STATE OF NEBRASKA

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Mike Johanns
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Final Report on the Disposition of Nebraska Capital and Non-Capital Homicide Cases (1973-1999): A Legal and Empirical Analysis

Note to Reader from Allen L. Curtis, Executive Director, Nebraska Commission on Law Enforcement and Criminal Justice October 4, 2002

Attached please find the final, corrected copy and only officially accepted report of the Commission's Homicide Study.

The Commission accepted the original Homicide Report on July 25, 2001 from the contractor Keating, O'Gara, Davis and Nedved, P.C., and copies were distributed as required by statute on August 1, 2001.

Following the release of the original report, the authors found several cases which were coded incorrectly and should have been considered death eligible. Dr. Baldus *(Lead researcher for contractor)* decided since corrections were required, he would clarify some of the findings. Dr. Baldus then met with the Legislature's Judiciary Committee in November 2001 and released amended versions of Volumes 1 and 2. At the time of release, he stated the amended report *". . . clarifies and expands upon a few issues of interpretation that arose in response to the initial report, corrects coding and typographical errors identified since July, and reflects several reclassifications in the data base that expand slightly the universe of death-eligible cases."*

The release of the amended report generated confusion about which report was the "official" report.

The Commission on Law Enforcement and Criminal Justice at its January 2002 meeting discussed how best to maintain the integrity of the homicide report while also presenting the corrections. Although the report findings had not changed substantially, having two reports was confusing.

The contractor agreed at the January meeting that having two versions of the report was confusing and suggested the Commission retract the amended report. He provided an errata sheet addressing technical issues and substitute sheets to insert in the original report which corrected any errors or omissions.

The Commission voted to accept the withdrawal of the second Homicide Report by the author. The original Homicide Study Committee research consultants (Cheryl Wiese and Julia McQuillan) were then commissioned to review the errata sheets to insure that changes listed were accurate and in accordance with generally accepted research logic or theory.

At the July 26, 2002 Crime Commission meeting, the consultants, Dr. Julia McQuillan and Cheryl Wiese, submitted their review of the errata sheets and proposed changes in text to the Commission for consideration. Members were provided: 1) the consultants' report which explained their work and the amendment process, 2) errata sheet listing all changes to the original report, 3) insert sheets to replace the amended pages of the original report, 4) a new Table of Contents, and 5) new figures and tables. The Commission voted unanimously to accept these five submitted documents as corrections to the original homicide report and directed their placement, along with the corrected report, on the Commission's website.

We have updated Volume 1 and Volume 2 of the original report with the corrected sheets. We have sent copies of this final report to all the original recipients required by the authorizing legislation. Others can receive the report and the five submitted documents at the Commission's website. The website is www.nol.org/home/crimecom/.

VOLUME 2

TABLES, FIGURES, AND APPENDICES

The Disposition of Nebraska Capital and Non-Capital Homicide Cases (1973-1999): A Legal and Empirical Analysis

David C. Baldus
George Woodworth
Gary L. Young
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July 25, 2001
Amended - July 26, 2002

Tables
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TABLE 1
NEBRASKA STATUTORY AND MITIGATING CIRCUMSTANCES

R.R.S. Neb. § 29-2523 (2001). Aggravating and mitigating circumstances, as follows:

(1) Aggravating Circumstances:

(a) The offender was previously convicted of another murder or a crime involving the use or threat of violence to the person, or has a substantial prior history of serious assaultive or terrorizing criminal activity;

(b) The murder was committed in an effort to conceal the commission of a crime, or to conceal the identity of the perpetrator of such crime;

(c) The murder was committed for hire, or for pecuniary gain, or the defendant hired another to commit the murder for the defendant;

(d) The murder was especially heinous, atrocious, cruel, or manifested exceptional depravity by ordinary standards of morality and intelligence;

(e) At the time the murder was committed, the offender also committed another murder;

(f) The offender knowingly created a great risk of death to at least several persons;

(g) The victim was a public servant having lawful custody of the offender or another in the lawful performance of his or her official duties and the offender knew or should have known that the victim was a public servant performing his or her official duties;

(h) The murder was committed knowingly to disrupt or hinder the lawful exercise of any governmental function or the enforcement of the laws; or

(i) The victim was a law enforcement officer engaged in the lawful performance of his or her official duties as a law enforcement officer and the offender knew or reasonably should have known that the victim was a law enforcement officer.

The facts upon which the applicability of an aggravating circumstance depends must be proved beyond a reasonable doubt.

(2) Mitigating Circumstances:

(a) The offender has no significant history of prior criminal activity;

(b) The offender acted under unusual pressures or influences or under the domination of another person;

(c) The crime was committed while the offender was under the influence of extreme

mental or emotional disturbance;

(d) The age of the defendant at the time of the crime;

(e) The offender was an accomplice in the crime committed by another person and his or her participation was relatively minor;

(f) The victim was a participant in the defendant's conduct or consented to the act; or

(g) At the time of the crime, the capacity of the defendant to appreciate the wrongfulness of his or her conduct or to conform his or her conduct to the requirements of law was impaired as a result of mental illness, mental defect, or intoxication.

TABLE 2

NEBRASKA CRIMINAL HOMICIDE CONVICTIONS AND THE PROPORTION AND NUMBER OF CAPITAL MURDER CASES, BY YEAR: 4/20/73 TO 12/31/99

1970's			1980's			1990's		
A	B	C	D	E	F	G	H	I
Year	Number of Convictions	Proportion & # Death-Eligible Cases	Year	Number of Convictions	Proportion & # Death-Eligible Cases	Year	Number of Convictions	Proportion & # Death-Eligible Cases
1973-74	19	.21 (4)	1980	32	.31 (10)	1990	19	.32 (6)
1975	21	.43 (9)	1981	30	.17 (5)	1991	19	.16 (3)
1976	27	.15 (4)	1982	23	.17 (4)	1992	36	.17 (6)
1977	31	.35 (11)	1983	23	.43 (10)	1993	36	.17 (6)
1978	26	.27 (7)	1984	26	.58 (15)	1994	28	.21 (6)
1979	21	.19 (4)	1985	22	.27 (6)	1995	28	.39 (11)
			1986	37	.24 (9)	1996	27	.22 (6)
			1987	23	.26 (6)	1997	25	.12 (3)
			1988	27	.22 (6)	1998	24	.17 (4)
			1989	27	.33 (9)	1999	34	.15 (5)
Sub-Totals	145	.27 (39/145)		270	.30 (80/270)		276	.20 (56/276)
Grand Total		.25 (175/691)						

TABLE 3
DISPOSITION OF NEBRASKA CAPITAL MURDERS, IN 5-YEAR PERIODS:
1973 TO 1999

A	B	C	D
Year of Sentence[1]	Rates at which Death-Eligible Cases Advance to a Penalty Trial with the State Seeking a Death Sentence[1]	Rates that Death Sentences are Imposed in Penalty Trials[2]	Death-Sentencing Rates Among All Death-Eligible Cases[2]
A. 1973-1977	.50 (14/28)	.36 (5/14)	.18 (5/28)
B. 1978-1982	.55 (18/33)	.56 (10/18)	.30 (10/33)
	.51 (56/110)	.36 (20/55)	.17 (20/109)
C. 1983-1987	.49 (24/49)	.22 (5/23)	.10 (5/48)
D. 1988-1992	.38 (11/29)	.18 (2/11)	.07 (2/29)
E. 1993-1999	.48 (22/46)	.32 (7/22)	.15 (7/46)
	.44 (33/75)	.27 (9/33)	.12 (9/75)
Total 1973-1999[a]	.48 (89/185)	.33 (29/88)[a]	.16 (29/184)[a]

[1] The Table includes 10 subsequent prosecutions for 9 defendants whose death sentences were vacated or murder 1 convictions reversed on appeal. One defendant had two such subsequent prosecutions.

[2] Column C excludes cases that did not advance to a penalty trial, while Columns B and D include all death-eligible cases.

[a] Column B includes one case in which the prosecutor perceived the defendant to be death-eligible and advanced the case to a penalty trial but the sentencing judge believed it was not death-eligible. Accordingly, that case is excluded from Columns C and D and all other analyses of judicial sentencing decisions presented in this report.

TABLE 4

LOGISTIC REGRESSION MODELS OF FOUR CHARGING AND SENTENCING OUTCOMES

(the number in the Columns are logistic odds-multipliers and regression coefficients (in parenthesis) estimated for the applicable explanatory variables in Column A; there are two models for each outcome-the first with the geography variable (2.e) omitted and the second with it included)

A	B	C	D	E	F	G	H	I
Explanatory Variables	Death Sentence Waived by Plea/Unilateral Decision		Death-Eligible Cases Advanced to Penalty Trial w/ State Seeking a Death Sentence		Death Sentences are Imposed in a Penalty Trial		Death Sentence Imposed Among All Death-Eligible Cases	
1. Legitimate Case Characteristics								
a. Number of Statutory Aggravating Circumstances	.53 (-.64)*	.48 (-.72)*	1.67 (.51)*	1.75 (.56)*	18.1 (2.9)*	18.1 (2.9)*	12.2 (2.5)*	12.2 (2.5)*
b. Number of Statutory Mitigating Circumstances	1.26 (.23)	1.23 (.21)	.83 (-.19)	.83 (-.19)	.72 (-.13)	.72 (-.13)	.58 (-.16)	.54 (-.17)
c. Victim Bound and Gagged	--	--	1.31 (.27)	1.72 (.54)	--	--	--	--
d. Def. Killed Two or More Victims [1]	.41 (-.90)	.35 (-1.05)*	1.97 (.68)	2.46 (.90)	--	--	--	--
e. Guilty Plea	--	--	--	--	.11 (-2.2)*	.12 (-2.1)	.04 (-3.3)*	.05 (-3.1)*
f. Def. Committed an Additional Crime	--	--	--	--	--	--	4.48 (1.5)	4.95 (1.4)*
g. Defendant Confession	3.2 (1.14)*	3.7 (1.3)*	--	--	--	--	--	--
2. Illegitimate/Suspect Variables								
a. White Def.	1.95 (.67)	1.46 (.38)	.63 (-.45)	.73 (-.31)	1.61 (.48)	1.55 (.44)	1.40 (.33)	1.40 (.33)
b. White Victim	.97 (-.03)	.76 (-.27)	.92 (-09)	.97 (-.03)	1.03 (.03)	1.03 (.03)	.86 (-.15)	.88 (-.12)
c. Def. SES Scale (High, Middle, Low)	1.21 (.20)	1.08 (.08)	.72 (-.33)	.72 (-.33)	.86 (-.15)	.87 (-14)	.55 (-.58)	.86 (-.14)
d. Victim SES Scale (High, Middle, Low)	1.82 (.72)*	2.03 (.71)*	.55 (-.59)*	.54 (-.61)*	.30 (-1.2)*	.30 (-1.2)*	.27 (-1.3)*	.30 (-1.2)*
e. Geography Variable 1=Major Urban County 0=Other County	--	.27 (-1.3)*	--	2.8 (1.03)*	--	.95 (-.05)	--	.93 (.08)

[1] In multiple victim cases, in terms of aggravation in the case, the model reflects the more or most aggravated murder, as the case may be.

* = indicates a level of confidence in the estimate that, in Bayesian terms, is the analogue to statistical significance at the .05 level or beyond in frequenist terms.

TABLE 5

ESTIMATED DEATH SENTENCING RATES FOR DEFENDANTS WITH COMPARABLE LEVELS OF DEFENDANT CULPABILITY IN 29 NEBRASKA DEATH SENTENCED CASES, CONTROLLING FOR THE NUMBER OF STATUTORY AGGRAVATING CIRCUMSTANCES IN THE CASES: 1973-1999[1]

A	B	C
Number of Aggravating Circumstances and Number of Death Sentenced Cases	Comparable Penalty Trial Cases	Comparable Cases Among All Death-Eligible Defendants
1 (n=3)	29 % (.22-.33)	9 % (.09-.28)
2 (n=12)	54 % (.40-.62)	39 % (.80-.51)
3 (n=8)	82 % (.79-.87)	61 % (.42-.66)
4-6 (n=6)	87 % (.79-.90)	75 % (.70-.79)

[1] The second line of data in each box indicates the range of estimates for death sentences imposed among near neighbors for the cases classified in that box.

TABLE 6
NON-CAPITAL HOMICIDE: LOGISTIC REGRESSION MODELS OF FOUR DECISION OUTCOMES, NEBRASKA: 1973-1999
(the numbers in each Column are the odds multipliers[1] for the variables in Column A)

A Explanatory Variables	B M1 charge Among All Cases (n=514)	C M2 Charge Among All Cases (n=514)	D M1 Conviction in Cases Charged with M1 (n=261)	E M2 Conviction: Life Sentence Imposed v. a Term of Years (n=193)
1. Murder 1 Mens Rea Clearly Present	5.8 (1.76)[d]	.24 (-1.43)[d]	87.6 (4.7)[d]	.74 (-.31)
2. Murder 1 Mens Rea Clearly Absent	.39 (-.93)[d]	.86 (-.15)	<.001 (-16.3)	.84 (-.18)
3. White Defendant	.74 (-.30)	1.3 (.27)	.71 (-.34)	.73 (-.31)
4. White Victim	1.4 (.36)	.63 (-.46)	1.3 (.30)	.90 (.61)
5. Victim Socio-Economic Status (SES) Scale (high, medium, low)	1.4 (.35)	1.3 (.27)	1.1 (.06)	.55 (-.59)
6. Defendant Socio Economic Status (SES) Scale (high, medium, low)	.83 (-.18)	1.1 (.10)	.65 (-.43)	1.1 (.12)
7. Female Victim	1.44 (.37)	.58 (-.54)[b]	.97 (-.03)	1.1 (-.07)
8. Male Defendant	2.25 (.85)[c]	1.1 (.08)	2.0 (.71)	3.9 (1.4)[c]
9. Defendant Prior Homicide	2.5 (.93)	.97 (-.03)	>50 (8.8)	2.7 (.98)
10. Victim Age	1.02 (.02)[b]	.99 (-.01)	1.02 (.02)	.99 (-.008)

[a]=significant at the .10 level; [b]=significant at the .05 level; [c]=significant at the .01 level; [d]=significant at the .001 level.

[1] For example, the 5.8 odds multiplier in Row 1 Column B indicates that on average, after controlling for the other variables in the analysis, the odds of a murder 1 charge are enhanced by a factor of 5.8 when the evidence clearly establishes a mens rea for first degree murder.

TABLE 6
NON-CAPITAL HOMICIDE: LOGISTIC REGRESSION MODELS OF FOUR DECISION OUTCOMES, NEBRASKA: 1973-1999
(the numbers in each Column are the odds multipliers[1] for the variables in Column A)

11. Defendant Age	1.01 (.01)	1.01 (.01)	1.002 (.002)	1.00 (.001)
12. Number of Coperpetrators	1.27 (.23)	.61 (-.49)[b]	.87 (-.14)	.92 (-.08)
13. Hispanic Defendant	.84 (-.17)	.86 (-.16)	2.4 (.86)	<.001 (-13.4)
14. Number of Statutory Aggravating Circumstances	1.05 (.05)	1.26 (.23)	3.1 (1.1)	.84 (-.18)

[a]=significant at the .10 level; [b]=significant at the .05 level; [c]=significant at the .01 level; [d]=significant at the .001 level.

