

Death Penalty and Deterrence: The Last Word

By Mike Males, PhD

Legal executions restarted in earnest in 1984 after state courts and the United States Supreme Court cleared legal obstacles raised by 1970s anti-death penalty rulings. States implemented the death penalty with widely varying intensity. From 1984 through 2006,

- 13 states (Alabama, Arizona, Arkansas, Florida, Georgia, Louisiana, Missouri, North Carolina, Ohio, Oklahoma, South Carolina, Texas, Virginia) each conducted one or more executions per year, a total of 942, 90% of the executions in the United States.
- 20 states (California, Colorado, Connecticut, Delaware, Idaho, Illinois, Indiana, Kentucky, Maryland, Mississippi, Montana, Nebraska, Nevada, New Mexico, Oregon, Pennsylvania, Tennessee, Utah, Washington, Wyoming) conducted a total of 109 executions.
- 17 states (Alaska, District of Columbia, Hawaii, Iowa, Kansas, Maine, Massachusetts, Michigan, Minnesota, New Hampshire, New Jersey, New York, North Dakota, Rhode Island, South Dakota, Vermont, West Virginia, Wisconsin) had no executions.

Claims have been made, refuted, resurrected, and re-refuted that use of the death penalty deters murder. Complex mathematical analyses of multiple factors contributing to murder rates have reported opposite results, with some concluding a deterrent effect from the death penalty exists, others no deterrent effect, others a violence-promoting effect. Who makes the best case?

The Center on Juvenile and Criminal Justice conducted an analysis of the effect of the 1,051 legal executions on the 446,457 homicides in the 50 states and DC during the 1984-2006 period. We found that, clearing away the complexities, the reason for the widely differing findings on the deterrent effect of the death penalty is fairly simple.

Method

Homicide data from the Federal Bureau of Investigation (2007), legal execution data and city homicide trends from the Bureau of Justice Statistics (2007), and state population figures from the Bureau of the Census (2007) are used to analyze murder rates in the 13 “big death” states” with 942 executions, the 20 “little death states” with 109 executions, and the 18 “no death” states and DC with no executions.

Results

Results and characteristics of the three sets of states are shown in Table 1, and homicide trends are shown in Figure 1. From 1983-84 to 2005-06, the homicide rate declined by 34% in the “big death” states with the most executions, by 24% in the “little death” states with few executions, and by 36% in the “no death” states with no executions.

Table 2 shows results in the three largest states, one in each category: Texas (the state with the most executions, 379), California (13 executions), and New York (zero). Again, the “big death” and the “no death” states show the biggest declines in homicide, while the “little death” state shows the least decline. The major cities in each category show larger declines in the no-death penalty states.

Table 3 shows how opposite conclusions can be reached on whether the death penalty deters homicide. A straightforward “death penalty versus no death penalty” chi-square analysis that pits the no-death states against all of those that conducted executions finds a statistically significant effect that not executing anyone best deters homicide ($\chi^2=17.61$, $p < 0.001$). An “intensity of execution” analysis that pits the big-death states against the little-death and no-death states (on the grounds that rarely applying the death penalty does not permit fair evaluation of its effects) finds that states that conduct lots of executions have fewer homicides, though the result is less significant ($\chi^2=5.40$, $p = 0.02$).

Discussion

One can conclude, with mathematical assurance, that a state policy of executing lots of people, and a state policy of executing no one, both significantly deter homicide. Although many complications can be added to the analysis, the basic commonality that underlies these contradictory results is simple: the states in the middle, the ones that rarely used the death penalty, had much lower reductions in homicide than both the states that used the death penalty frequently and the states that never used it at all.

This peculiar result suggests the death penalty is irrelevant to homicide. Executions are highly publicized, often over long periods of time as sentences are imposed, appeals argued and decided, dates set, dates postponed, controversies covered, sentences finally carried out. If executions deterred murder, we would expect the states that executed at least some people to show bigger drops in homicide than states that executed no one. Conversely, if executions promoted more homicide (the “state-sanctioned violence” argument), we would expect that states that conducted lots of executions would experience more murders than those that executed very few.

Neither of the expected patterns emerges. In addition, the no-death-penalty states show slightly more favorable results, with bigger declines and murder and more strongly significant results when pitted against the death-penalty states. These results are far from the level of significance necessary to argue that not executing anyone deters murder, but they strongly argue the death penalty and homicide rates are unrelated.

