionnaire	Personal Interview	Self Administered Questionnaire
Comparison Sites	New York City, Overall Sample of US Schools	New York, New Haven, Atlanta	None

1991 to 1997 and sample sizes varied greatly (between 312 and 7,500 youngsters). All samples are probabilistic samples representative of either San Juan youth or Junior and High schools in the Island. Two of the surveys collected their data using self-administered questionnaires and the third used personal interviews. The different surveys also varied in terms of the type and number of violence items included. The specific items included in this analysis from each study are shown in Figures 2 to 10.

### Youth Risk Behavior Survey 1991-1997

The first study to be reviewed is the Youth Risk Behavior Surveillance Survey (YRBSS). This survey monitors health-risk behaviors among youth and includes data from state, territorial and local schools. The survey data is available in PR for 1991, 1995 and 1997.

Figure 1 shows the three violence items analyzed. They measured the prevalence of engaging in at least one physical fight during the 12 months preceding the survey and of carrying either a weapon or a handgun at least one day during the last month preceding the survey. The prevalence of these behaviors in Puerto Rico are compared with similar surveys done in a sample of New York City schools and with a sample of U.S. schools as a whole

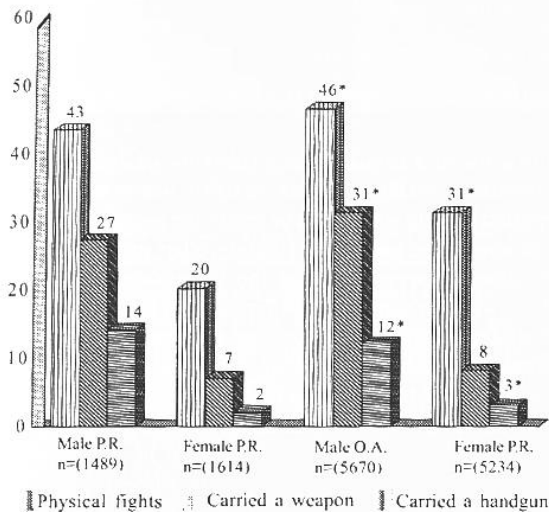


**Figure 1.** Percent of Middle & High School Students Who Reported Violence Behavior in YRBSS, 1991.

students in PR reporting fights (26%) was smaller than the proportion of females reporting fights in NYC (38%) and in the US sample as a whole (34%). In all sites about a third or more of male students reported carrying weapons. In PR the prevalence of carrying weapons among males (32%) was slightly lower than in than other sites (NYC, 42%; OA, 41%). There were larger differences however, between

the proportion of females reporting carrying a weapon in PR (7%) and the proportion of female students reporting carrying a weapon in NYC (21%) and in the sample of US schools as a whole (11%) The proportion of males reporting carrying a handgun was similar between the PR sample (18%) and the NYC sample (15%) but larger than in the US sample as a whole (12%). The pattern for Puerto Rican females reporting carrying a handgun (13) was similar to that of females surveyed in (15%) but larger than the proportion of female students reporting carrying a handgun in the sample of USA schools as a whole (7%).

Figure 2 shows the YRBSS findings for 1995. New York City was not included in the survey therefore comparison will be made with the sample of the USA as a whole. As in 1991, physical fights were the most prevalent items in PR (43% for males and 20% of females) and in the sample as a



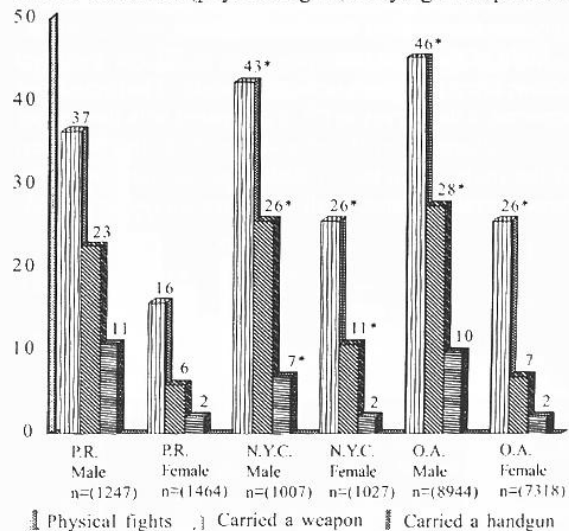
**Figure 2.** Percent of Middle & High School Students Who Reported Violence Behavior in YRBSS, 1995.

