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Felony Murder and Capital Punishment: an Examination of the Deterrence Question

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FELONY MURDER AND CAPITAL PUNISHMENT: AN EXAMINATION OF THE DETERRENCE QUESTION

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A proper test of the deterrent effect of the death penalty must consider capital homicides. However, the criterion variable in most investigations has been total homicides—most of which bear no legal or theoretical relationship to capital punishment. To address this fundamental data problem, this investigation used Federal Bureau of Investigation data for 1976–1987 to examine the relationship between capital punishment and felony murder, the most common type of capital homicide. We conducted time series analyses of monthly felony murder rates, the frequency of executions, and the amount and type of television coverage of executions over the period. The analyses revealed occasional departures (for vehicle theft and narcotics killings) from the null hypotheses. However, on balance, and in line with the vast majority of capital punishment studies, this investigation found no consistent evidence that executions and the television coverage they receive are associated significantly with rates for total, index, or different types of felony murder.

INTRODUCTION

After more than two centuries of study, authorities continue to disagree on empirical grounds about the role of capital punishment in the criminal justice system (see Beccaria, 1963; Bentham, 1962; Ferri, 1917; Garofalo, 1914; Stephen, 1864; Tarde, 1912). Ironically, there is least agreement about the one aspect of the death penalty debate that seems most amenable to scientific inquiry—whether capital punishment is effective in discouraging would-be killers.

Studies in the United States range from the early comparative analyses of homicides in death penalty versus abolitionist jurisdictions (Bedau, 1967; Bye, 1919; Calvert, 1927; Kirkpatrick, 1925; Schuessler, 1952; Sellin, 1955, 1959, 1967; Shipley, 1911; Sutherland, 1925; Vold, 1932) to more recent multivariate analyses of the relationship between execution practices (i.e., certainty) and homicide rates across jurisdictions and over time (Bailey, 1975, 1977, 1980, 1990; Black and Orsagh, 1978; Bowers and Pierce, 1975; Ehrlich,

executions. Two primary indicators of the amount of national newspaper coverage of executions, as noted, are the *New York Times Index* and *Facts on File*. (Bailey and Peterson, 1989, and Stack, 1987, consider executions that are noted in both sources as receiving high media publicity.) With the exception of *Facts* for 1987, virtually all executions occurring between 1977 and 1987 (96%) appeared in these sources. Thus, for the period under investigation here, *Times* and *Facts* coverage of executions was essentially not a variable. Nor are there any alternative indicators of the amount of national newspaper coverage devoted to executions.

There are also no systematic figures available on the amount of magazine attention to executions. However, this is not a major concern, because with the exception of a few celebrated cases, a perusal of the tables of content of the major news magazines (*Newsweek*, *Time*, *U.S. News and World Report*) shows that they have devoted very little attention to executions. Further, by comparison with television, their circulation is very limited: *Newsweek* = 3,050,000, *Time* = 4,600,000, *U.S. News and World Report* = 2,084,000 (Oxbridge Communications, 1989).

A remaining source of news regarding executions is radio. Unfortunately, no national data are available to measure radio news coverage of executions.

In sum, it would be desirable, but is not possible, to consider additional sources of execution publicity. However, given the importance of television as a source of news, if there is merit to deterrence or brutalization arguments, it should be evident in an analysis of television publicity of executions and felony murders.

CONTROL VARIABLES

Monthly population, unemployment, and AFDC figures were taken from various U.S. government sources, including the *Statistical Abstract of the United States*, *Current Population Reports*, and issues of the *Annual Statistical Supplement* to the *Social Security Bulletin*. The *Statistical Abstracts* provided annual figures for the remaining sociodemographic variables. Homicide arrest data came from the yearly FBI Uniform Crime Reports. When only annual data were available, linear interpolation was employed to estimate monthly figures for the control variables. We do not view using interpolated values for these factors as an important limitation. Precise parameter estimates for the control variables are not of direct concern since they are considered to avoid spurious results for the death penalty factors.

TIME PERIOD

The analysis is limited to the period 1976–1987. We consider 1976 as a baseline year in that the first execution since 1967 in the United States took place in January 1977. For the years 1968 through 1976, there were no

Table 1. Regression Analyses of Executions, Amount of Execution Publicity, Index Felony and Total Felony Murder Rates

Predictor Variables	Index Felonies			Total Felonies		
	<i>b</i> (s.e.)	<i>b</i> (s.e.)	<i>b</i> (s.e.)	<i>b</i> (s.e.)	<i>b</i> (s.e.)	<i>b</i> (s.e.)
% Metropolitan Population	-.0084 (.0067)	-.0096 (.0066)	-.0098 (.0067)	-.0141 (.0127)	-.0150 (.0123)	-.0137 (.0124)
% Black Population	.0347 (.0416)	.0370 (.0420)	.0375 (.0408)	-.0918 (.0646)	-.0821 (.0657)	-.0872 (.0644)
% 16-34 Years of Age	.0268*** (.0087)	.0267** (.0088)	.0262** (.0088)	.0272* (.0163)	.0280* (.0163)	.0271* (.0162)
Divorce Rate	-.0143 (.0168)	-.0146 (.0168)	-.0117 (.0169)	.0026 (.0312)	.0004 (.0312)	.0027 (.0311)
Unemployment Rate	-.0015 (.0019)	-.0012 (.0019)	-.0014 (.0018)	-.0030 (.0035)	-.0026 (.0035)	-.0027 (.0035)
% AFDC Population	.0787*** (.0198)	.0776*** (.0198)	.0821*** (.0203)	.1019** (.0370)	.0992** (.0369)	.0996** (.0368)
High Season Variable	.0105*** (.0021)	.0103*** (.0021)	.0103*** (.0022)	—	—	—
Low Season Variable	-.0099*** (.0018)	-.0098*** (.0018)	-.0099*** (.0018)	—	—	—
Homicide Arrest Rate	-.0045*** (.0014)	-.0047*** (.0014)	-.0041** (.0014)	-.0081** (.0025)	-.0083** (.0025)	-.0081** (.0025)
% Abolition Population	.0006 (.0005)	.0007 (.0005)	.0008 (.0005)	.0018 (.0010)	.0017 (.0010)	.0019 (.0010)

Table 1 (Continued)