While big-death-penalty states tend to be concentrated in the South, where murder rates are highest, the states’ levels of homicide show no relationship to trends. The three categories of states each contain cities with traditionally high murder rates (Houston, Dallas, Miami, and Atlanta in the big-death states; Los Angeles, Chicago, Philadelphia, and Baltimore in the “little death” states; New York, Detroit, Washington, and Newark in the no-death states), and trends in these cities likewise show no murder deterrent of the death penalty. As a murder deterrent, the death penalty appears largely irrelevant.

Table 1. Homicide trends in states by execution level

Characteristics	Big death	Little death	No death
States	13	20	18
Population 000	101,280	110,783	69,364
Executions	942	109	0
Homicides	177,695	175,832	92,930
Average annual murder rate per 100,000 population			
1983-84	9.65	7.71	6.68
1985-89	9.73	7.99	7.30
1990-94	10.43	9.20	8.09
1995-99	7.46	7.13	5.20
2000-04	6.25	5.79	4.28
<u>2005-06</u>	<u>6.36</u>	<u>5.85</u>	<u>4.28</u>
Change	-34.1%	-24.1%	-35.9%

Source: FBI, Uniform Crime Reports (2007), Table --, 1983-2006. Bureau of Justice Statistics (2007), Sourcebook of Criminal Justice Statistics, Table --.

Table 2. Homicide trends in the major state and major city in each category

States	.Texas	.California	.New York	Houston	LA	NYC
Population 000	20,852	33,872	18,976	1,977	3,705	8,018
Executions	379	13	0	na	na	na
Homicides	40,451	66,344	36,153	8,943	17,489	29,802
Average annual murder rate per 100,000 population						
1983-84	13.65	10.46	10.57	32.79	26.17	20.67
1985-89	12.54	10.67	11.29	25.77	24.23	23.28
1990-94	12.91	12.41	13.18	29.12	28.49	26.58
1995-99	7.18	8.15	6.24	14.20	16.45	10.86
2000-04	6.12	6.56	4.85	12.81	15.06	7.77
<u>2005-06</u>	<u>6.02</u>	<u>6.87</u>	<u>4.65</u>	<u>16.68</u>	<u>12.63</u>	<u>6.92</u>
Change	-55.9%	-34.3%	-56.0%	-49.1%	-51.7%	-66.5%

Source: FBI Uniform Crime Reports, Table 8, 1983-2006.

Table 3. Change in homicide rates by level of death penalty application

Homicide change	Big death penalty states	No death penalty states	Little/No death	Any death
1983-84	9.65	6.68	7.29	8.61
<u>2005-06</u>	<u>6.36</u>	<u>4.28</u>	<u>5.26</u>	<u>6.10</u>
Change	-34.1%	-35.9%	-27.9%	-29.2%

Analysis of predicted versus actual homicides

Predicted*	7,544	3,451
Actual	7,177	3,113
χ^2	5.40	17.61
p	0.02	< 0.001

*Predicted-versus-actual homicide analysis predicts 2006 homicides in "big death penalty states" from homicide change in the "little/no death penalty states"; and predicts 2006 homicides in the "no-death penalty states" from changes in the "any death penalty" states.

Sources

Bureau of Justice Statistics (2007). Sourcebook of Criminal Justice Statistics. Washington, DC: US Department of Justice, Table 6.85. <http://www.albany.edu/sourcebook/pdf/t6852006.pdf>

Local level homicide trends and characteristics (interactive tables).

<http://bjsdata.ojp.usdoj.gov/dataonline/Search/Homicide/Local/LocalHomicide.cfm>

FBI (Federal Bureau of Investigation) (2007). Crime in the United States, annual, 1983-2006. Washington, DC: US Department of Justice, Table 8.

http://www.fbi.gov/ucr/cius2006/data/table_08.html

US Census Bureau (2007). National and State Population Estimates. Washington, DC: US Department of Commerce. <http://www.census.gov/popest/states/NST-ann-est.html>

The Center on Juvenile and Criminal Justice is a nonprofit, nonpartisan organization that offers policy analysis, program development, and technical assistance in the criminal justice field. For more information, please visit www.cjcj.org.