[1] For example, the 5.8 odds multiplier in Row 1 Column B indicates that on average, after controlling for the other variables in the analysis, the odds of a murder 1 charge are enhanced by a factor of 5.8 when the evidence clearly establishes a mens rea for first degree murder.

Figures
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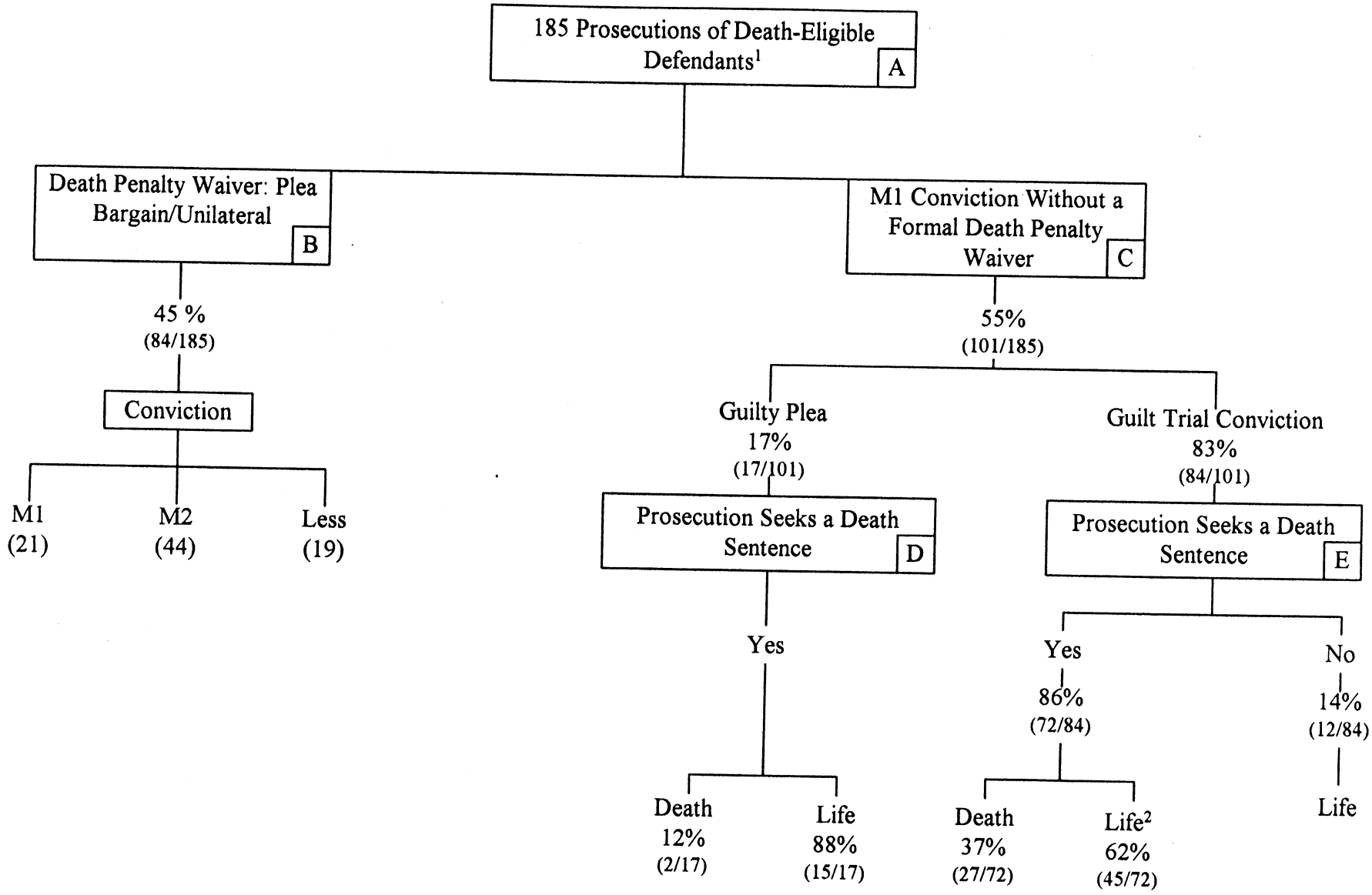
FIGURE 1
DISPOSITION OF DEATH-ELIGIBLE MURDER CASES, NEBRASKA: 1973-1999



[1] This Figure includes 9 cases that involved a second or third prosecution following the vacation/reversal of a death sentence or first degree murder conviction in an earlier prosecution that resulted in a death sentence. Four of these cases resulted in a second death sentence and in one case a third death sentence was imposed.

[2] In one case in this category, the sentencing court believed it had no discretion under the law to impose a death dentence. We include that outcome as a life sentence here but have deleted the case from all subsequent analyses of the exercise of judicial sentencing discretion.

FIGURE 2

DISPOSITION OF NON-CAPITAL MURDER CASES RESULTING IN A CRIMINAL CONVICTION, NEBRASKA: 1973-1999

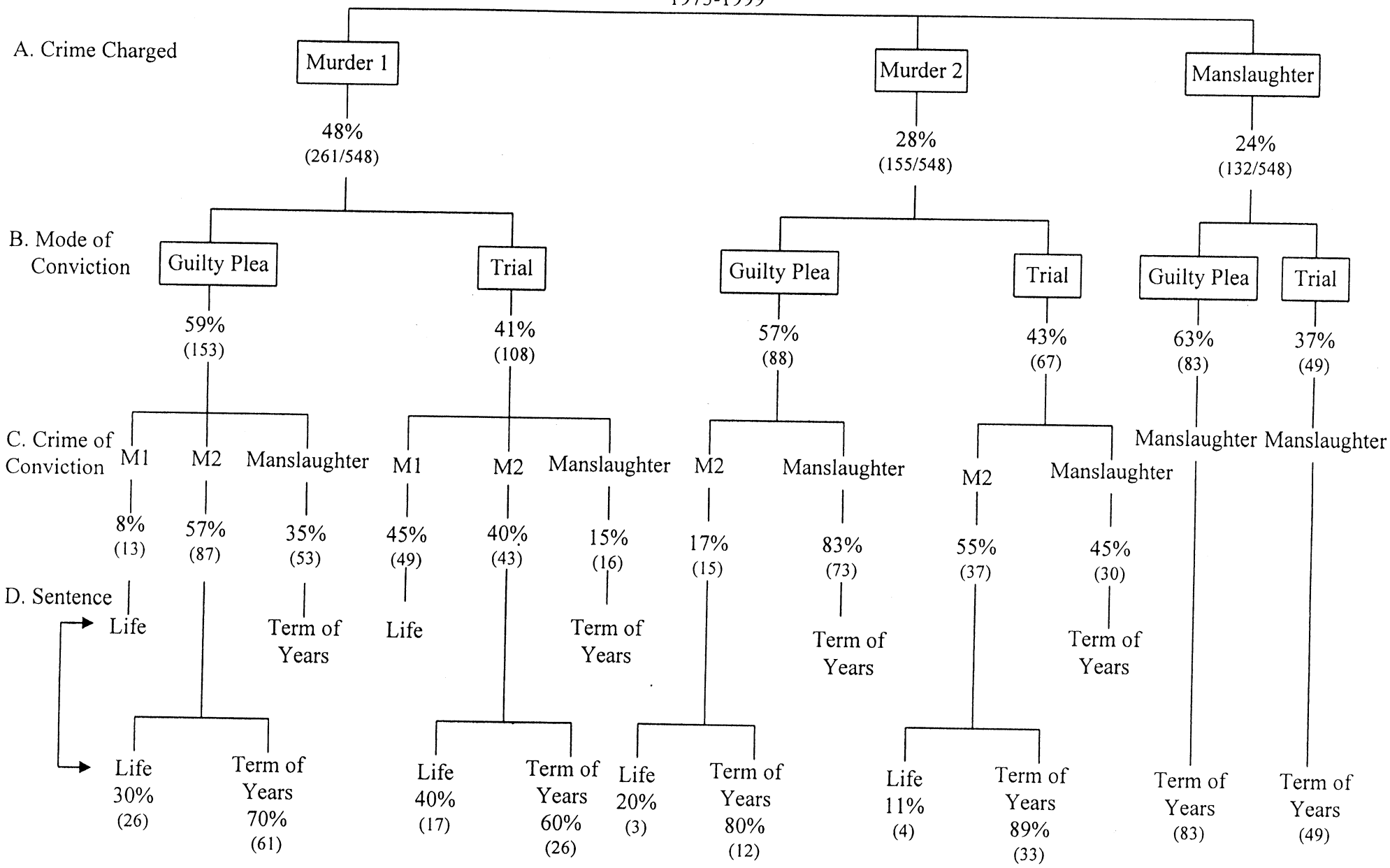
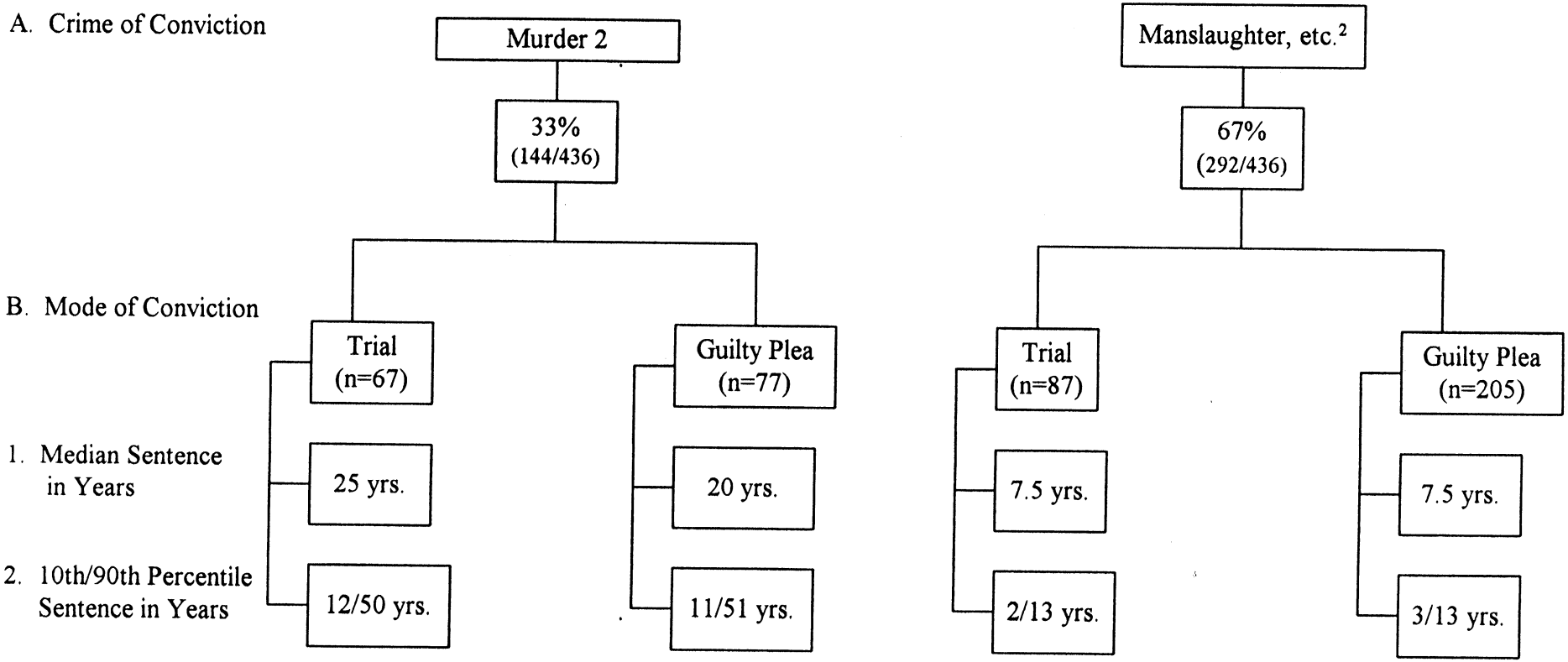


FIGURE 3

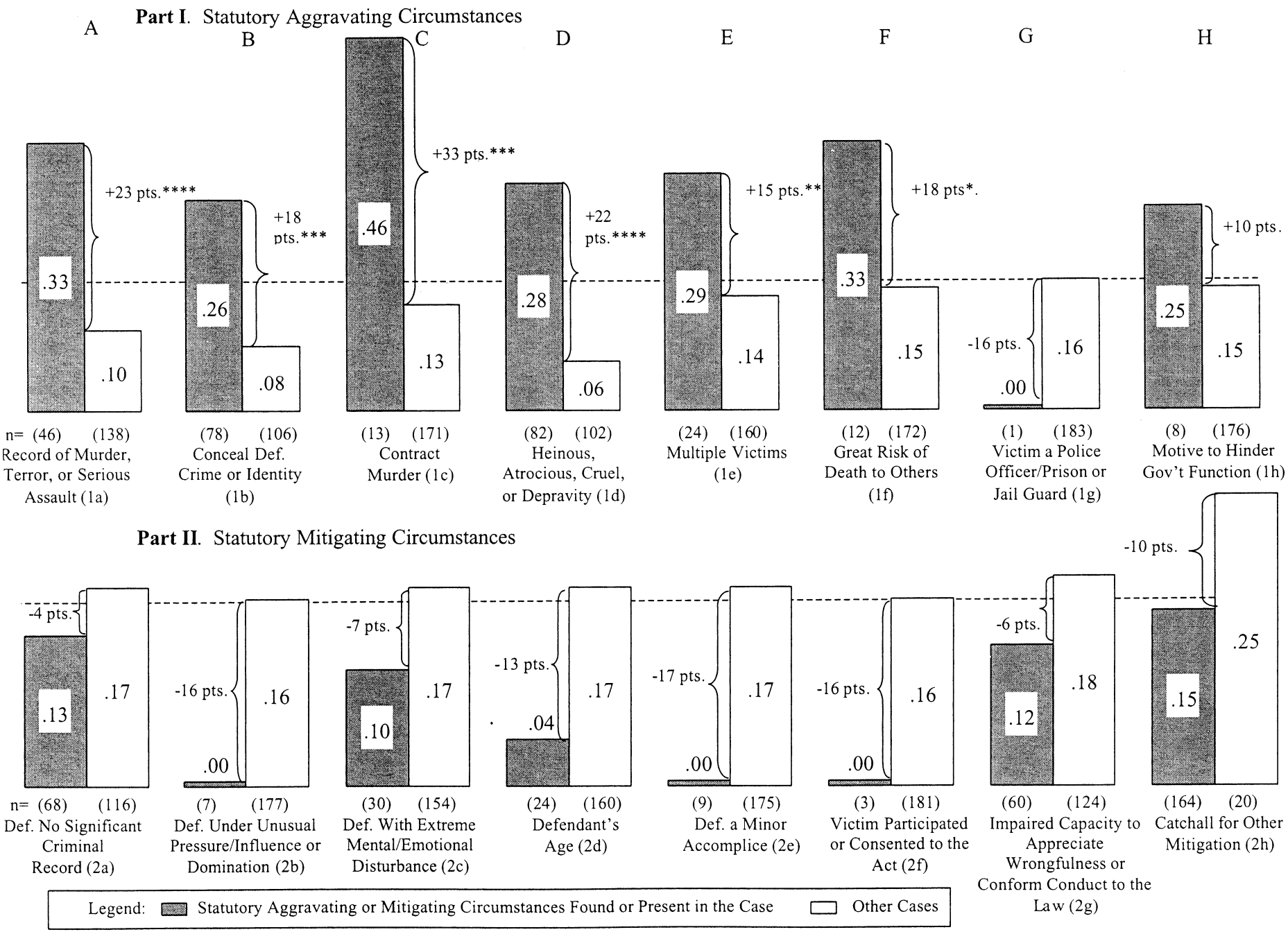
LENGTH OF PRISON SENTENCES IMPOSED IN 436 NON-CAPITAL HOMICIDE CASES, CONTROLLING FOR THE CRIME OF CONVICTION AND MODE OF CONVICTION: NEBRASKA, 1973-1999[1]



[1] There are 112 non-capital cases included in Figure 2 that are not reported here because they resulted in a life sentence for first or second degree murder.