Predictor Variables	Index Felonies			Total Felonies		
	<i>b</i> (s.e.)	<i>b</i> (s.e.)	<i>b</i> (s.e.)	<i>b</i> (s.e.)	<i>b</i> (s.e.)	<i>b</i> (s.e.)
Number of Executions	.0005 (.0008)	.0006 (.0008)	.0005 (.0009)	.0001 (.0016)	.0001 (.0015)	-.0002 (.0016)
% Missing SHR Data	.0005 (.0004)	.0005 (.0004)	.0005 (.0004)	-.0007 (.0008)	-.0007 (.0008)	-.0007 (.0008)
Television Dummy (0/1) Variable	.0022 (.0021)	— —	— —	.0020 (.0040)	— —	— —
No. of Minutes of Coverage	— —	.0002 (.0002)	— —	— —	.0004 (.0004)	— —
No. of Days of Coverage	— —	— —	.0010 (.0010)	— —	— —	.0020 (.0020)
Intercept	-.5937 (.8713)	-.5140 (.8588)	-.5560 (.8519)	1.5136 (1.5303)	1.4644 (1.5003)	1.4378 (1.5004)
R^2	.743***	.742***	.778***	.765***	.765***	.764***
Type of Analysis	OLS	OLS	GLS	GLS	GLS	GLS
D.W.	1.95	1.96	—	—	—	—

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

executions in the United States. However, following the Supreme Court's reaffirmation of capital punishment in *Gregg vs. Georgia* (1976), executions resumed in January 1977. Although it would be desirable to consider the period before the 10-year moratorium on capital punishment (1968–1976), required data are not available for this earlier period. The Vanderbilt Television News Archive (1977–1988) which is the only available source for determining the amount and type of network television news coverage of executions, was not established until 1968. The time series ends with December 1987 because data for a number of the control variables are not yet available for 1988–1990.

FINDINGS

To reiterate, deterrence theory predicts a significant inverse relationship between felony murder rates and the provision for capital punishment, the number of executions, and the amount and type of execution publicity. Conversely, the brutalization argument predicts a significant positive association between felony murder rates and the provision for capital punishment, the number of executions, and the amount and type of media attention devoted to executions. Because previous short-term impact studies of capital punishment and homicide report evidence of both deterrence (Phillips, 1980; Stack, 1987) and brutalization (Bowers, 1988; Bowers and Pierce, 1980; King, 1978), we employed two-tailed tests of statistical significance in considering the findings for the death penalty variables for the analyses to follow.

The first step in the analysis was to examine the autoregressive structure for lag periods through $t-12$ months for the time series for index and total felony murder rates and for each type of felony murder. Here, we are concerned with problems of serial correlation. We used the SAS (Statistical Analysis System) autoregression procedure (SAS Institute, 1984) to identify and, where necessary, to fit autoregressive models. We report Yule-Walker estimates for the autoregressive analyses (Yule, 1927; Walker 1931) and ordinary least squares (OLS) estimates when there is no significant serial correlation.

The left panel of Table 1 reports the results of the analyses in which index felony murder rates are regressed against the number of monthly executions and indicators of the amount of television attention devoted to executions. The right panel reports results of the analyses for total felony murders.

Table 1 provides no support for the deterrence argument. Over the period, there was a chance-only association between rates for both measures of felony murder and the provision for capital punishment, number of monthly executions, and each indicator of the amount of television coverage devoted to executions: (1) a dummy variable that differentiates months with and without television news coverage, (2) the number of minutes of air time devoted to

executions, and (3) the number of days during a month with television coverage of executions.¹⁵

On the possibility that television coverage of executions provided by the three individual networks may have had a differential effect on killings, the analyses reported in Table 1 were repeated, but with indicators of the amount of execution coverage computed individually for ABC, CBS, and NBC. The appendix shows some variation across networks in television coverage of executions, but the variation proved unrelated to homicides. There was a chance-only association between the percent abolition variable, number of executions, the amount of television attention they received from ABC, CBS, NBC, and index and total felony murder rates. Because these findings parallel so closely those reported in Table 1, they are not presented in tabular form; however, the results are available on request.

The next step in the analysis was to consider each type of felony murder. Again, some types of felony murder may be more responsive to deterrence or brutalization than others. Table 2 reports OLS analyses in which robbery murder rates are treated as the dependent variable. (There were no significant autocorrelations for this type of felony murder.) Robbery murder is the most common type of felony homicide. FBI data show that the annual number of robbery-related killings ranged from 1,605 to 2,162 during the 1976–1987 period. Over the 12 years, robbery murders totaled nearly 22,000.

Again, we see no evidence of either deterrence or brutalization. Robbery murder rates varied independently of the provision for capital punishment, the number of monthly executions, and each measure of the amount of television coverage devoted to executions. Although not shown in Table 2, the same pattern holds for robbery murder when the analysis is extended to consider individually the amount of coverage provided by the three networks.

The same analyses were conducted for each of the other types of felony murder reported by the FBI (see above). As before, the autoregressive structures were explored, significant autocorrelations were fit, and Yule–Walker estimates derived when required. With the exception of killings associated with vehicle thefts (see Table 3), the analyses show only chance associations between the execution and media variables and monthly felony murder rates.

As with other types of felony murder, there was only a chance association between rates of vehicle theft murder and the provision for the death penalty

15. To explore possible collinearity problems for the execution variables, we regressed the number of monthly executions and each measure of the amount of execution publicity examined in Table 1 against the other right-hand variables. The resulting multiple R^2 values for the number of executions fall in the .47 to .51 range for the different models. For the measures of the amount of television attention devoted to executions, the R^2 values range from .28 to .34. (The same pattern holds for the execution and media coverage variables when each network is examined individually.) These results give no indication of collinearity problems for any of the execution variables.

Table 2. OLS Analyses of Executions, Amount of Execution Publicity, and Robbery Murder Rates

Predictor Variables	<i>b</i> (s.e.)	<i>b</i> (s.e.)	<i>b</i> (s.e.)
% Metropolitan Population	-.0106 (.0060)	-.0106 (.0059)	-.0104 (.0060)
% Black Population	-.0160 (.0373)	.0194 (.0376)	.0166 (.0371)
% 16-34 Years of Age	-.0221** (.0078)	.0225** (.0078)	.0222** (.0078)
Divorce Rate	-.0183 (.0151)	-.0192 (.0151)	-.0183 (.0150)
Unemployment Rate	-.0015 (.0017)	-.0004 (.0017)	-.0015 (.0017)
% AFDC Population	.0689*** (.0176)	.0682*** (.0176)	.0685*** (.0176)
High Season Variable	.0106*** (.0019)	.0105*** (.0019)	.0105*** (.0019)
Low Season Variable	-.0081*** (.0022)	-.0082*** (.0022)	-.0081*** (.0022)
Homicide Arrest Rate	-.0045*** (.0012)	-.0045*** (.0012)	-.0045*** (.0012)
% Abolition Population	.0004 (.0005)	.0004 (.0005)	.0004 (.0005)
Number of Executions	.0008 (.0008)	.0007 (.0007)	.0006 (.0008)
% Missing SHR Data	.0002 (.0004)	.0002 (.0004)	.0002 (.0004)
Television Dummy (0/1) Variable	.0002 (.0019)	— —	— —
No. of Minutes of Coverage	— —	.0001 (.0002)	— —
No. of Days of Coverage	— —	— —	.0004 (.0009)
Intercept	.0287 (.7765)	-.0520 (.7654)	-.0012 (.7626)
<i>R</i> ²	.744***	.745***	.745***
D.W.	1.89	1.90	1.89