whole for both sexes (46% for males and 31% for females). The prevalence of fights continues as in 1991 to be slightly lower in PR than in the USA schools as a whole. The proportion of students reporting carrying weapon remains slightly lower among the males students survey in Puerto Rico (27%) than among males in the USA schools as a whole (31%). The percentage of females reporting carrying weapons was very low (7% and 8%) in both sites. There was a very small difference in the prevalence of carrying handguns between males surveyed in PR (14%) and those surveyed in the USA schools (12%).

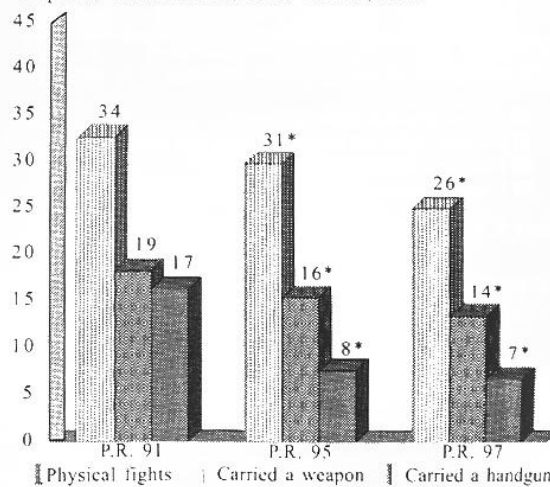
In 1997 the YRBSS was conducted in New York, in PR and the continental USA as a whole. Figure 3 shows the findings for this year. Physical fights were the most prevalent item in PR among males (37%) and among females

(16%). Compared both to New York (males 43% and females 26%) and to the USA as a whole (males 46% and females 26%) Puerto Rican youngsters reported less fighting in schools than their U.S. counterparts. In all sites the proportion of male students reporting carrying weapons was similar (between 23 and 28%). Among females surveyed in all three sites the percentage reporting carrying weapons was low (between 6 and 11%). The prevalence of carrying handguns among males was also similar in the 3 sites (between 7% and 11%) and among females it was 2% or less in all samples.

Figure 4 shows a slight reduction over the past decade in the 3 behaviors (physical fights, carrying a weapon and



**Figure 3.** Percent of Middle & High School Students Who Reported Violence Behavior in YRBSS, 1997.



**Figure 4.** Percent of Middle & High School Students Who Reported Violence Behavior in YRBSS 1991, 1995 & 1997.

carrying a gun) measured by the YBRSS in PR since 1991. In a recent CDC publication these behaviors has been said to improve over the last ten years. (13)

### MECA

The original intention of the MECA Study was to provide information about the prevalence of mental disorders among youth. It used the Diagnostic Interview Schedule for Children (Version 2.3). This instrument generates criteria for 31 DSM-III-R psychiatric diagnoses in children (13). It included many items about violence behavior since they were part of the criteria needed to generate the conduct disorder diagnosis.

Eight of the most prevalent items in PR are discussed below. They are shown in Figure 5 and 6. The prevalence reported in the survey in PR is compared with three other sites (Alabama, New Haven and New York) that were part of the study. As in the YBRSS physical fights were the most prevalent items in all four sites survey in MECA.

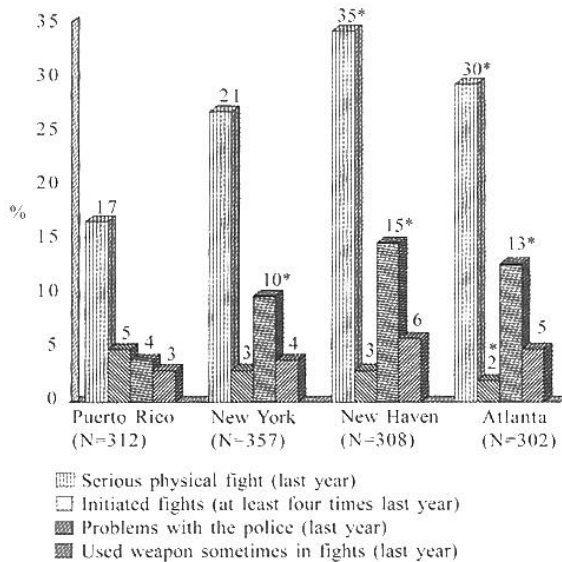


Figure 5. Reported Violence Behavior in MECA Study, 1991.