[2] This category of cases includees a small number of homicides in addition to manslaughter.

FIGURE 4: THE IMPACT OF STATUTORY AGGRAVATION AND MITIGATION ON DEATH-SENTENCING RATES AMONG ALL DEATH-ELIGIBLE DEFENDANTS, NEBRASKA: 1973-1999 (the bars indicate the death-sentencing rates for the subgroups of cases)



* = Significant at the .10 level; ** = Significant at the .05 level; *** = Significant at the .01 level; **** = Significant at the .001 level.

FIGURE 5

CHARGING AND SENTENCING OUTCOMES AMONG ALL DEATH-ELIGIBLE CASES, CONTROLLING FOR THE NUMBER OF STATUTORY AGGRAVATING CIRCUMSTANCES FOUND OR PRESENT IN THE CASES, NEBRASKA: 1973-1999

(for each category of cases the bars represent (a) the rates at which death-eligible cases advance to a penalty trial, (b) the rates that death sentences are imposed in penalty trials, and (c) the death-sentencing rates among all capital cases)

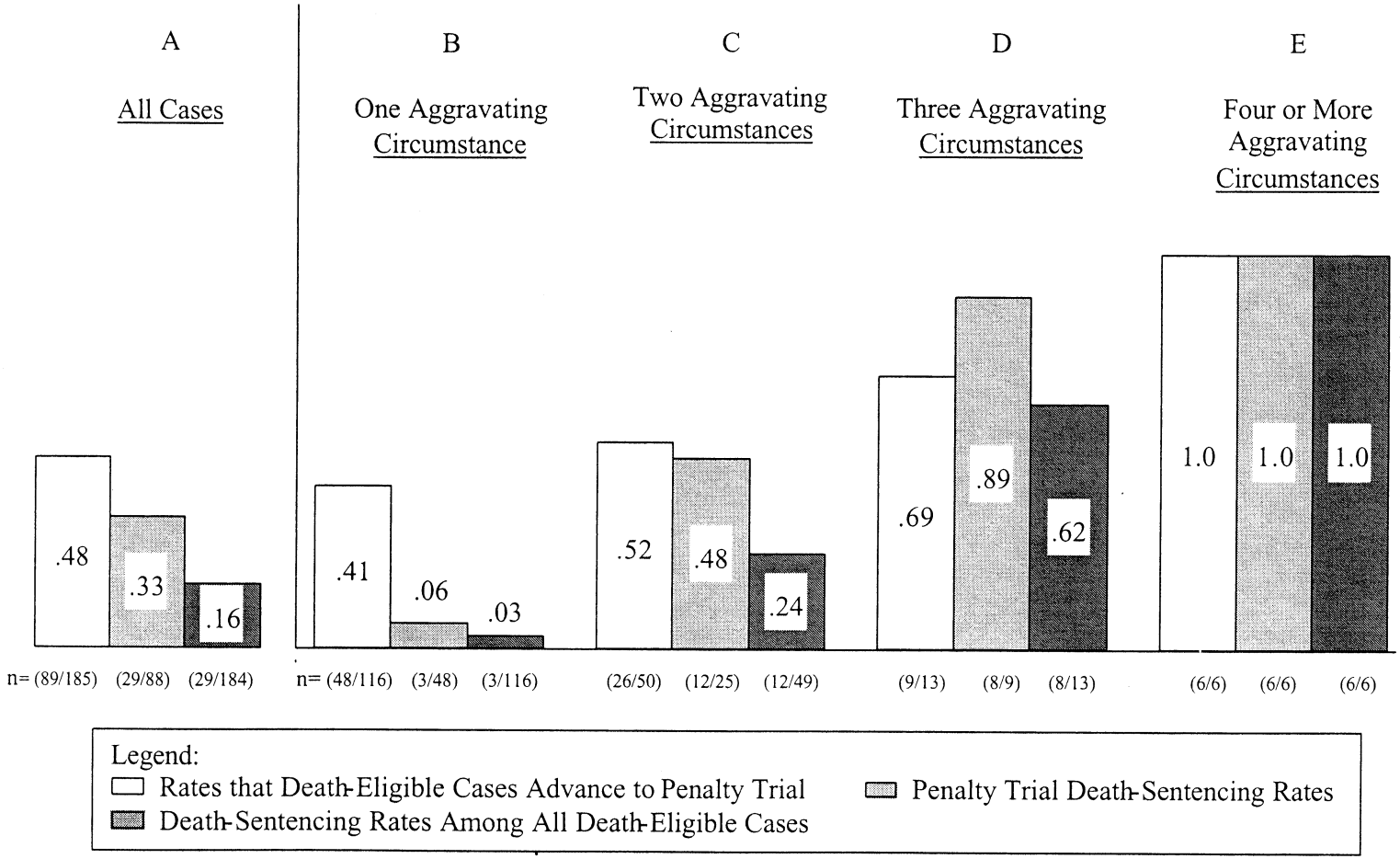
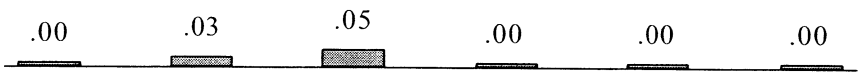


FIGURE 6

DEATH-SENTENCING RATES AMONG ALL DEATH-ELIGIBLE CASES, CONTROLLING FOR THE NUMBER OF STATUTORY AGGRAVATING AND MITIGATING CIRCUMSTANCES FOUND OR PRESENT IN THE CASES, NEBRASKA: 1973-1999

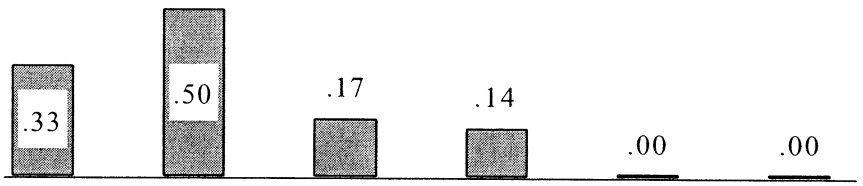
A	B	C	D	E	F	G
Number of Statutory Aggravating Circumstances	Number of Statutory Mitigating Circumstances					
	None	One	Two	Three	Four	Five or More

Part I. One Aggravating Circumstance



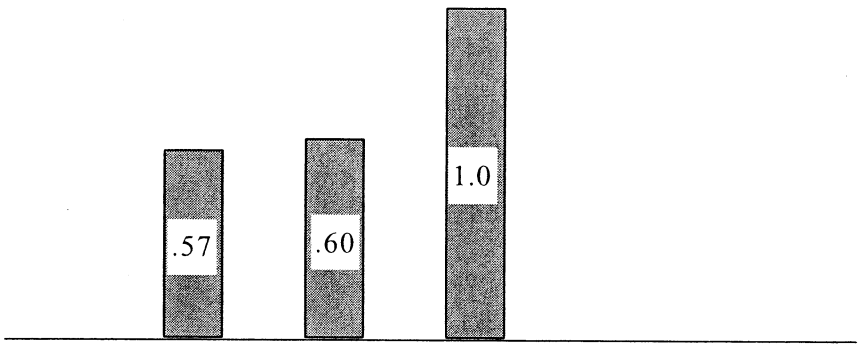
n= (3) (1/35) (2/41) (23) (11) (3)

Part II. Two Aggravating Circumstances



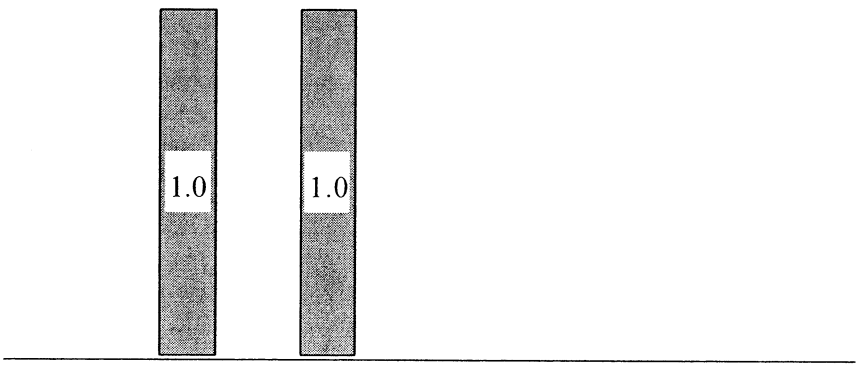
n= (2/6) (5/10) (4/24) (1/7) (1) (1)

Part III. Three Aggravating Circumstances



n= (4/7) (3/5) (1/1)

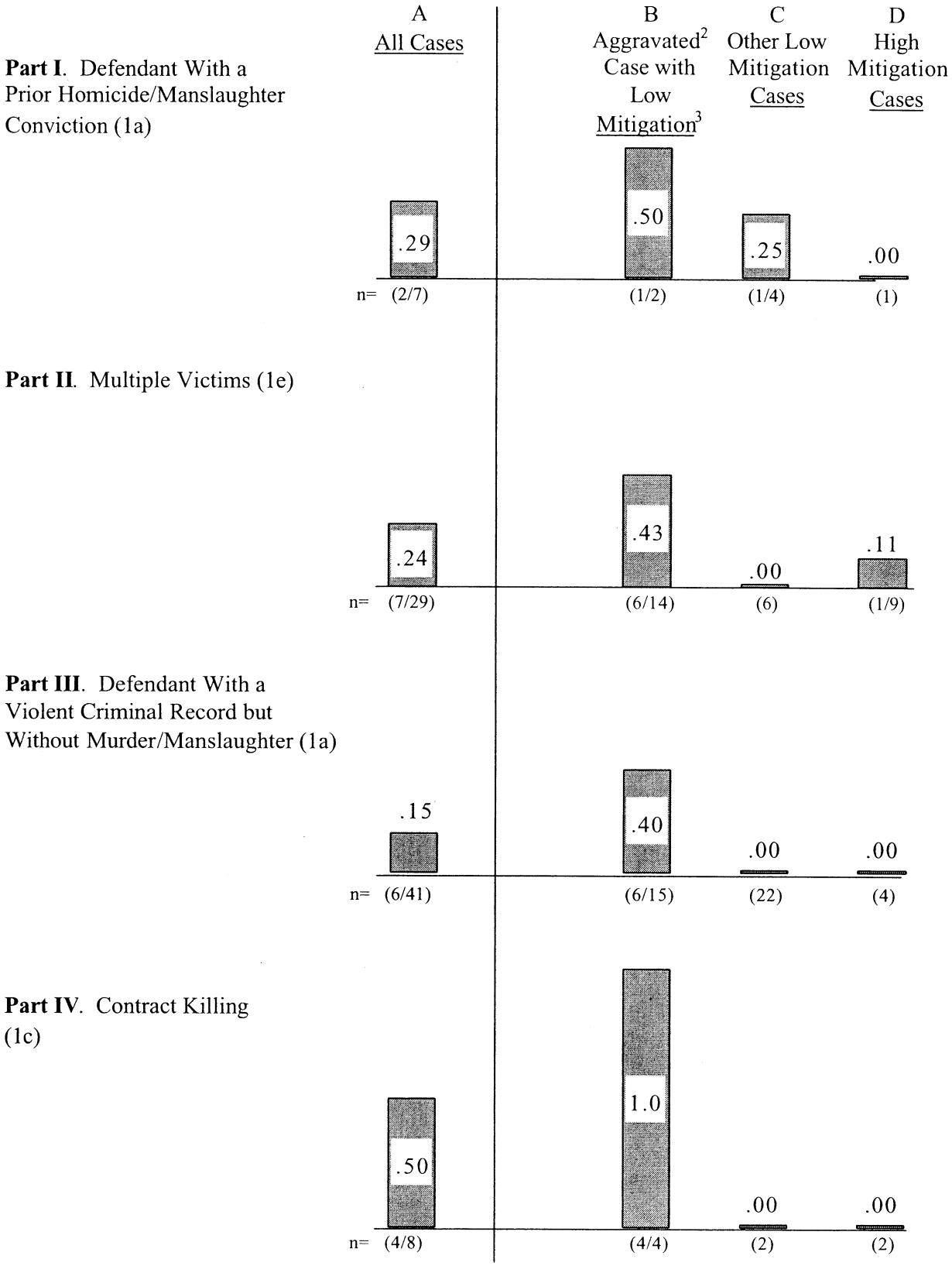
Part IV. Four or More Aggravating Circumstances



n= (2/2) (4/4)

FIGURE 7

DEATH-SENTENCING RATES AMONG ALL DEATH-ELIGIBLE CASES CONTROLLING FOR THE CLASSIFICATION OF EACH CASE UNDER THE SALIENT FACTORS MEASURE OF DEFENDANT CULPABILITY: NEBRASKA, 1973-1999[1]