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

Table 3. Autoregressive Analyses of Executions, Amount of Execution Publicity, and Vehicle Theft-Related Murder Rates

Predictor Variables	<i>b</i> (s.e.)	<i>b</i> (s.e.)	<i>b</i> (s.e.)
% Metropolitan Population	-.0002 (.0005)	-.0003 (.0005)	-.0003 (.0005)
% Black Population	.0062* (.0030)	.0073* (.0031)	.0065* (.0030)
% 16-34 Years of Age	.0001 (.0007)	.0002 (.0007)	.0001 (.0007)
Divorce Rate	-.0011 (.0015)	-.0011 (.0015)	-.0009 (.0015)
Unemployment Rate	.0001 (.0001)	-.0001 (.0001)	.0001 (.0001)
% AFDC Population	-.0010 (.0015)	-.0011 (.0015)	-.0010 (.0015)
Homicide Arrest Rate	-.0003** (.0001)	-.0003** (.0001)	-.0003** (.0001)
% Abolition Population	.0000 (.0000)	.0000 (.0000)	.0000 (.0000)
Number of Executions	.0002** (.0001)	.0002** (.0001)	.0002** (.0001)
% Missing SHR Data	.0000 (.0001)	.0000 (.0000)	-.0000 (.0000)
Television Dummy (0/1) Variable	.0003 (.0002)	— —	— —
No. of Minutes of Coverage	— —	.0000 (.0000)	— —
No. of Days of Coverage	— —	— —	.0002 (.0000)
Intercept	-.0381 (.0606)	-.0391 (.0594)	-.0327 (.0592)
<i>R</i> ²	.694***	.705***	.701***

* $p < .05$

** $p < .01$

*** $p < .001$

and each measure of the amount of execution publicity. However, unlike other types of felony murder, there was a significant positive association between the number of monthly executions and rates for this type of killing.

This pattern is puzzling. In the bivariate ($r = .329, p < .001$) and multivariate analyses ($b = .0002, p < .05$), there was a pattern of a higher number of vehicle theft murders for months with a greater number of executions. This is consistent with the brutalization argument, but it is unclear why such a pattern would hold for only one relatively uncommon type of felony murder. Over the 1976–1987 period, auto theft killings numbered only 291 according to SHR files. The number of monthly vehicle theft killings ranged from zero to seven, and rates ranged from zero to .003 ($\bar{x} = .0008$).

TYPES OF EXECUTION PUBLICITY

As noted, it is possible that some types of television coverage of executions may discourage killings (deterrence) and some types may promote murder (brutalization). We explored this question by considering Bailey's six measures of the type of execution coverage provided by the networks (see above). Table 4 reports the results of the analyses in which these types of execution coverage and total felony murder rates were considered. The analyses for index felony murder are reported in Table 5.¹⁶

Again, the dominant pattern is consistent with the null hypothesis. Total and index felony murder rates vary independently of the number of monthly executions in all cases, and of the "percent abolition population" variable in 11 of the 12 analyses. The exception to the null pattern for the percent abolition variable is for total felony murders ($b = .0020, \text{s.e.} = .0010, p < .05$) when the "last words" type of media variable is considered.

Also with one exception, the null hypothesis holds for each type of television coverage devoted to executions. The exception again is for the "last words" execution variable. The trade-off is slight ($b = .0068$), but there was a significant positive association between the airing of this type of execution coverage and index felony murder rates. Although this is consistent with "brutalization" predictions, it is not clear why this pattern holds for only one of the six types of execution coverage.

When the analysis of kinds of television coverage is extended to different types of felony murder, we also found no consistent support for the deterrence or brutalization argument. However, we again observed a significant ($p < .05$) positive association ($b = .0002$) between the number of monthly executions and rates of vehicle theft killings. This pattern holds when each type of execution publicity is considered.

16. To explore the possibility of collinearity problems for the execution variables, we regressed each against the other predictors included in the models shown in Tables 4 and 5. Again, the multiple R^2 value for the number of monthly executions falls in the .50 range for each analysis. For the measures of the type of execution coverage provided, the resulting R^2 values are more variable. They range from a low of .14 for the execution protest variable to a high of .28 for the measure of television coverage devoted to "nondeserving" executions. Once more, we see no evidence of collinearity problems for the execution variables.

Table 4. Autoregressive Analyses of Executions, Amount of Execution Publicity, and Total Felony Murder Rates

Predictor Variables	<i>b</i> (s.e.)	<i>b</i> (s.e.)	<i>b</i> (s.e.)	<i>b</i> (s.e.)	<i>b</i> (s.e.)	<i>b</i> (s.e.)
% Metropolitan Population	-.0157 (.0123)	-.0159 (.0123)	-.0149 (.0123)	-.0155 (.0124)	-.0142 (.0124)	-.0156 (.0123)
% Black Population	-.0948 (.0639)	-.0937 (.0644)	-.0905 (.0641)	-.0958 (.0650)	-.0832 (.0652)	-.0981 (.0639)
% 16-34 Years of Age	.0272 (.0163)	.0269 (.0163)	.0252 (.0163)	.0263 (.0163)	.0256 (.0163)	.0269 (.0164)
Divorce Rate	.0021 (.0312)	.0031 (.0312)	.0034 (.0311)	.0033 (.0312)	.0075 (.0313)	.0022 (.0313)
Unemployment Rate	-.0030 (.0035)	-.0029 (.0035)	-.0029 (.0035)	-.0029 (.0035)	-.0024 (.0035)	-.0029 (.0035)
% AFDC Population	.1008** (.0369)	.1009** (.0370)	.1013** (.0368)	.1005** (.0373)	.1057** (.0369)	.0964** (.0371)
Homicide Arrest Rate	-.0082*** (.0025)	-.0082** (.0025)	-.0080*** (.0025)	-.0082*** (.0025)	-.0081*** (.0025)	-.0083*** (.0025)
% Abolition Population	.0019 (.0010)	.0018 (.0010)	.0020* (.0010)	.0018 (.0010)	.0019 (.0010)	.0018 (.0010)
Number of Executions	.0003 (.0015)	.0002 (.0016)	.0020 (.0015)	.0004 (.0015)	-.0001 (.0016)	.0004 (.0015)
% Missing SHR Data	-.0007 (.0008)	-.0007 (.0008)	-.0007 (.0008)	-.0007 (.0008)	-.0007 (.0008)	-.0007 (.0008)
Artist Drawings (0/1)	.0040 (.0067)	— —	— —	— —	— —	— —