The proportion of students reporting been in a serious physical fight during the previous year ranged from a high of 35% in New Haven to a low of 17% in PR. Only by a small proportion of students in all sites however, reported initiating fights at least 4 times in the previous year. The prevalence for this item ranged from 2 to 5% across sites. Another interesting item was "problems with the police". Only 4% of the students reported such problems in PR as compared to 10% in NY, 15% in New Haven and 13% in Atlanta. Interpretations of this item are difficult since it

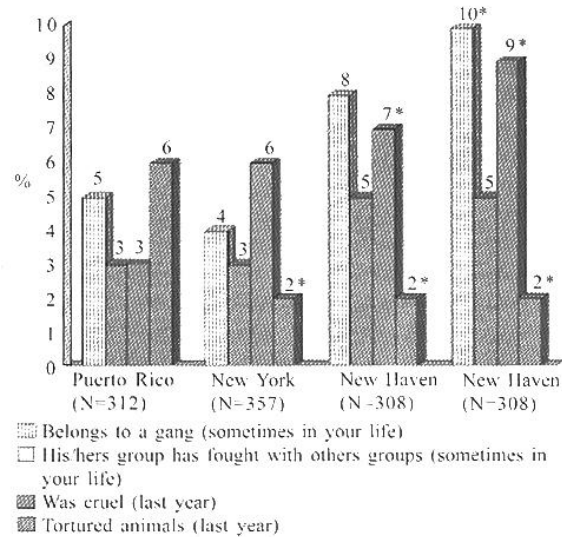


Figure 6. Reported Violence Behavior in MECA Study, 1991.

could mean actually less problems or less police supervision. Using weapons in fights was a rare event reported by only six percent or less of the samples studied.

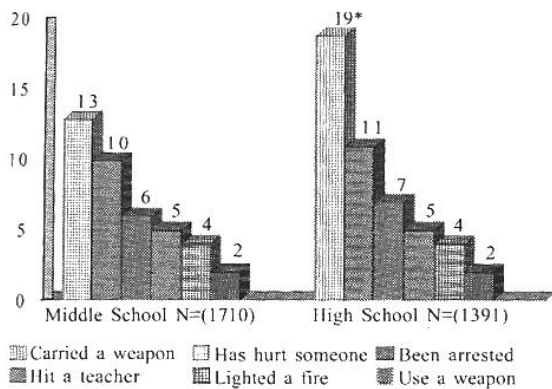
Belonging to gangs and fighting other groups are not prevalent behaviors among the youngsters surveyed. There were no significant differences in the proportions of students reporting belonging to a gang among the samples surveyed in PR (5%), New York (4%) or New Haven (8%). More students in Atlanta (10%) than in PR (5%) however, reported belonging to a gang. Reports of fighting with other groups were rare in all samples surveyed. Only a small proportion of students reported this behavior. It ranged from only 3% of students in Puerto Rico and 4% in New York to 5% in New Haven and Atlanta. The item of being cruel to other was reported by only 3% of the students surveyed in PR and by 6% of the students in New York. More youngsters surveyed in New Haven (7%) and in Atlanta (9%) reported been cruel to others when compared to the students in PR. Torturing animals however, was 4 times more likely to be reported in PR than in NY, New Haven and Atlanta.

### Youth Survey

Youth Survey, or "Consulta Juvenil" is an island-wide survey of Junior and High school students attending public and private schools in PR. It has been conducted biannually since 1990 and is an interagency project of the Puerto Rico Mental Health and Anti-Addiction Services Administration and the Universidad Central del Caribe School of Medicine in Bayamón, PR. The main purpose of

this survey is to monitor the patterns of drug use among the student population. It uses a stratified sample that is representative of all Junior and High schools in the island. Although it's focus is drug use behavior it includes several items related to school violence (10-12).