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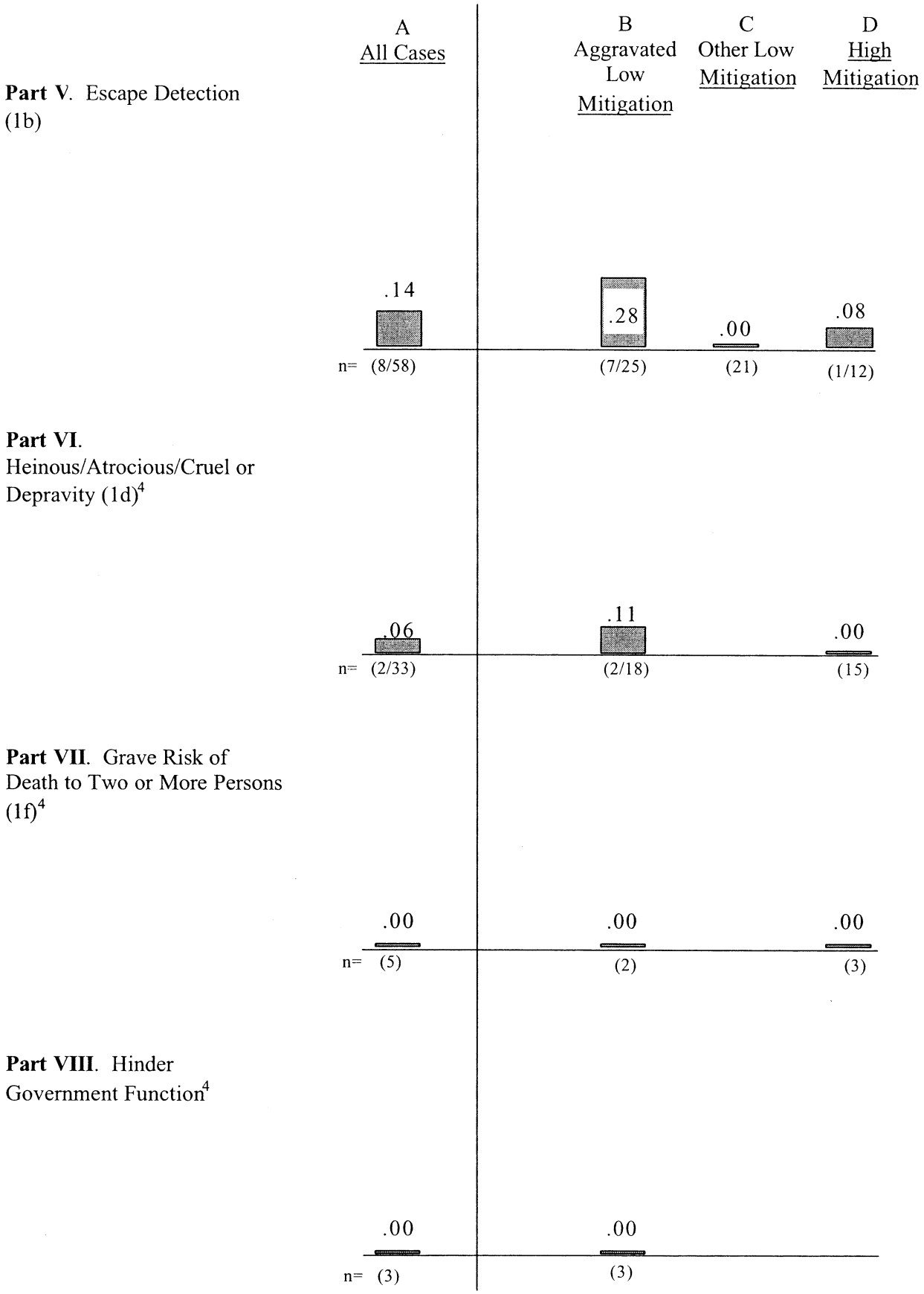
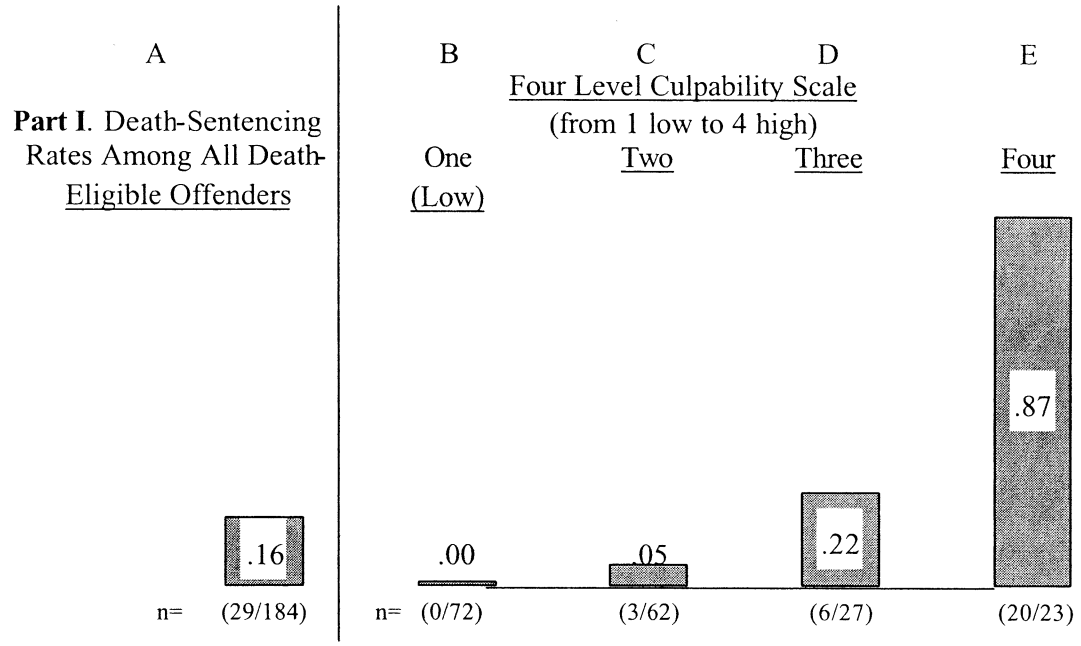

A
All Cases
B
Aggravated Low Mitigation
C
Other Low Mitigation
D
High Mitigation
Part V. Escape Detection (1b)
.14
.28
.00
.08
n= (8/58)
(7/25)
(21)
(1/12)
Part VI. Heinous/Atrocious/Cruel or Depravity (1d)[4]
.06
.11
.00
n= (2/33)
(2/18)
(15)
Part VII. Grave Risk of Death to Two or More Persons (1f)[4]
.00
.00
.00
n= (5)
(2)
(3)
Part VIII. Hinder Government Function[4]
.00
.00
n= (3)
(3)

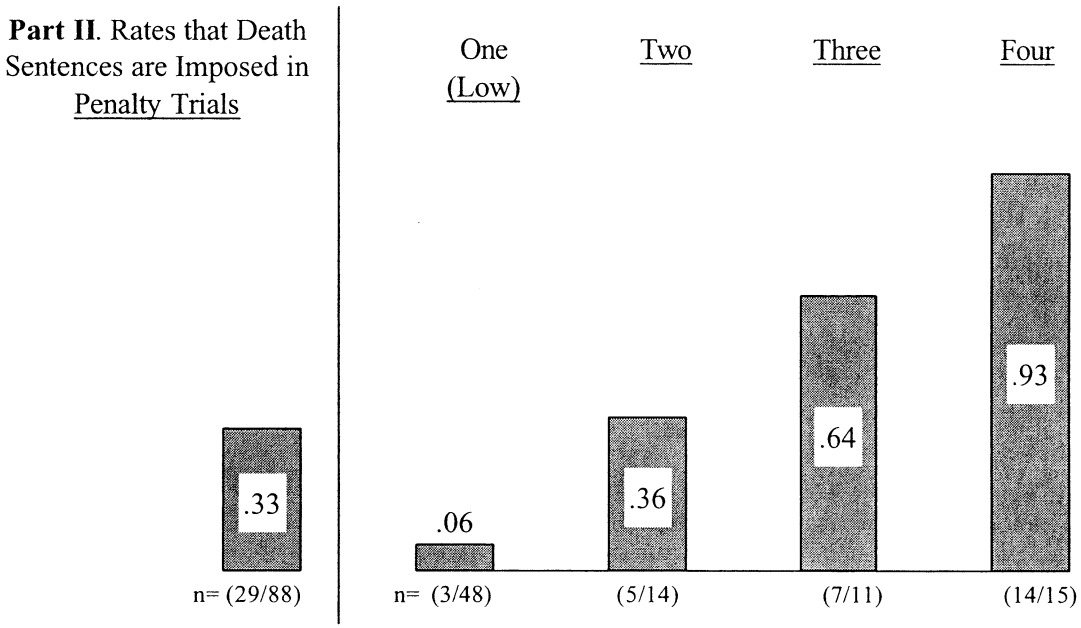
[1] The designation at the conclusion of each part's description indicates the principal statutory aggravating circumstance in these cases, e.g., for Part I cases, the principal aggravator is (1a). See Table 1 for a list of the statutory aggravators.
[2] An "aggravated" case includes one or more additional aggravating circumstances, except for Part II in which "aggravated" refers to the presence of a contemporaneous felony, such as robbery or arson.
[3] A low mitigation case has two or fewer statutory mitigating circumstances (a) found or recognized by the court in a penalty trial case or (b) present in a non-penalty trial case.
[4] These cases are subclassified only in terms of high and low mitigation.

FIGURE 8

DEATH- SENTENCING RATES AMONG ALL DEATH-ELIGIBLE CASES (PART I) AND IN PENALTY TRIALS (PART II), CONTROLLING FOR DEFENDANT CULPABILITY ON REGRESSION BASED CULPABILITY SCALES

(the bars indicate the death sentencing rates among each category or cases defined in terms of defendant culpability estimated on a regression based scale)





[1] This Figure does not include one death eligible case in which the sentencing court did not believe it had discretion to impose a death sentence.

Seven Level Culpability Scale
(from 1 low to 7 high)

Part III. Rates that Cases Advance to a Penalty Trial

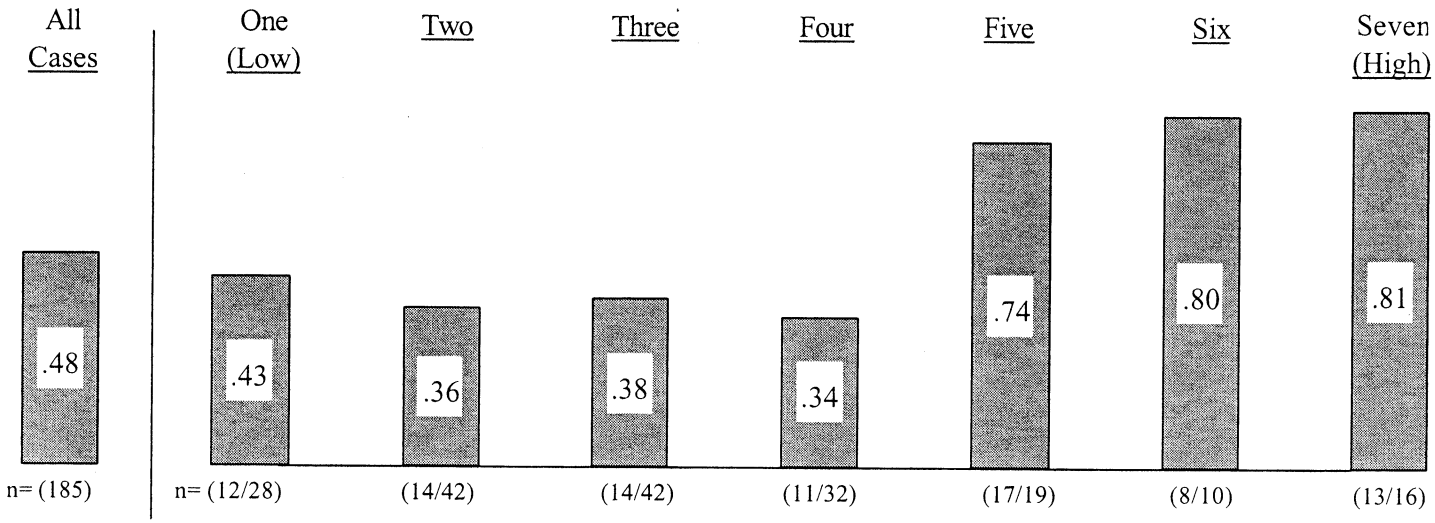
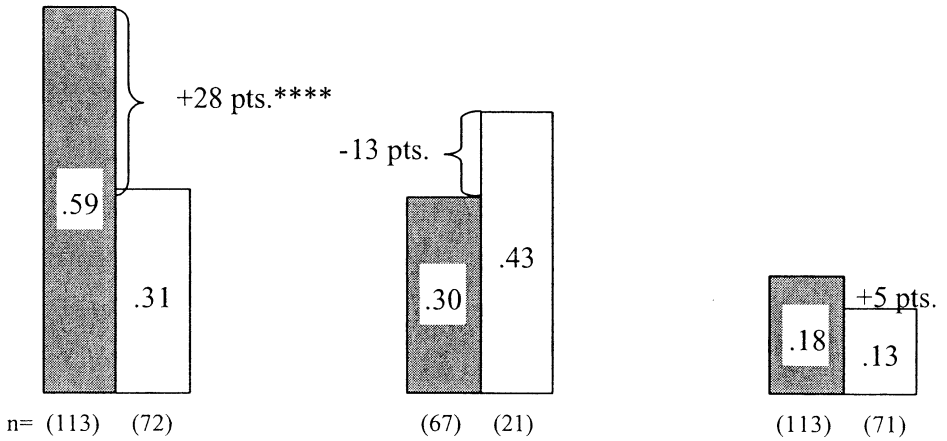


FIGURE 9

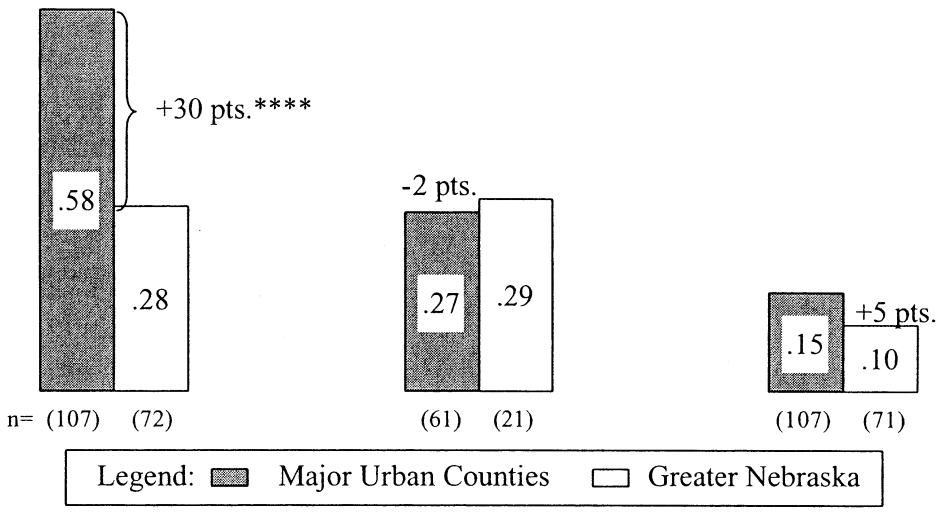
UNADJUSTED AND ADJUSTED DISPARITIES BETWEEN MAJOR URBAN COUNTIES AND GREATER NEBRASKA IN CAPITAL MURDER CHARGING AND SENTENCING OUTCOMES: NEBRASKA, 1973-1999

A	B	C
Rates at which Cases Advance to a Penalty Trial With the State Seeking a Death Sentence[1]	Rates that Death Sentences are Imposed in Penalty Trials[2]	Death-Sentencing Rates Among All Death-Eligible Cases[3]

Part I. Unadjusted Geographic Disparities



Part II. Geographic Disparities Adjusted for the Number of Aggravating Circumstances in the Cases[4]



**** = disparity significant at the .0001 level

[1] The penalty trial rates were .67 (54/81) in Douglas and Sarpy Counties; .41 (13/32) in Lancaster County; and .31 (22/72) in greater Nebraska.

[2] The penalty trial death-sentencing rates were .28 (15/54) in Douglas and Sarpy Counties; .38 (5/13) in Lancaster County; and .43 (9/21) in greater Nebraska.

[3] The death-sentencing rates among all death-eligible offenders were .19 (15/81) in Douglas and Sarpy Counties; .16 (5/32) in Lancaster County; and .13 (9/71) in greater Nebraska.