Table 4 (Continued)

Predictor Variables	<i>b</i> (s.e.)	<i>b</i> (s.e.)	<i>b</i> (s.e.)	<i>b</i> (s.e.)	<i>b</i> (s.e.)	<i>b</i> (s.e.)
Witness Accounts (0/1)	—	.0022 (.0052)	—	—	—	—
Last Words Presented (0/1)	—	—	.0050 (.0054)	—	—	—
Deserving Offenders (0/1)	—	—	—	.0084 (.0059)	—	—
Nondeserving Offenders (0/1)	—	—	—	—	.0058 (.0065)	—
Execution Protests (0/1)	—	—	—	—	—	.0016 (.0052)
Intercept	1.6840 (1.4783)	1.6966 (1.4795)	1.6133 (1.4788)	1.7076 (1.4963)	1.4246 (1.5033)	1.7431 (1.4784)
<i>R</i> ²	.764***	.764***	.765***	.762***	.769***	.761***

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

1975, 1977; Forst, 1977; Kleck, 1979; Layson, 1985; Passell, 1975; Passell and Taylor, 1975; Peterson and Bailey, 1988; Yunker, 1976). In addition, some investigations have examined the effect of execution publicity on homicides (Bailey, 1990; Bailey and Peterson, 1989; Bowers, 1988; Dann, 1935; King, 1978; McFarland, 1983; Phillips, 1980; Savitz, 1958; Stack, 1987).

The vast majority of analyses have reported chance-only associations between homicides and the provision for, and extent of use of, capital punishment. Moreover, some short-term impact studies suggest that the effect of execution publicity is to increase rather than decrease homicides. Such findings have led some to conclude that capital punishment has a "brutalizing" effect, which results in the loss of more, not fewer, innocent lives. For example, Bowers and Pierce (1980:456) contend that instead of deterring homicides, "executions demonstrate that it is correct and appropriate to kill those who have gravely offended us. The fact that such killings are to be performed only by duly appointed officials on duly convicted offenders is a detail that may get obscured by the message that such offenders deserve to die."

The extant research provides a rather consistent lack of support for deterrence hypotheses, but there is disagreement about what this extensive body of literature actually demonstrates. Some scholars are reluctant to regard current findings as definitive due to a serious data quality problem that continues to plague deterrence research—the use of general rather than capital homicides as a dependent measure.

With few exceptions, capital punishment is available in retentionist jurisdictions in the United States only for certain types of homicide.¹ First, there are killings that are commonly referred to as first-degree or premeditated murder.² Two elements characterize these types of death-eligible killings: (1) premeditation, which designates intent to violate the law formulated prior to the activity and (2) malice aforethought, which refers to the intent to kill at the time of the act. Criminologists have long agreed that "classic" premeditated murders constitute a small minority of killings—at most 5 to 10% of all homicides (Wolfgang, 1958). In addition to these classic murders, virtually

1. According to a Bureau of Justice Statistics (1987) survey, 37 states provided for capital punishment for one or more types of murder. The list of capital offenses extended to other crimes in six jurisdictions: aircraft piracy (Alabama, Georgia), treason (California, Georgia), train wrecking (California), forcible rape of a child under age 14 years by a person 18 years or older (Mississippi), kidnapping (with a gross permanent physical injury inflicted on the victim) and kidnapping by a state prison inmate with a prior conviction for deliberate homicide or who has been previously declared a persistent felony offender (Montana). The following states had no provision for the death penalty for murder in any form: Alaska, Hawaii, Iowa, Kansas, Maine, Michigan, Minnesota, North Dakota, Rhode Island, West Virginia, and Wisconsin.

2. In some jurisdictions, the distinction between capital and noncapital homicide is the distinction between murder and manslaughter. For those states, *murder* involves planned, intentional killings, and the element of premeditation is absent for *manslaughter*.

Table 5. Regression Analyses of Executions, Type of Execution Publicity, and Index Felony Murder Rates

Predictor Variables	<i>b</i> (s.e.)	<i>b</i> (s.e.)	<i>b</i> (s.e.)	<i>b</i> (s.e.)	<i>b</i> (s.e.)	<i>b</i> (s.e.)
% Metropolitan Population	-.0010 (.0066)	-.0111 (.0066)	-.0100 (.0066)	-.0099 (.0067)	-.0081 (.0069)	-.0099 (.0066)
% Black Population	.0301 (.0415)	.0386 (.0407)	.0433 (.0400)	.0448 (.0414)	.0469 (.0417)	.0291 (.0415)
% 16-34 Years of Age	.0262** (.0088)	.0264** (.0088)	.0245** (.0087)	.0253** (.0088)	.0273** (.0085)	.0265** (.0088)
Divorce Rate	-.0134 (.0168)	-.0120 (.0169)	-.0109 (.0166)	-.0107 (.0169)	-.0130 (.0169)	-.0139 (.0168)
Unemployment Rate	-.0014 (.0019)	-.0015 (.0019)	-.0016 (.0018)	-.0015 (.0019)	-.0010 (.0019)	-.0014 (.0019)
% AFDC Population	.0784*** (.0198)	.0814*** (.0203)	.0837*** (.0200)	.0802*** (.0204)	.0877** (.0197)	.0775*** (.0199)
High Season Variable	.0104*** (.0022)	.0104*** (.0021)	.0106*** (.0020)	.0108*** (.0021)	.0102*** (.0021)	.0104*** (.0022)
Low Season Variable	-.0098*** (.0018)	-.0100*** (.0018)	-.0102*** (.0018)	-.0099*** (.0018)	-.0110*** (.0018)	-.0098 (.0018)
Homicide Arrest Rate	-.0046*** (.0014)	-.0041*** (.0014)	-.0036** (.0014)	-.0040** (.0013)	-.0040 (.0013)	-.0047 (.0014)
% Abolition Population	.0006 (.0005)	.0007 (.0005)	.0009 (.0005)	.0007 (.0005)	.0007 (.0005)	.0006 (.0005)
Number of Executions	.0008 (.0008)	.0005 (.0008)	.0005 (.0008)	.0006 (.0008)	.0005 (.0008)	.0007 (.0008)
% Missing SHR Data	.0005	.0005	.0006	.0005	.0005	.0005