The six items to be analyzed are shown in Figure 7. All comparisons are done within the sample since it is a local survey. The items measured prevalence during the last year. Of the violence items included in the analysis,



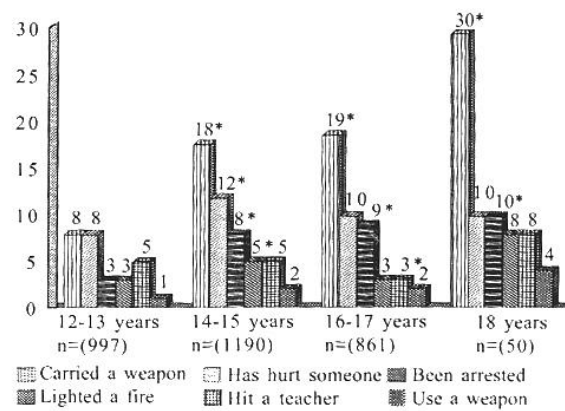
**Figure 7.** Prevalence of Youth Violence in Public and Private Schools in Puerto Rico by School Level. (Consulta Juvenil, 1997) carrying a weapon was the most prevalent (13% for Middle school and 19% for High school). This was also the behavior with the largest difference between Middle and High school in Puerto Rico.

Hurting someone, been arrested, hitting a teacher, lightening a fire and using a weapon had a similar distribution in both school levels. The prevalence of these behaviors ranged from 11% for hurting someone to 2% for used a weapon.

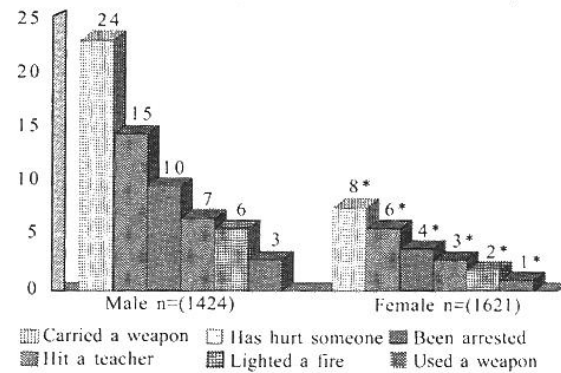
The age distribution of the reported behaviors is shown on Figure 8. It shows a rapid increase by age in the proportion of students reporting carrying a weapon. In the youngest group (12-13 years old) only 8% reported carrying a weapon while about a third (30%) of the 18 years old reported this behavior. Another behavior that seems to increase with age is been arrested. Only 3% of the younger group (12-13 year olds) reported been arrested during the last year while in the 14 to 15 year old the prevalence almost doubles (8%) and among those students 18 or older the prevalence it increases to 10%.

Figure 9 shows the expected differences in reported violent behaviors by gender. Males are 3 times more likely to report carrying a weapon (24%) than females (8%). They are also more than twice as likely to report hurting someone, been arrested, hitting a teacher, lightening a fire and using a weapon than the females in the survey.

Finally, Figure 10 shows prevalence of reported violence

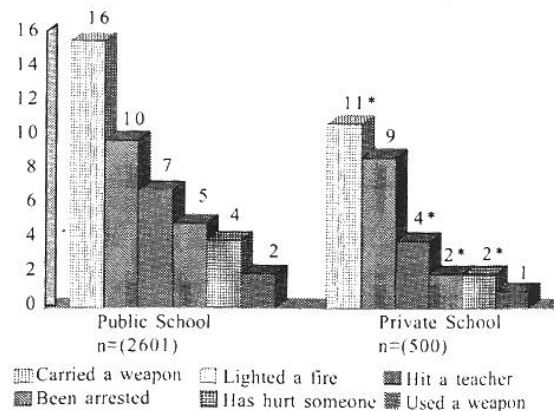


**Figure 8.** Prevalence of Youth Violence in Public and Private Schools in Puerto Rico by Age. (Consulta Juvenil, 1997)



**Figure 9.** Prevalence of Youth Violence in Public and Private Schools in Puerto Rico by Gender. (Consulta Juvenil, 1997)

by school system that is public or private. It shows a somewhat higher prevalence of violent behaviors in public schools. The largest difference between both school systems is in the item about carrying weapons. In this



**Figure 10.** Prevalence of Youth Violence in Public and Private Schools in Puerto Rico by School Type. (Consulta Juvenil, 1997)

item 16% of the public school system reported carrying a weapon while only 11% of the private school students reported the same.