[4] The reduced number of major urban county cases in Part II is explained by the fact that all cases with 4 or more aggravators (n=6) were prosecuted in major urban counties. Because there are no greater Nebraska cases with compable levels of culpability these 6 cases are omitted from the adjusted rates calculation in Part II.

FIGURE 10
UNADJUSTED CHARGING AND SENTENCING OUTCOMES IN CAPITAL MURDER CASES IN MAJOR URBAN AND GREATER NEBRASKA COUNTIES, OVER TIME, NEBRASKA: 1993-1999

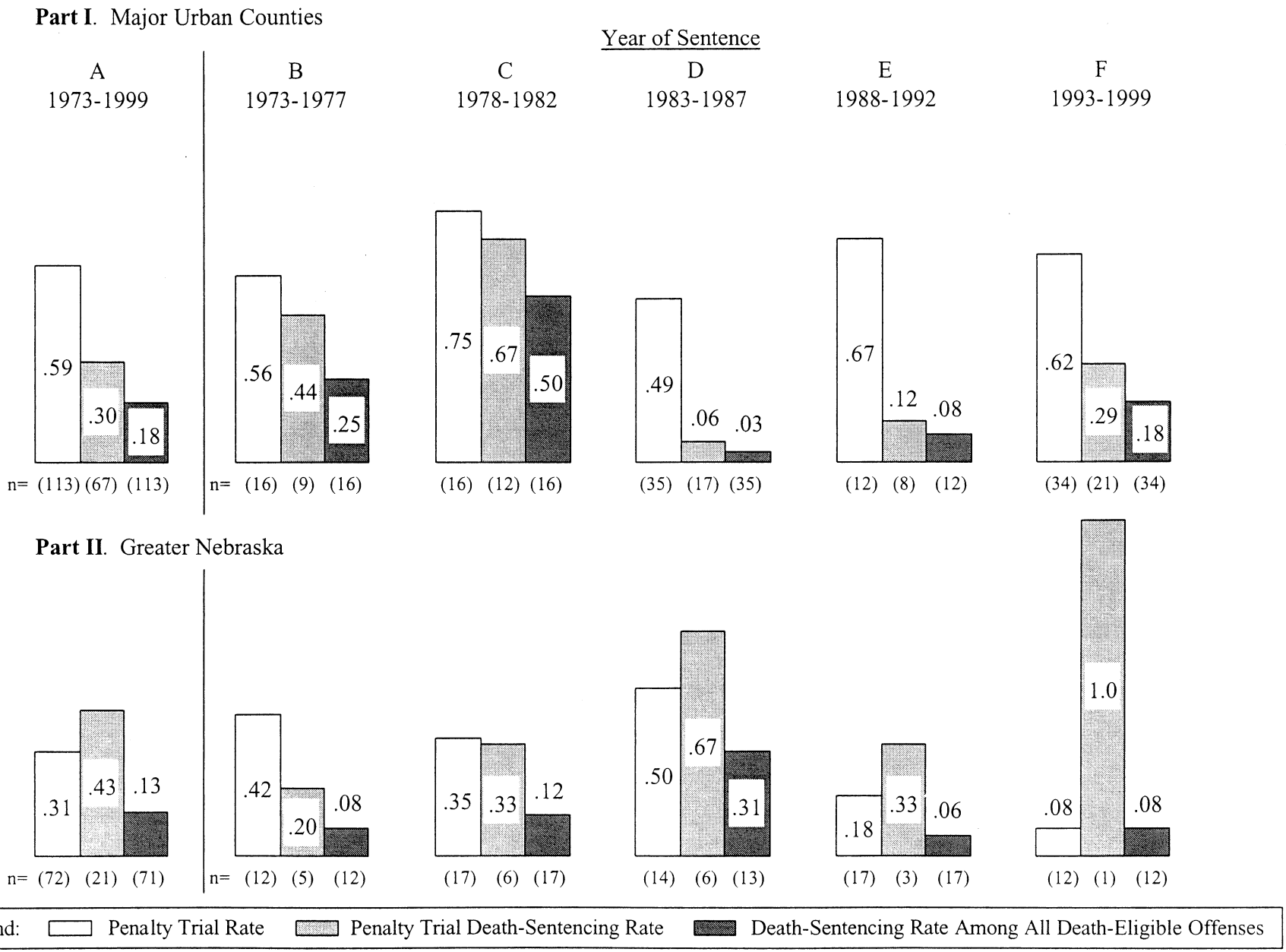
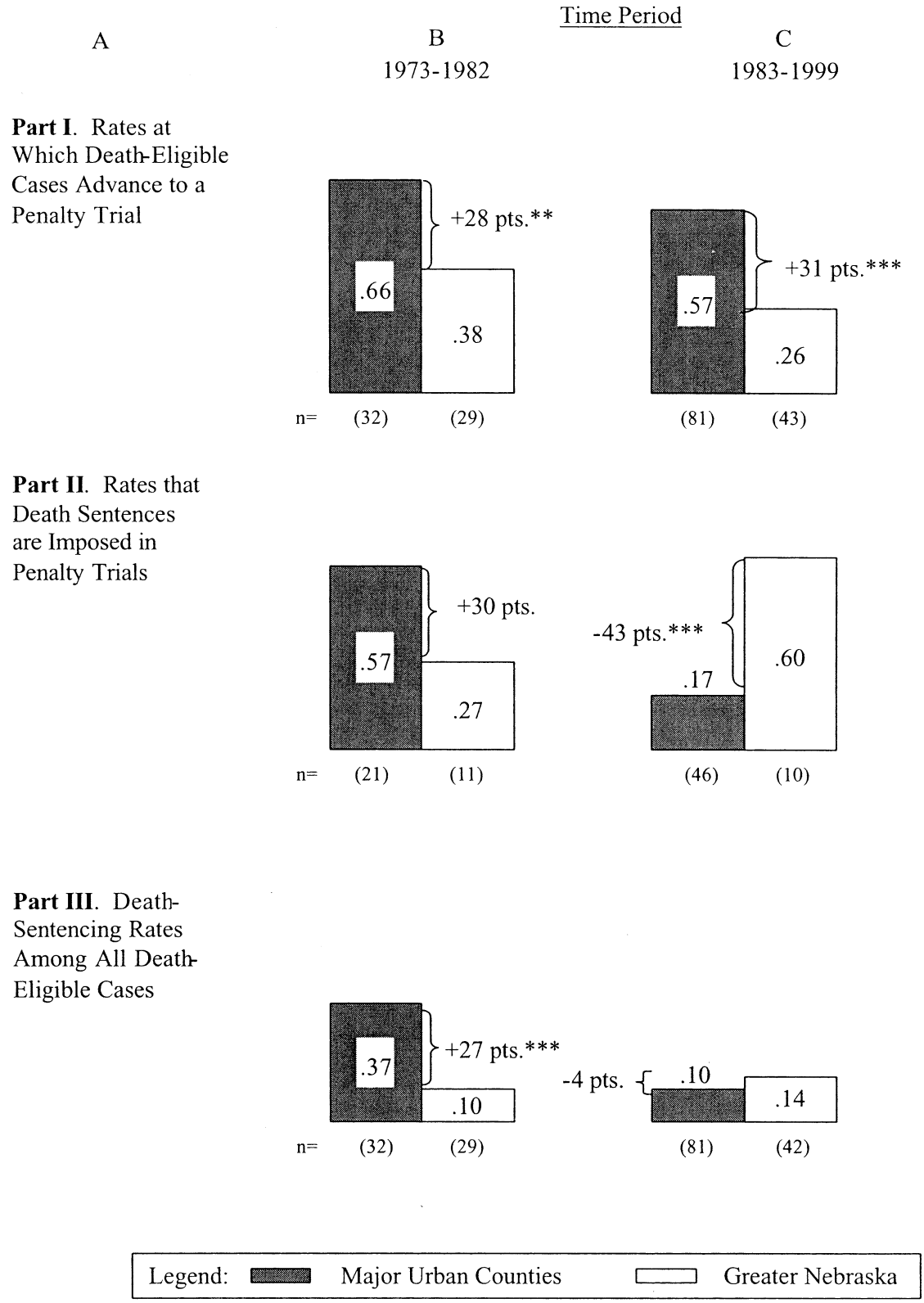


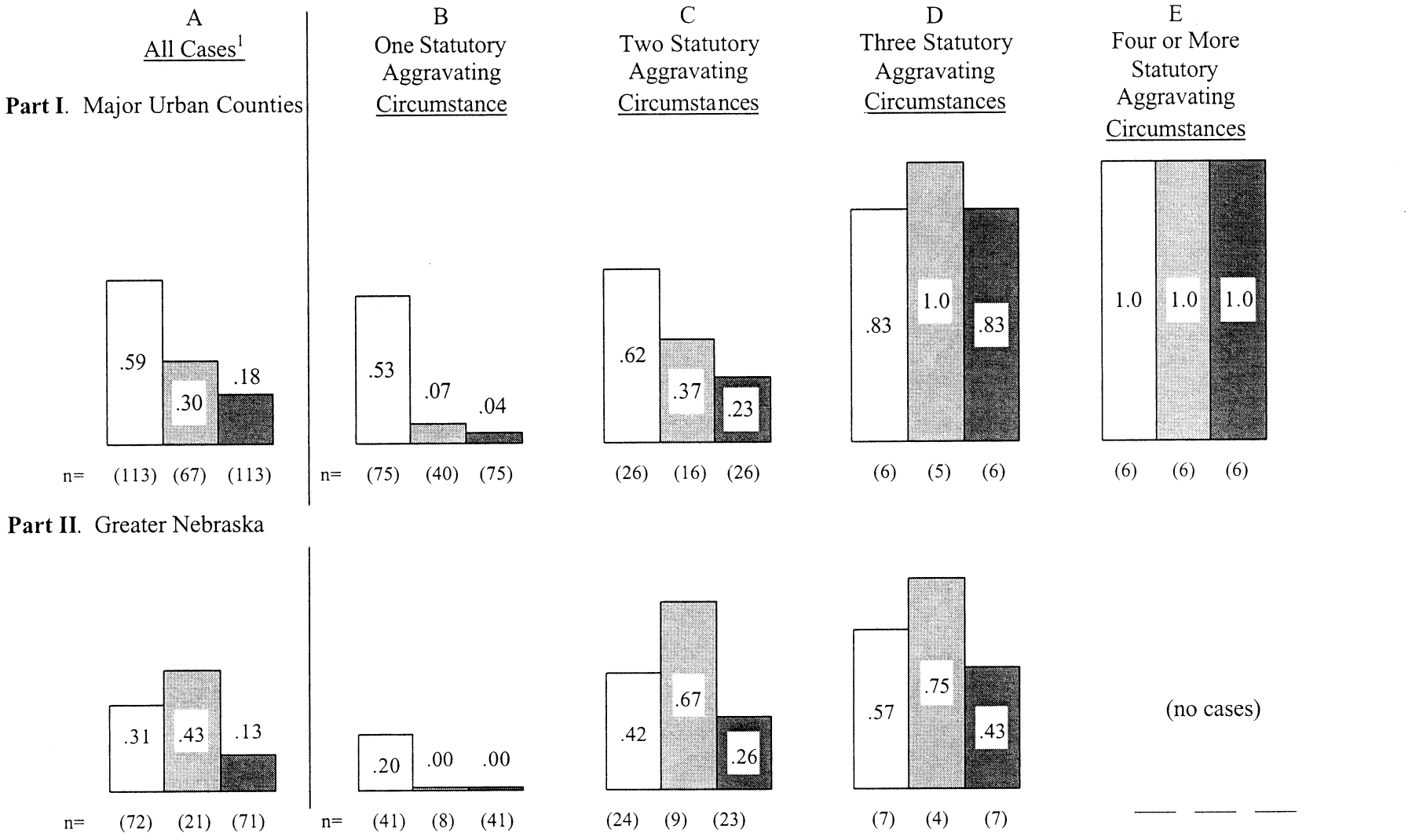
FIGURE 11
UNADJUSTED GEOGRAPHIC DISPARITIES IN CHARGING AND SENTENCING OUTCOMES: 1982 AND EARLIER V. 1983-1999, NEBRASKA



Levels of statistical significance of disparity: *=.10; **=.05; ***=.01 and beyond

FIGURE 12

CHARGING AND SENTENCING OUTCOMES IN MAJOR URBAN COUNTIES AND GREATER NEBRASKA CONTROLLING FOR THE NUMBER OF STATUTORY AGGRAVATING CIRCUMSTANCES IN THE CASES: NEBRASKA, 1973-1999.

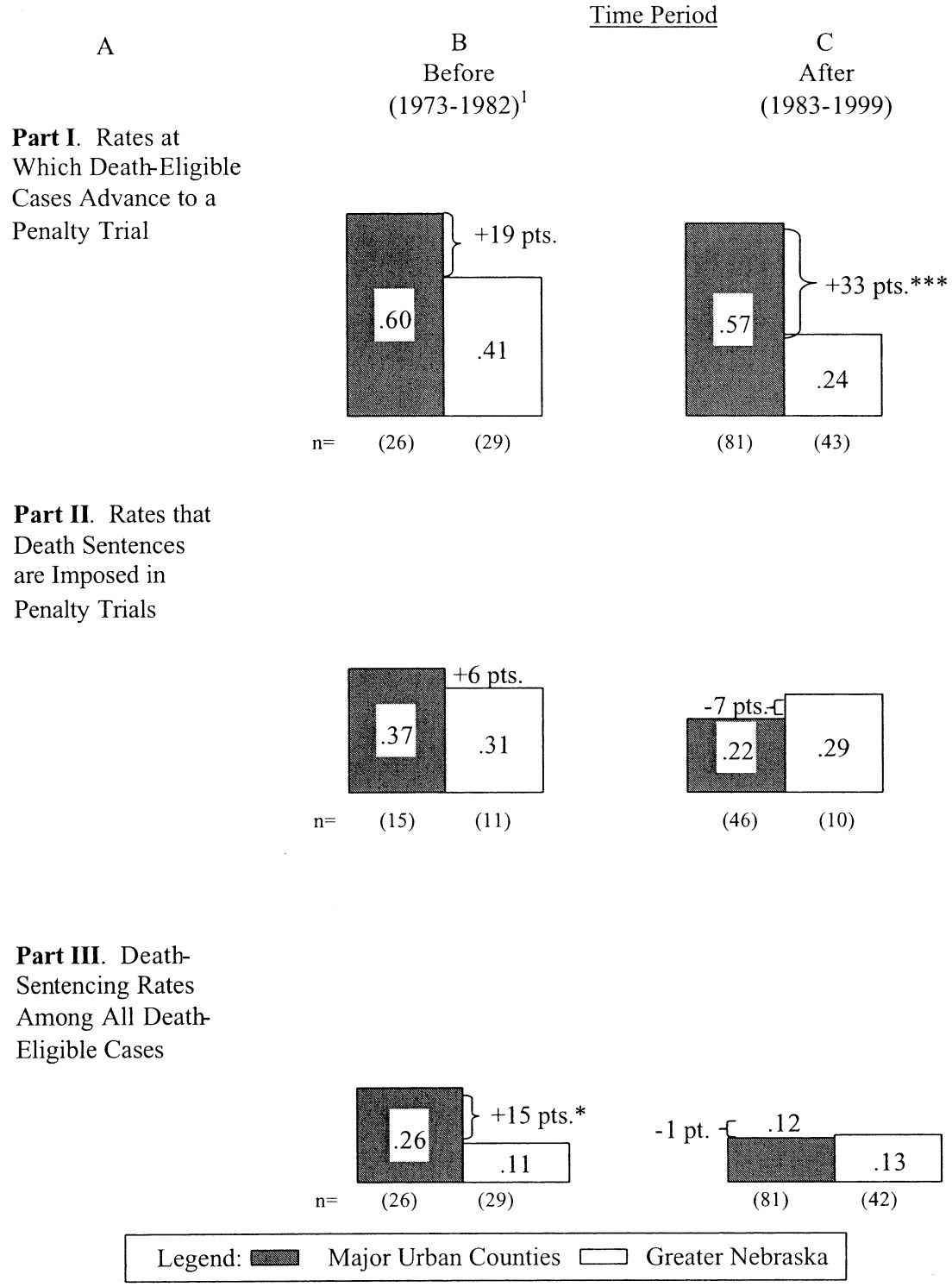


[1] After adjustment for the number of aggravating circumstances in the cases: (a) the death-sentencing rate among all death-eligible cases was .15 in the major urban areas and .10 in greater Nebraska (p=.31); the penalty trial death-sentencing rate was .27 in the major urban counties and .29 in greater Nebraska (p=.67); and the rate at which cases advance to a penalty trial was .58 in the major urban counties and .28 in greater Nebraska (p=.0001).