Table 5 (Continued)

Predictor Variables	<i>b</i> (s.e.)	<i>b</i> (s.e.)	<i>b</i> (s.e.)	<i>b</i> (s.e.)	<i>b</i> (s.e.)	<i>b</i> (s.e.)
	(.0004)	(.0004)	(.0004)	(.0004)	(.0004)	(.0004)
Artist Drawings (0/1)	.0014 (.0037)	— —	— —	— —	— —	— —
Witness Accounts (0/1)	— —	.0033 (.0028)	— —	— —	— —	— —
Last Words Presented (0/1)	— —	— —	.0068* (.0030)	— —	— —	— —
Deserving Offenders (0/1)	— —	— —	— —	.0038 (.0032)	— —	— —
Nondeserving Offenders (0/1)	— —	— —	— —	— —	.0064 (.0035)	— —
Execution Protests (0/1)	— —	— —	— —	— —	— —	.0018 (.0028)
Intercept	-.3883 (.8492)	-.4717 (.8418)	-.6028 (.8306)	-.6134 (.8543)	-.8661 (.8671)	-.3849 (.8481)
<i>R</i> ²	.741***	.779***	.791***	.780***	.810***	.742***
Type of Analysis	OLS	GLS	GLS	GLS	GLS	OLS
D.W.	1.965	—	—	—	—	1.956

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

The only other departure from the null hypothesis is for killings related to narcotics violations. Here, there was consistently only a chance association between rates and the number of executions ($b = -.0004$ to $.0031$). However, there was a significant negative association between rates and one type of execution publicity. Narcotics murders were significantly lower ($b = -.0031, p < .05$) for months when "nondeserving" persons were put to death. (See Table 6.) For the other qualitative publicity measures, there were slight positive but nonsignificant trade-offs ($b = .0001$ to $.0006$) with rates of narcotics killings.

What is particularly interesting about the relationship between narcotics killings and television coverage of "nondeserving" executions is that in the bivariate analysis, average offense rates are slightly higher for the seven months in which such persons were executed ($\bar{x} = .0170$) than for the other 137 months ($\bar{x} = .0147$) in the time series. Consistent with the bivariate results, one might expect that the execution of "nondeserving" persons would not be terribly effective in discouraging killings because the state may be perceived as acting in a nonlegitimate manner. Or at least, the execution of "deserving" persons might be thought to have a greater deterrent effect. However, this was not the case for narcotics-related killings. One possibility is that the perception of the certainty of execution is increased when the state is willing to put to death even "nondeserving" offenders (youths, the retarded, and homicide accessories). This is of course speculative. It is clear, however, that the pattern for narcotics killings is not a result of problems of multicollinearity. First, the same "other" predictor variables were considered in examining each type of felony murder, but the significant negative results for "nondeserving" executions are unique to narcotics killings. Second, when this indicator of the type of media attention is regressed against the other predictors in the multivariate model, the resulting R^2 value (.278) is meager.

In short, we have no adequate explanation for this isolated finding. Nor do we have an explanation for why the number of executions is associated positively (throughout the analysis) with vehicle theft killings, but not with other types of felony murder.

CONCLUSION

Our results may disappoint proponents of deterrence and proponents of the brutalization argument. We find no consistent evidence that the availability of capital punishment, the number of executions, the amount of television coverage they receive, or the type of television coverage given executions is associated significantly with rates for total and different types of felony murder. These findings are consistent with the vast majority of studies of capital punishment and general homicides.

For reasons that are unclear, however, for the 1976–1987 period, we did

Table 6. Autoregressive Analysis of Executions, Execution Publicity Regarding Nondeserving Offenders, and Rates of Narcotics-Related Murder

Predictor Variables	<i>b</i> (s.e.)
% Metropolitan Population	-.0001 (.0028)
% Black Population	-.0094 (.0143)
% 16-34 Years of Age	-.0041 (.0037)
Divorce Rate	.0105 (.0069)
Unemployment Rate	-.0005 (.0008)
% AFDC Population	.0085 (.0082)
Homicide Arrest Rate	-.0005 (.0005)
% Missing SHR Data	-.0002 (.0002)
% Abolition Population	-.0001 (.0002)
Number of Executions	.0000 (.0003)
Nondeserving Offenders	-.0031* (.0014)
Intercept	.2488 (.3235)
R^2	.927***

* $p < .05$

** $p < .01$

*** $p < .001$

observe a pattern of higher rates of vehicle theft killings being associated with a higher number of executions. But in the opposite direction, there were significantly lower rates of *narcotics murder* for months in which “nondeserving” persons were put to death. Although we have no adequate explanation for these two “deviant” patterns, our findings make clear that during the 1976–1987 period most types of felony murder varied independently of the

frequency of executions and the amount and type of television publicity that they received.

In conclusion, there is simply no consistent evidence that executions, or their presentation to the national television viewing audience, had anything to do with felony murder during the period of this study. However, caution is warranted in interpreting these null patterns. First, for example, our null findings might be a result of the rather small number of executions during the 1976–1987 period ($n = 93$) and the fact that a minority ($n = 25$) of those executions received television coverage. We urge interested scholars to explore this possibility by extending our analysis for future years.

Second, an analysis such as ours is subject to possible spatial aggregation problems due to the entire nation (the 50 states and the District of Columbia) being the unit of analysis in the time series (Fox and Radelet, 1989). That is, monthly rates for the felony murder and death penalty variables were computed on a national basis. By including the “percent abolition” variable in the analysis, we controlled for the portion of the U.S. population subject to capital punishment. However, over the 1977–1987 period, the vast majority of executions ($87/93 = 94\%$) took place in southern states, although our analysis assumes that residents in all death penalty jurisdictions would be affected equally by executions and execution publicity. This may or may not be the case, but clearly, future investigators should consider replicating our analysis on a regional, and possibly a state, level.

Third, as detailed earlier, SHR data also have certain limitations, including that some homicide incidents are excluded from the SHR and some crime circumstance information is missing for some cases included in the files. Missing SHR cases and data are more or less problematic for different states. Accordingly, an additional argument can be made for replicating our study on a state level.

Perhaps further analyses along the lines suggested will yield support for arguments regarding deterrence or brutalization and felony murder. At present, however, it seems safe to conclude that on a national level, the recent U.S. experience with capital punishment provides little indication that executions either discourage or encourage the most common types of capital homicides—felony murders.