### Conclusion

The most recent and available data on school violence behavior among Puerto Rican students indicates that physical fights and carrying a weapon are the most prevalent violent behaviors. Although more than third (37%) of male students in PR reported engaging in physical fights during the year prior to the interview, somewhat higher proportions were reported in other sites in the USA such as New York City (44%) and in the overall sample of schools surveyed in the Continental United States as a whole (46%). In PR 2 in 10 students reported carrying a weapon and 1 in 20 reported carrying a handgun. Slightly higher proportions were reported in other sites of the continental USA.

Although reports of hitting a teacher (5%) were rare among public and private school students in PR, the behavior is disturbing enough as to need further follow-up. The impact of such behavior in the student, teacher and classroom as a whole can be very detrimental to the school moral as a whole.

In general this review has shown that the prevalence of reported school violence in PR tends to be somewhat lower than the prevalence reported in other sites of the continental USA. This findings are not surprising if one takes into account that reported alcohol, cigarette and drug use are also found to be lower among Puerto Rican youngsters in the island than among their counterparts in the USA. (15-16). Even sexual behaviors such as sexual initiation and having multiple partners have lower prevalence among High school students surveyed in the Island when compare to Puerto Rican students living in the mainland (17).

The CDC has recently reported that since the early 90's there has been a decrease in some items measuring school violence in USA (17). These decreases are reported for items measuring physical fighting and carrying weapons and handguns. This analysis replicated a similar tendency for Puerto Rican students.

Age and gender has a dramatic influence in the reports of youth violence. In Puerto Rican schools males are three times as likely to carry weapons than females and almost twice as likely to report hurting someone than females. In addition, while only 8% of boys in Junior high ages 12-13 report carrying a weapon while fully 30% of those 18 year olds reported carrying a weapon. Being arrested also increases from only 3% in the youngest (12- 13 year olds) students surveyed to 10% on the oldest group (18 year olds).

The need to develop programs to prevent school violence in PR has become evident in the press coverage of several serious incidents of intentional injuries received by students by their peers. The first step to develop such programs is to monitor school violence closely. This permits to detect potential problems and to tailor programs to specific schools needs. There are different methodologies for monitoring school violence including yearly surveys to measure school violence in the different school districts as it is done in the USA, adding to already existing surveys such as "Consulta Juvenil" sections in their instrument devoted to school violence and improving the instruments used by the Department of Education and collected by social workers working in the different schools.

Intervention programs to reduce violence in all age groups are needed. However, younger boys (12 or less) seem to be an obvious target for violence prevention programs. These youngsters will benefit from strategies geared to the development and maintenance of healthy nonviolent strategies in dealing with school, family and community environments. These youngsters are less likely to have developed persistent violent behaviors and this could allow intervention programs to truly prevent the onset of such behaviors rather than to attempt to change ongoing violence practices, which the literature agrees, is much harder to do.

### Resumen

El propósito de este trabajo es describir la prevalencia de la violencia juvenil en Puerto Rico basándose en encuestas realizadas en muestras representativas de jóvenes en la Isla llevadas a cabo durante la década de los 1990. Las encuestas revisadas incluyen: la Encuesta de Comportamientos Riesgosos en Jóvenes (1990-1997); el Estudio de Métodos sobre la Epidemiología de Desordenes Mentales en Niños y Adolescentes (1991) y la encuesta de Consulta Juvenil (1997-1998). Se encontró que la prevalencia de violencia en las escuelas en Puerto Rico es mas baja que la prevalencia reportada en otras ciudades de los Estados Unidos. El genero y la edad de los adolescentes demostraron tener una influencia dramática en el reporte de violencia de los jóvenes en Puerto Rico. Reportes recientes del CDC relacionados a una disminución en los EE.UU.A. de la violencia escolar a partir de los años 90 fueron replicados entre los jóvenes de Puerto Rico. Se discuten además las implicaciones de los hallazgos para la implantación de programas prevención de violencia.

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