FIGURE 13

GEOGRAPHIC DISPARITIES IN CHARGING AND SENTENCING OUTCOMES: 1982 AND EARLIER V. 1983-1999, CONTROLLING FOR THE NUMBER OF AGGRAVATING CIRCUMSTANCES IN THE CASES, NEBRASKA

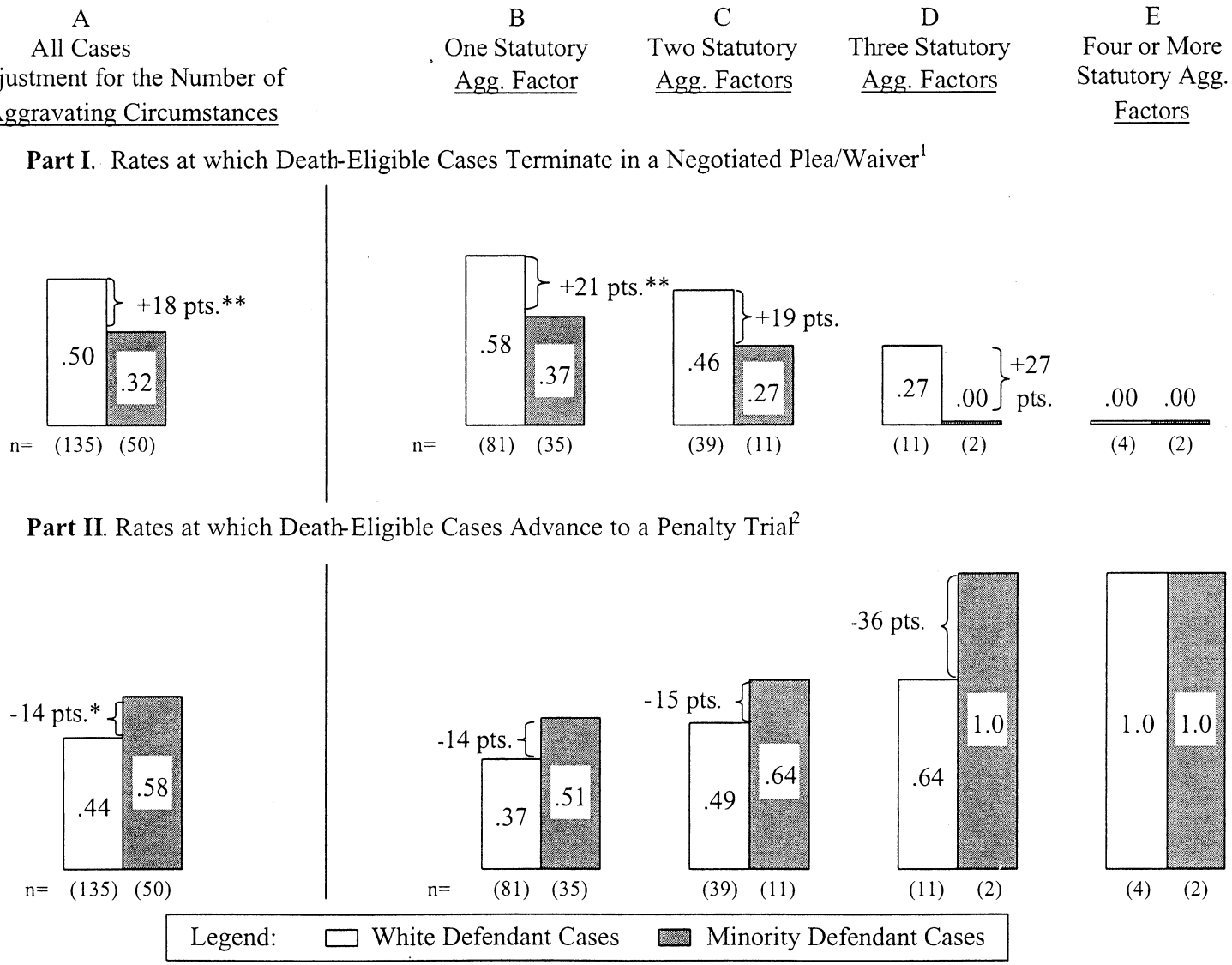
(the bars indicate the penalty trial rates (Part I) and death-sentencing rates (Parts II & III) after adjustment for the number of statutory aggravating circumstances in the cases)



[1] The '82 and earlier cases reported below do not include 6 death sentenced cases from the major urban centers because those cases involved 4 or more aggravating circumstances and there were no cases with more than 3 aggravators in greater Nebraska. Levels of statistical significance of disparity: *=.10; **=.05; and ***=.01

FIGURE 14

STATEWIDE WHITE DEFENDANT DISPARITIES IN THE RATES AT WHICH DEATH-ELIGIBLE CASES (A) TERMINATE IN A NEGOTIATED PLEA/WAIVER AND (B) ADVANCE TO A PENALTY TRIAL, CONTROLLING FOR THE NUMBER OF AGGRAVATING CIRCUMSTANCES IN THE CASES: NEBRASKA, 1973-1999



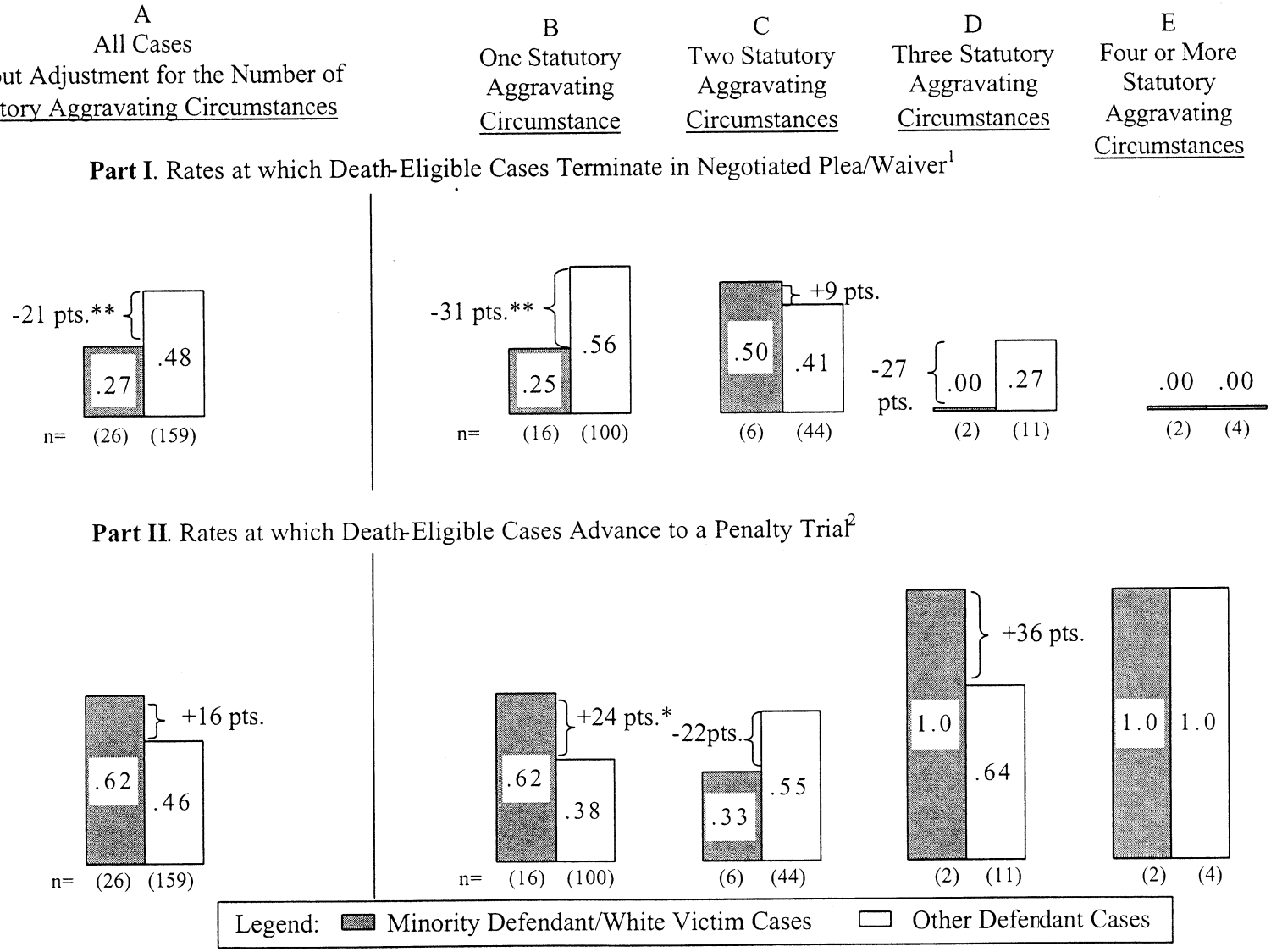
[1] After adjustment for the number of statutory aggravating circumstances, the overall white defendant disparity was +19 percentage points (.51 - .32), significant at the .01 level.

[2] After adjustment for the number of statutory aggravating circumstances, the overall white defendant disparity was -15 percentage points (.44 - .59), significant at the .06 level.

Level of Significance or Disparity: * = .10; ** = .05.

FIGURE 15

STATEWIDE MINORITY DEFENDANT/WHITE VICTIM DISPARITIES IN THE RATES AT WHICH DEATH-ELIGIBLE CASES (A) TERMINATE IN A NEGOTIATED PLEA/WAIVER AND (B) ADVANCE TO A PENALTY TRIAL, CONTROLLING FOR THE NUMBER OF STATUTORY AGGRAVATING CIRCUMSTANCES IN THE CASES: NEBRASKA, 1973-1999



[1] The overall average minority defendant/white victim disparity controlling for the number of statutory aggravating circumstances is -19 percentage points (.29 - .48), significant at the .06 level.

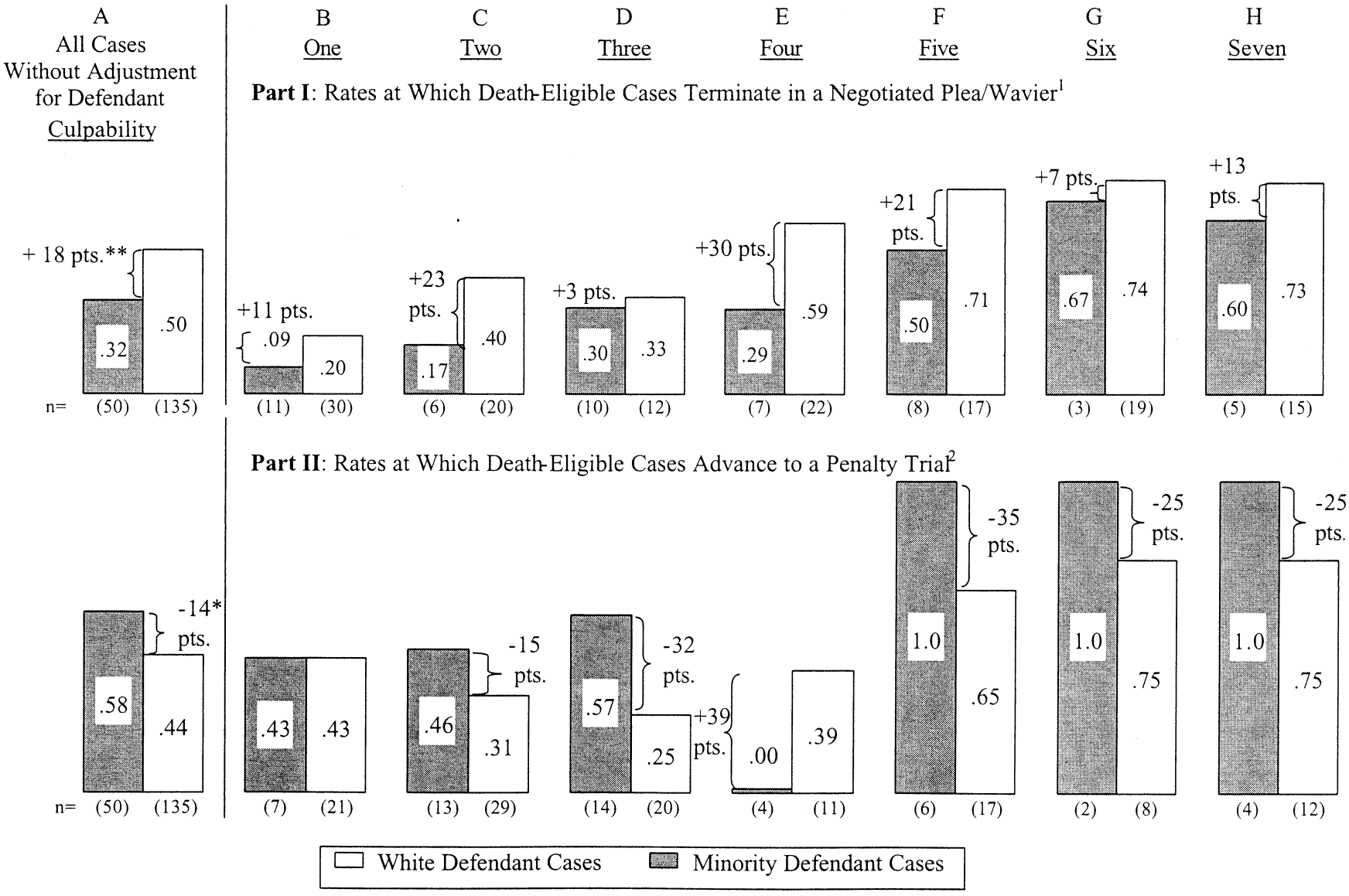
[2] The overall average disparity controlling for the number of statutory aggravating circumstances is +12 percentage points (.58 - .46), significant at the .18 level.