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Appendix Executions Receiving Television Publicity, and the
Number of Minutes of Coverage, 1977—1987

Yr.	Mo.	Person's Name	Minutes of Coverage by Television Network			
			ABC	CBS	NBC	Total
77	1	Gary Gilmore	9.17	10.33	7.00	26.50
79	6	John Spengelink ^a	5.67	5.33	4.33	15.33
79	10	Jesse Bishop	3.50	5.17	2.33	11.00
81	3	Steven Judy	5.17	.67	0.00	5.83
82	8	Frank Coppola	.33	.00	.00	.33
82	12	Charlie Brooks	2.17	1.67	.67	4.50
83	4	John Evans ^b	.33	4.50	3.33	8.16
83	5	John Evans ^b	.00	.33	.33	.67
83	9	Jimmy Lee Gray	1.83	2.33	.00	4.17
83	12	Robert Sullivan ^a	9.17	6.50	5.50	21.17
		Robert Wayne Williams				
		John Eldon Smith				
84	2	Anthony Antone ^a	.33	3.17	.17	3.67
84	3	James Autry	.17	.00	.33	.50
84	4	Ronald O'Bryan ^a	.33	.67	1.83	2.83
		Arthur Goode				
		Elmo Sonnier				
84	7	Ivon Stanley	.00	.17	.00	.17
84	11	Thomas Barefoot ^a	3.67	1.00	3.33	8.00
		Ernest Knighton ^a				
		Velma Barfield				
84	12	Alpha Otis Stephens	.17	.00	.00	.17
85	1	Robert Lee Willie ^a	8.33	.00	3.17	11.50
		Doyle Skillern				
85	4	James Briley	.00	1.50	.67	2.17
85	7	Henry Martinez Porter	.00	.83	.00	.83
86	1	James Terry Roach	.33	2.00	.33	2.67
86	4	Daniel Thomas	.00	.00	.33	.33
86	9	Chester Wicker ^a	.00	2.00	.00	2.00
87	6	Jimmy Wingo	.00	2.50	.00	2.50
87	8	John Brogdon ^a	2.67	.00	.00	2.67
87	9	Beauford White ^a	2.50	2.50	.00	5.00
		Wayne Ritter ^a				
		Dale Pierce Selby ^a				

^a These persons were executed the month prior to the date indicated. Executions occurring after the twenty-third of the month (month *t*) were coded for the following (*t* + 1) month.

^b The execution of John Evans took place on April 22, 1983. However, some coverage of the execution was not aired until April 24, 1983. Hence, the publicity for April 24 was coded for May 1983.

all retentionist states have made homicides that result from the commission of certain felonies eligible for the death penalty.³ Felony murders, as they commonly are termed, and suspected felony killings, constitute 20 to 22% of homicides annually (Federal Bureau of Investigation, 1989) and account for the large majority of capital homicides.⁴

In addition, since the U.S. Supreme Court's ruling in *Gregg vs. Georgia* 1976 (96 Sup. Ct. 2902), executions, to a large degree, have been reserved for felony murderers. To illustrate, for the period under examination in this investigation (1976–1987), there were 93 executions. Of those, 67 (72%) were for murders associated with robbery, rape, burglary and kidnapping. Four involved domestic and family killings, 8 involved police killings, 4 involved classic premeditated murder (contract killings, homicide for insurance benefits, and a killing to silence a witness to a homicide), and the remainder ($n = 10$) involved a variety of other types of circumstances.

Despite the long-term recognition that most homicides are not eligible for capital punishment, the typical practice in deterrence investigations has been to examine rates for all types of homicide combined. Indeed, efforts to examine capital homicides have been confined to two short-term impact studies (Dann, 1935; Savitz, 1958) of a single city (Philadelphia) for a few selected years. Dann (1935) examined probable capital homicides in Philadelphia in the 60 days before and after each of five highly publicized executions in 1927, 1929, 1930, 1931, and 1932. Savitz replicated Dann's study for the period 1944–1947. He examined definite and possible capital homicides in the eight weeks before and after four highly publicized death sentences (not actual executions) were handed down in 1944, 1946 (two), and 1947. Neither study found evidence of deterrence. However, the temporal and geographic generalizability of these findings cannot be assumed.

Beyond these studies, the practice has been to examine total rather than capital homicides. This procedure is commonplace because most analyses rely on homicide figures published by the Federal Bureau of Investigation (FBI) or the U.S. Department of Health and Human Services. These sources do not differentiate killings by type, and thus, it is not possible to determine from them the number and rate of capital killings.

3. A sizable majority of states provide for capital punishment for felony murder by (1) statutorily defining felony murder in general, or particular types of felony murder, as capital homicides or (2) providing that the commission of a felony, or a certain type of felony, resulting in a homicide constitutes an aggravating circumstance that is to be considered by a judge/jury in deciding whether to sentence a convicted murderer to death or a term of imprisonment.

4. For some states, the commission of any type of felony homicide qualifies as a capital crime. More typically, however, the types of felony murder that qualify as capital homicides include killings associated with rape, robbery, burglary, arson, and kidnapping (Bureau of Justice Statistics, 1987).

In short, although scholars on both sides of the death penalty debate agree that a proper test of the deterrent effect of capital punishment must consider capital homicides, the improper operationalization of the dependent variable remains a very serious limitation of deterrence research (Bedau, 1977, 1982; Sellin, 1967, 1980; van den Haag, 1969, 1975; van den Haag and Conrad, 1983; Wilson, 1983). Further advancement of the understanding of this issue requires that this fundamental data problem be addressed. We do so in this investigation.

THE CURRENT INVESTIGATION

To extend understanding of the deterrence and death penalty issue, we used unpublished FBI homicide data to examine the relationship between capital punishment and felony murder—the most common type of capital homicide. As noted, felony murders and probable felony murders account for about one-fifth of all criminal homicides (Federal Bureau of Investigation, 1989). More important, they represent the vast majority of capital homicides.⁵

To test the effect of capital punishment on capital murder, we conducted national time series analyses of executions and monthly felony murder rates over the 1976–1987 period. If there is merit to the deterrence argument, one would expect a significant inverse relationship between the number of monthly executions and offense rates. Conversely, if executions promote killings due to brutalization, executions and monthly felony murder rates should be positively associated. On the possibility that executions might discourage some types of murder (deterrence), but encourage others (brutalization), we also examined rates for different types of felony murder.

In addition to the importance of the certainty of execution, deterrence theory predicts a significant inverse relationship between the amount of publicity devoted to executions and murder rates. Most recent investigations of the publicity hypothesis have not found evidence of deterrence (or brutalization) when considering the effect of newspaper (Bailey and Peterson, 1989; Stack, 1987)⁶ and television (Bailey, 1990) coverage of executions. However, these

5. To illustrate, in 1987 there were 20,996 criminal homicides in the United States, 20.7% ($.207 \times 20,096 = 4,160$) of which were classified by the FBI (1988:12) as felony or suspected felony murders. By comparison, if classic premeditated murders constitute 10% of criminal homicides, the number of premeditated crimes ($n = 2,010$) was approximately one-half that level; and one-quarter that number ($n = 1,005$) if they constitute 5% of homicides.

6. Actually, for the 1950–1980 period Stack (1987) reports a significant negative association between monthly homicide rates and executions that received high levels of newspaper coverage—executions that appeared in both the *New York Times Index* and *Facts on File*, a comprehensive national index of major news stories. However, Bailey and Peterson (1989) show that Stack's findings are an artifact due to media coding errors.

studies have considered general, and not capital, homicides. In this investigation we explore the publicity hypothesis further by examining the relationship between the amount and type of television coverage devoted to executions and rates for different types of felony murder.

METHODS AND PROCEDURES

To examine the deterrence hypotheses, we conducted time series analyses of monthly felony murder rates, the frequency of executions, and the amount and type of television coverage devoted to executions over the 144-month period, 1976–1987. The following sociodemographic factors were treated as control variables: (1) percent metropolitan population, (2) percent black population, (3) percent population 16 to 34 years of age, (4) the divorce rate, (5) percent unemployed of the civilian labor force, and (6) percent of the U.S. population receiving Aid to Families with Dependent Children (AFDC) benefits. We also included as control factors (7) annual dummy variables, (8) two seasonal variables that differentiate months with significantly higher/lower than normal felony murder rates,⁷ (9) the arrest clearance rate for murder,⁸ and (10) the percent of the U.S. population residing in jurisdictions without capital punishment for murder. Previous research has shown a significant inverse relationship between homicide arrest rates and offense rates, presumably due to deterrence (Bailey, 1976, 1990; Bailey and Peterson, 1989; Ehrlich, 1975). In addition, changes over the 1976–1987 period in percent death penalty/abolition population are controlled. It is doubtful that executions have a significant deterrent effect on populations that are not legally subject to capital punishment.

The control variables included in the analysis are not presented as a formal model of felony murder rates. Rather, they are considered to avoid spurious results for the death penalty factors. Because of multicollinearity problems for some of the control variables, the regression results for these factors must be viewed with caution.⁹ However, multicollinearity is not a problem for the

When corrected, there is a chance—only association between monthly homicide rates and executions receiving high levels of publicity for 1950–1980 and for the more extended period, 1940–1986 (Bailey and Peterson, 1989).

7. Monthly dummy variables are not significantly related to rates of larceny murder, vehicle theft murder, prostitution murder, other sex-offense murder, narcotics murder, "other" felony murder, suspected felony murder, or total felony murder.

8. Unfortunately, there are no national homicide conviction data for the 1976–1987 period. In 1972, the FBI discontinued reporting homicide conviction figures in the annual Uniform Crime Reports due to the small proportion of cases reaching judicial outcome during the reporting year.

9. To illustrate, we regressed each of the sociodemographic and other control variables against the other right-hand variables in the models shown in Tables 1–6. The resulting R^2 values are very high for most of the control factors: percent abolition population (.88), percent unemployment (.92), percent metropolitan population (.92), divorce rate

death penalty variables. The results of collinearity analyses for the capital punishment factors are presented in footnotes when the multivariate results are discussed.

FELONY MURDER: THE DEPENDENT VARIABLE

We operationalized the general rate of felony murder as the total number of monthly felony murder incidents per 100,000 residential population.¹⁰ In addition to the general rate, we examined the number of incidents per 100,000 population for index felony murders and for each individual type of felony murder reported by the FBI. As noted earlier, some states restrict capital felony murders to killings associated with the FBI's index offenses: rape, robbery, burglary, larceny, vehicle theft, and arson. We label combined rates for these types of killings as "index" felony murders. We also constructed individual rates for killings associated with each of the index offenses and those associated with the other types of felonies reported by the FBI: prostitution and commercialized vice, other felonious sex crimes, narcotics violations, gambling, other felonies, and suspected felony murders. Monthly felony murder data were drawn from unpublished FBI Supplementary Homicide Reports (SHR).¹¹

Data from the SHR have certain limitations for this type of investigation. First, compared with the FBI's Uniform Crime Reports (UCR), the SHR are less extensive in scope. Annual homicide victimization counts reported in the UCR are based on data submitted by police departments that serve over 98 percent of the U.S. population. Accordingly, UCR data provide a good estimate of total criminal homicides for the nation. Unfortunately, not all police departments participate in the SHR program. As a result, SHR homicide counts are lower than UCR counts. For example, over the 1976–1987 period, the average number of monthly UCR murders was 1,688, compared with an average of 1,574 SHR criminal homicides.

Nonetheless, the UCR and SHR homicide series are very highly correlated ($r = .89$) for the 1976–1987 period. Also important for this study, there is no

(.95), percent AFDC population (.97), percent 16–34 years of age (.98), percent black population (.99), and homicide arrest rate (.96).

10. For SHR records, criminal homicide incidents may involve multiple victims (and offenders), but most incidents involve a single victim (96.3 to 97.1% for the 1976–1987 period). For this type of investigation, it is of no practical consequence whether one operationalizes offense rates as the number of homicide incidents or victims per 100,000 population. Over the period, the two types of monthly rates are almost perfectly correlated ($r = .992$).

11. Unfortunately, the FBI data do not permit the identification of *premeditated* murders that are not associated with other felonies. Nor does any federal agency collect prosecution and/or judicial data that allow an estimate of the number and rate of premeditated murders. Consequently, it is not possible to examine the effect of capital punishment on classic premeditated murders.

indication of a trend over the 144-month period in the number of UCR homicides that do not appear in SHR files. The correlation between a linear time variable (1, 2, . . . 144) and the difference between UCR and SHR monthly victim counts is slight: $r = .103$, $R^2 = .011$. Accordingly, SHR data provide a reasonable indicator of monthly homicide patterns over the 1976–1987 period.

A more serious concern is the problem of missing data for cases that do appear in the SHR files. We differentiated felony from other types of killings on the basis of homicide “circumstance” information provided by the police. Unfortunately, circumstance data are not reported for all cases. Over the 1976–1987 period, the percentage of monthly criminal homicides with undetermined circumstances ranged from 9 to 25%.