Level of Significance of Disparity: * = .10; ** = .05.

FIGURE 16

STATEWIDE WHITE DEFENDANT DISPARITIES IN THE RATES AT WHICH DEATH-ELIGIBLE CASES (A) TERMINATE IN A NEGOTIATED PLEA/ WAIVER AND (B) ADVANCE TO A PENALTY TRIAL, CONTROLLING FOR DEFENDANT CULPABILITY WITH A REGRESSION BASED SCALE: NEBRASKA, 1973-1999

(the height of each bar indicates the negotiated plea and penalty trial rates for the subgroup of cases at each level of culpability estimated with a regression based scale; the culpability levels are from "one," low to "seven," high)



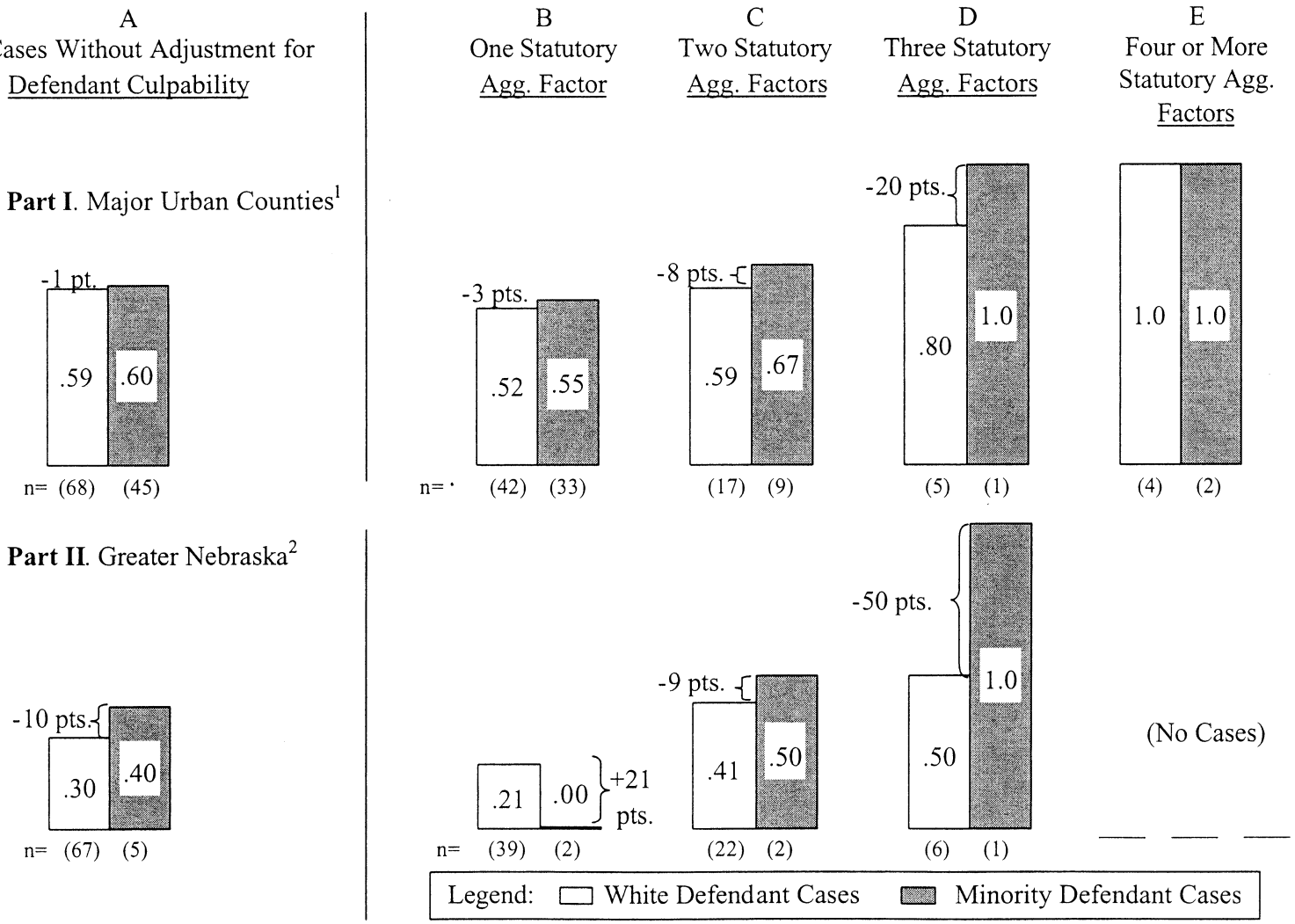
Level of Significance of Disparity: *=. 10; **=.05; ***=.01.

[1]The overall adjusted white defendant disparity is +16 percentage points (.50 - .34), significant at the .04 level.

[2] The overall adjusted white defendant disparity is–10 percentage points (.44 - .54), significant at the .06 level.

FIGURE 17

WHITE DEFENDANT DISPARITIES IN THE RATES AT WHICH DEATH-ELIGIBLE CASES ADVANCE TO A PENALTY TRIAL, CONTROLLING FOR THE PLACE OF DECISION (MAJOR URBAN COUNTIES V. GREATER NEBRASKA) AND THE NUMBER OF AGGRAVATING CIRCUMSTANCES IN THE CASES, NEBRASKA 1973-1999



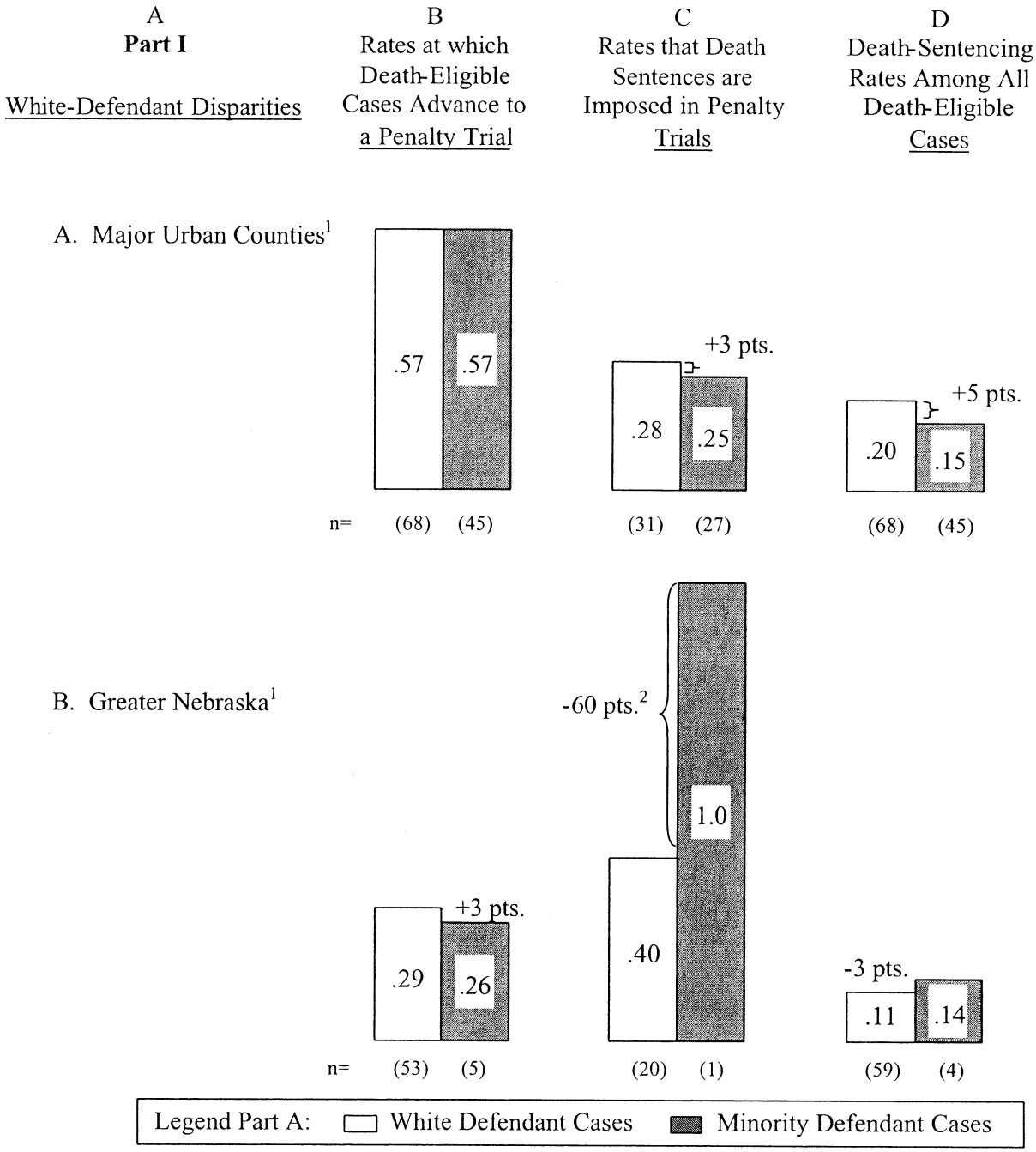
[1] After adjustment for the number of statutory aggravating circumstances, the overall white defendant disparity was -5 percentage points (.57 - .62), significant at the .68 level.

[2] After adjustment for the number of statutory aggravating circumstances, the overall white defendant disparity was +4 percentage points (.30 - .26), significant at the .84 level.

FIGURE 18

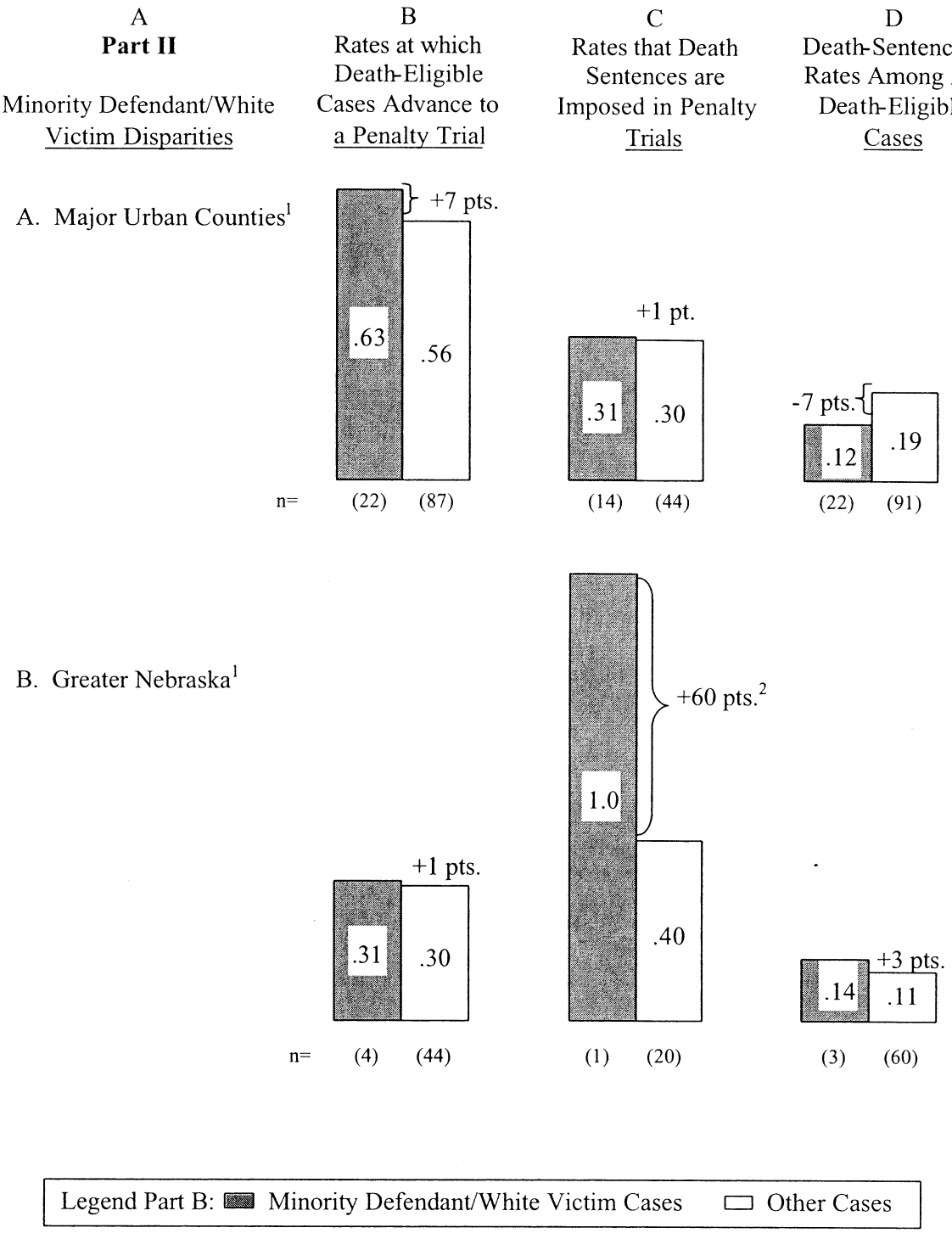
WHITE-DEFENDANT DISPARITIES (PART I, PAGE 1) AND MINORITY DEFENDANT/WHITE VICTIM DISPARITIES (PART II, PAGE 2) IN CHARGING AND SENTENCING DECISIONS IN MAJOR URBAN COUNTIES AND GREATER NEBRASKA, CONTROLLING FOR DEFENDANT CULPABILITY WITH A REGRESSION BASED SCALE

(the bar indicates the penalty trial and death-sentencing rates after adjustment for culpability with a regression based scale)



[1] The sample sizes in Columns B and D may vary because cases are omitted from the adjusted analysis if there is not at least one case in each racial category (e.g., white v. others) for a given culpability level.

[2] Because of the sparseness of the data in the adjusted analyses, the effects reported in Part I, Panel B, Column C and Part II, Panel B, Column C are unadjusted disparities.