In a recent paper, Maxfield (1989) examined a major source of the missing data problem for SHR homicides. He argued that often the SHR data submitted by the police reflect only preliminary information about killings. As investigations progress, more information becomes available about homicide circumstances. Unfortunately, because of the SHR reporting schedule (reports are submitted to the FBI monthly), the more complete information often does not appear in SHR records. By comparing homicide circumstance information provided in SHR data (for 1978) with detailed homicide data compiled by Riedel et al. (1985) for Dallas, Memphis, Newark, Oakland, Philadelphia, St. Louis, and San Jose, Maxfield found that “murders initially coded as [circumstances] ‘unknown’ tend to be ‘transformed’ into instrumental [rape, robbery, and other sex-related offenses] and property felonies when the investigation is completed” (p. 691).

Based on Maxfield’s analysis, for the period examined here, it is likely that the monthly variation in the level of missing circumstance data reflects variation in the undercount of felony murders in the SHR files. This undercount problem could contribute significant bias in a time series analysis of felony murder rates. To compensate for this problem, in the analyses to follow (Tables 1–6) we include as a control variable the percentage of monthly SHR homicide incidents involving missing circumstance information. This variable has the effect of controlling for the likely undercount of felony murders. However, the time series analyses were also conducted without including the “percent missing” control variable. Both analyses produced the same basic pattern of results for the execution and execution publicity variables.

DEATH PENALTY VARIABLES

For the 1976–1987 period, data for the number of monthly executions were drawn from the NAACP Legal Defense and Educational Fund, Inc.’s (1988) *Death Row, U.S.A.* From 1976 through 1987, as noted, there were 93 executions for murder. The number ranged from zero to six per month.

To control for the portion of the population subject to capital punishment for murder, the death penalty status of each jurisdiction in the United States (as of the last day of each year) was determined from the Bureau of Justice Statistics's annual *Capital Punishment* series. Resident population figures were summed for abolitionist jurisdictions, and the sum was divided by the total U.S. population to compute a "percent abolition population" variable (range = 12.0 to 28.3%).

EXECUTION PUBLICITY

This analysis examines the effect of television news coverage of executions for felony murder. Televised execution publicity is examined because in recent decades television has become the most popular and powerful source of news in the United States. Americans rely on television more than all other media sources combined for their daily news (Roper Organization, 1983). Moreover, Americans view television as providing the most "complete," "intelligent," and "unbiased" source of news. Of particular importance, this consensus holds for the populations that are most involved in homicide—young adults, blacks, and low-income and poorly educated persons (Bower, 1985; Comstock et al., 1978; Mediamark Research, 1987).

In a recent paper, Bailey (1990) developed a scheme for examining the amount and types of television news coverage of executions, which we use in our analysis of felony murder. Bailey's scheme relies on data from the Vanderbilt Television News Archive, which began abstracting the ABC, CBS, and NBC evening news programs in 1968. All executions receiving television coverage have been indexed and abstracted since Gary Gilmore was put to death in January 1977. (There were no executions between 1968 and 1976.) Of the 93 executions between 1977 and 1987, 33 (distributed over 25 months) received coverage by one or more of the three television networks.

First, as measures of the amount of television execution publicity, Bailey (1) differentiates (as a dummy variable) between months in which there was none versus some execution publicity, (2) tallies the amount of air time, in minutes, per month devoted to executions,¹² and (3) sums the number of days

12. Because the size of the viewing audiences for the three evening news programs is not uniform, it would be desirable to compute a weighted execution publicity measure for each network based on audience share. A weighting scheme could also be used in forming a combined execution publicity index for the three networks. Unfortunately, it is not possible to construct weighted measures for the period under consideration. Arbitron television program ratings are available on a quarterly basis during the period, but only for individual markets ($N = 212$), and not for the national viewing audience. Due to market boundaries changing during the 1976–1987 period, and population data being available for most markets only for 1980, accurate national monthly market shares for the ABC, CBS, and NBC evening news programs are not possible. Arbitron does report national quarterly market share figures, but they are simply mean ratings averaged (without weighting) across the 212 individual U.S. market areas. For the above reasons, Arbitron advises against using these

per month in which there was execution publicity. (The appendix reports for 1977–1987 the names of persons whose executions received television coverage and the amount of coverage provided by the networks.¹³)

Second, on the assumption that some types of execution publicity may have a more dramatic effect on homicide than other types, Bailey distinguishes among executions on a qualitative basis. He differentiates, as dummy variables, between months in which (1) artist's drawings were ($n = 6$), or were not, aired illustrating the condemned person's execution; (2) witness accounts were ($n = 11$), or were not, provided of the execution; (3) the executed person's "last words" were ($n = 9$), or were not, presented; offenders were portrayed as (4) "more" ($n = 7$) versus (5) "less" ($n = 7$) deserving of execution; and (6) execution coverage did ($n = 10$) or did not include coverage of anti-execution demonstrations.

Bailey's coding scheme pertains only to execution publicity. Publicity about other aspects of capital cases, such as the handing down of death sentences and appeals of capital convictions are not considered. Nor does he treat as execution publicity news about the activities of abolitionist groups, changes in death penalty legislation, appellate court actions, or coverage of death penalty matters outside the United States.

Following the practice of previous investigators (Bailey, 1990; Bailey and Peterson 1989; Phillips, 1980; Stack, 1987), we coded execution coverage that occurred after the twenty-third of the month as taking place the following month. The assumption here is that execution stories aired at the end of the month will have their greatest impact on homicides the next month.¹⁴

ALTERNATIVE EXECUTION PUBLICITY

In our analyses, we did not consider indicators of print media attention to

"average" figures as estimates of national viewer audiences (S. Cagner, Arbitron Rating Company, personal communication, 1989).

13. The data reported in the appendix reflect the total amount of air time devoted to executions during the months indicated. For some broadcasts, the entire amount of air time was devoted to the execution in question, but in some cases execution stories had mixed content. Often, a broadcast announced an execution but also gave details about the offender and the murder victim, aired statements by officials and other interested parties, and sometimes announced the next scheduled execution. In measuring broadcast time, we recorded the number of minutes for the entire execution story without attempting to differentiate the time devoted to executions *per se* versus related coverage.

14. As an alternative to considering the effects of monthly (month t) executions and television publicity on homicides, an anonymous reviewer of an earlier version of this paper recommended that we employ a three-month moving average (month $t-2$ + month $t-1$ + month $t/3$) for the death penalty variables in examining homicide rates (for month t). The analysis to follow (Tables 1–6) was replicated using three-month average values for each of the death penalty variables. This alternative analysis produced no evidence of either deterrence or brutalization. (Results are available in tabular form on request.)