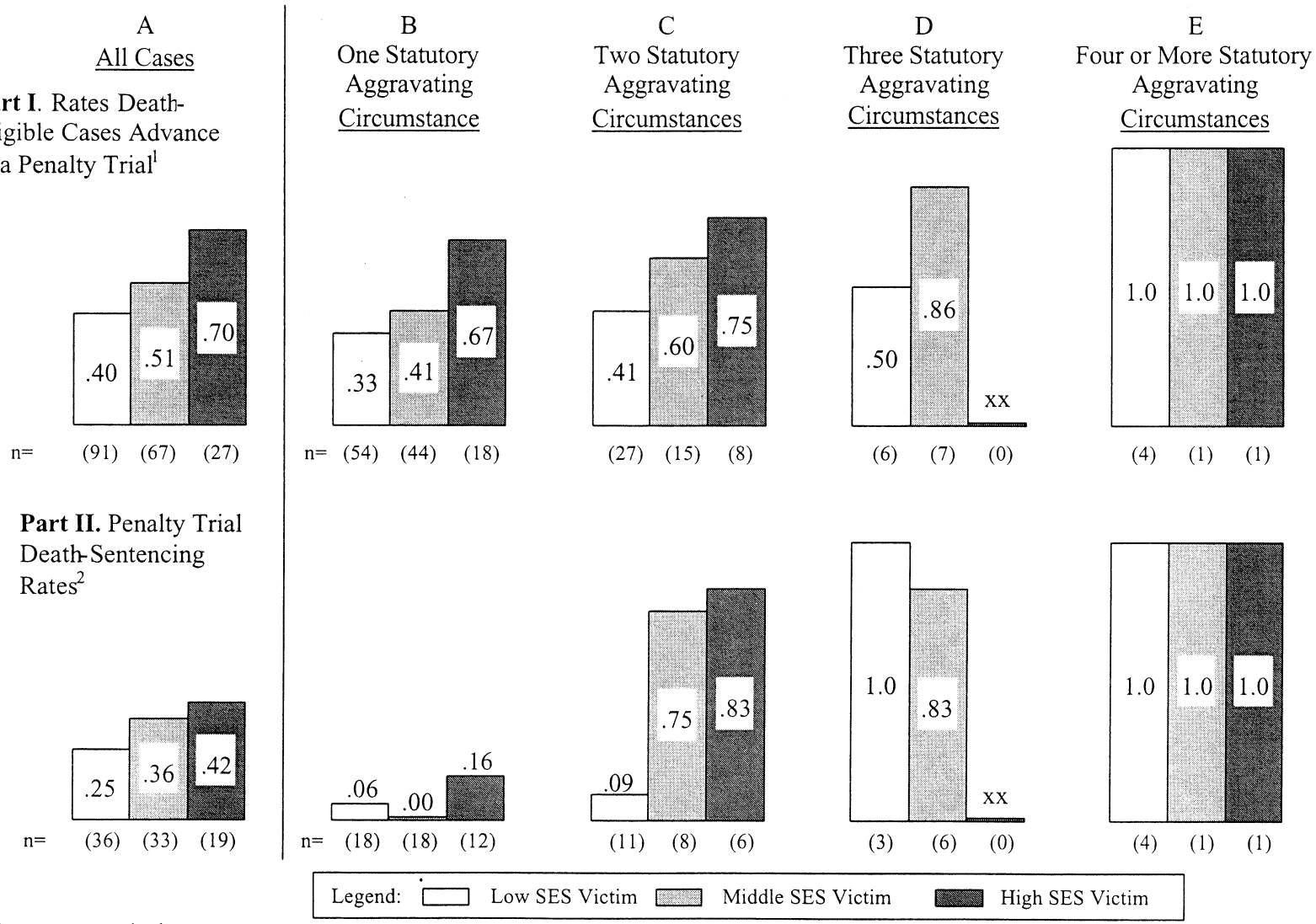


[3] The unadjusted disparity is 21 percentage points .50 (2/4) for the minority defendant/white victim cases and .29 (20/68) for the "other cases." Twenty four "other cases" were omitted fro m the adjusted analysis reported here because of an absence of minority defendant/white victim cases at the same level of culpability.

FIGURE 19

STATEWIDE VICTIM SOCIOECONOMIC (SES) EFFECTS IN CAPITAL CHARGING AND SENTENCING OUTCOMES, ALL CASES (COLUMN A) AND CONTROLLING FOR THE NUMBER OF AGGRAVATING CIRCUMSTANCES IN THE CASES (COLUMN B-E)

(the bars indicate the penalty trial rates (Part I) and death-sentencing rates (Parts II and III) for the three SES subgroups)



xx Indicates no cases in the category.

[1] The overall average victim SES effect after adjustment for the number of aggravating circumstances in the cases is significant at the .002 level.

[2] The overall average victim SES effect after adjustment for the number of aggravating circumstances in the cases is significant at the .003 level.

[3] The overall average victim SES effect after adjustment for the number of aggravating circumstances in the cases is significant at the .001 level. Part III does not include one middle victim SES case shown in Part I in which the sentencing court did not believe it had discretion to impose a death sentence.

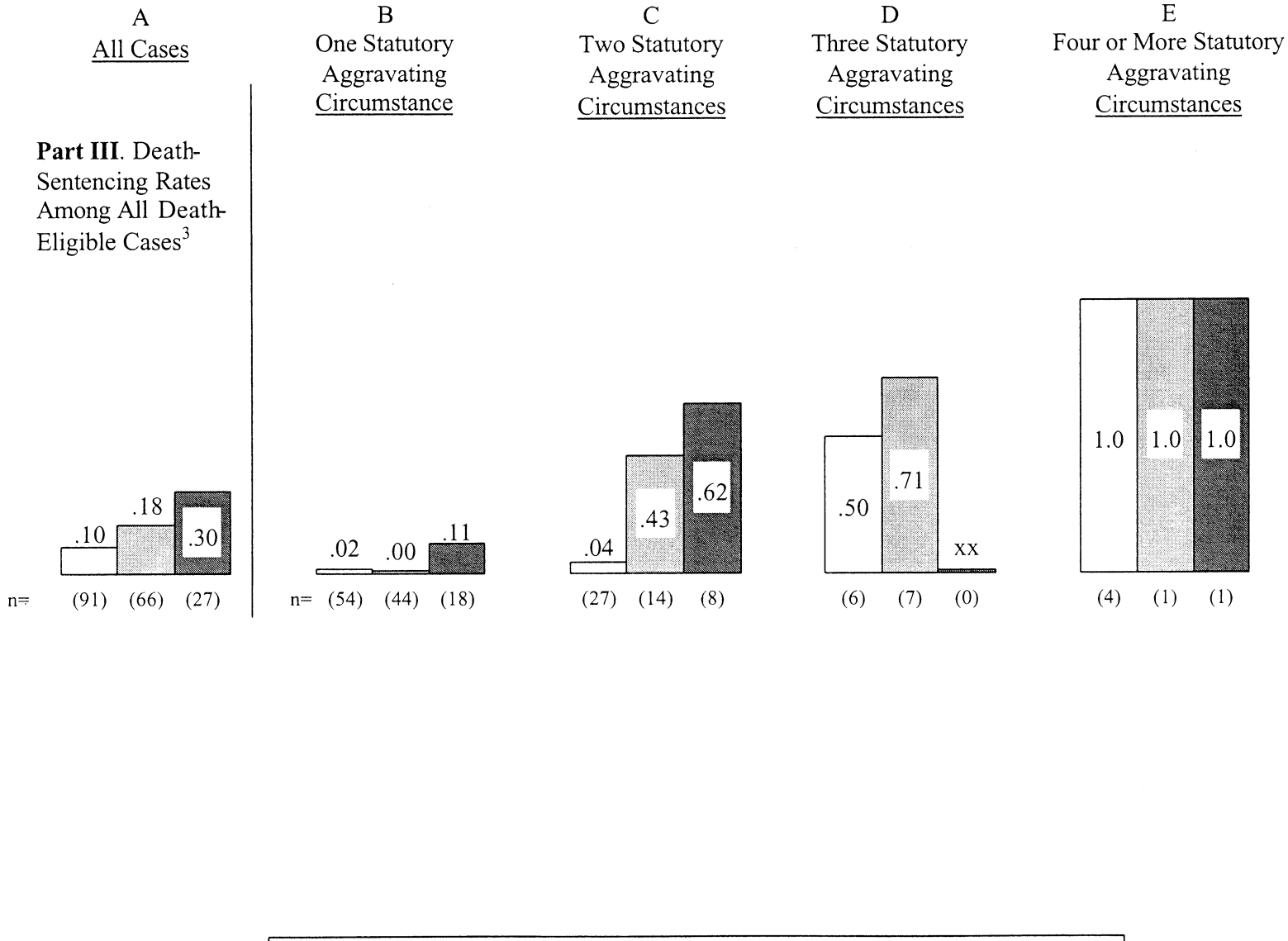
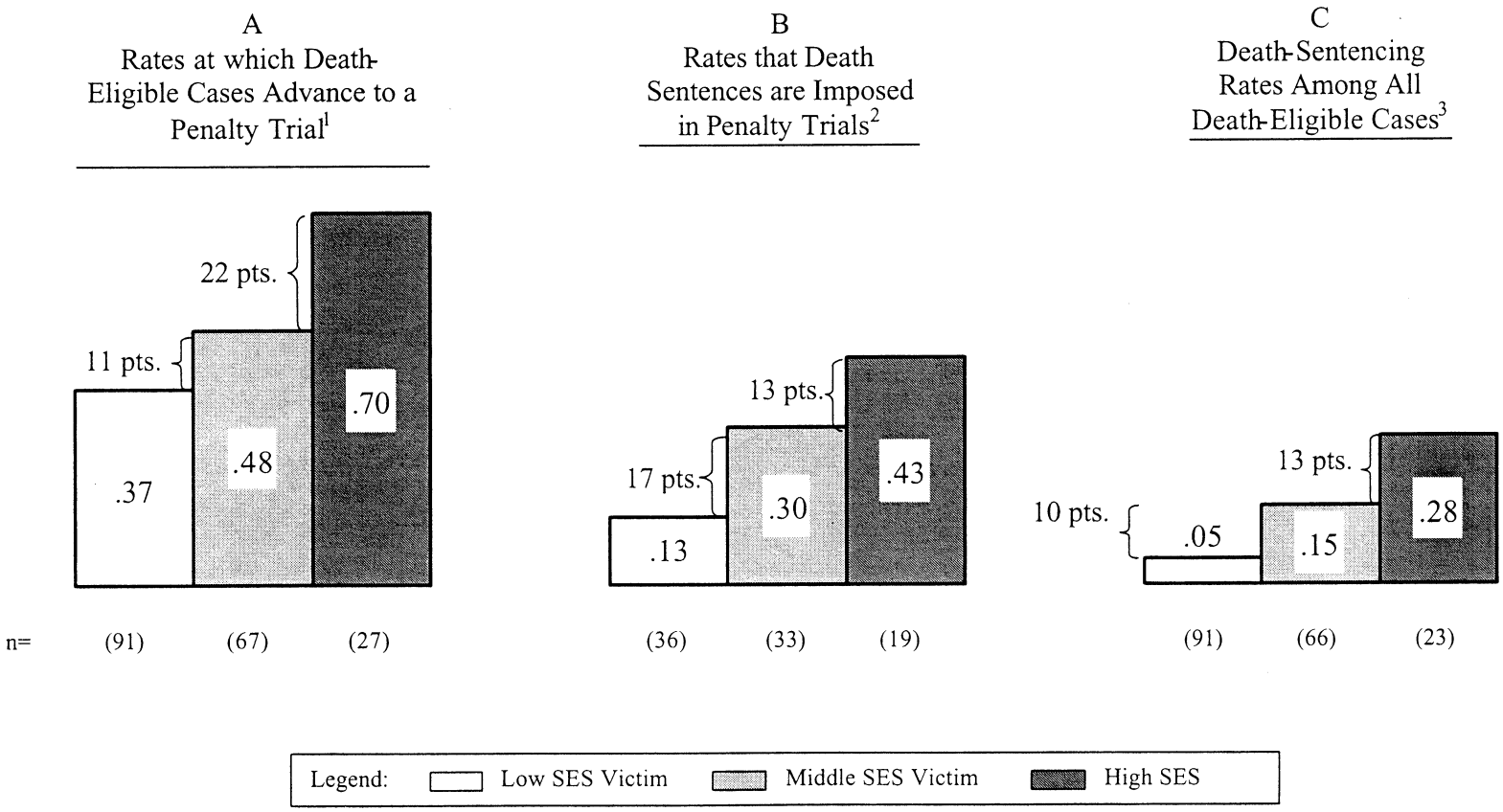

A
All Cases
B
One Statutory Aggravating Circumstance
C
Two Statutory Aggravating Circumstances
D
Three Statutory Aggravating Circumstances
E
Four or More Statutory Aggravating Circumstances
Part III. Death-Sentencing Rates Among All Death-Eligible Cases[3]
.10
.18
.30
.02
.00
.11
.04
.43
.62
.50
.71
xx
1.0
1.0
1.0
n= (91) (66) (27)
n= (54) (44) (18)
(27) (14) (8)
(6) (7) (0)
(4) (1) (1)
Legend: Low SES Victim Middle SES Victim High SES Victim

FIGURE 20

VICTIM SOCIOECONOMIC STATUS (SES) EFFECTS IN CHARGING AND SENTENCING OUTCOMES, CONTROLLING FOR THE NUMBER OF STATUTORY AGGRAVATING CIRCUMSTANCES IN THE CASES

(the bars indicate the death-sentencing rate in each subgroup of cases adjusted for the number of aggravators in the cases)



[1] The victim SES effects are significant at the .002 level after adjustment for defendant culpability.

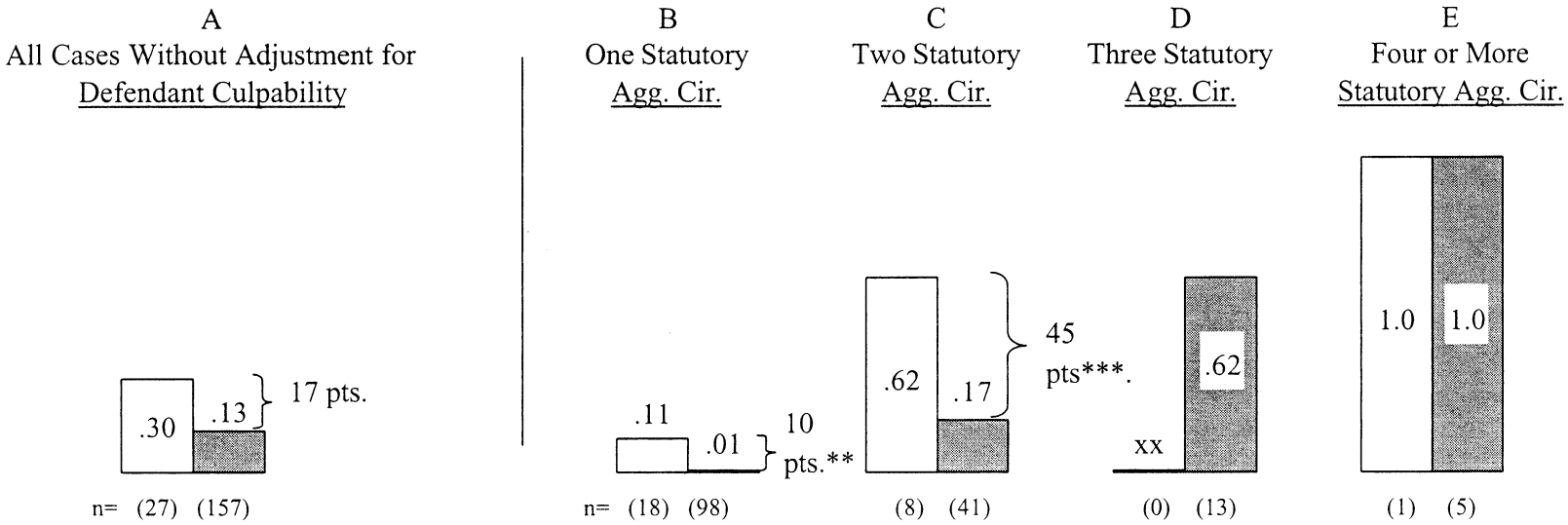
[2] The victim SES effects are significant at the .01 level after adjustment for defendant culpability.

[3] The victim SES effects are significant at the .001 level after adjustment for defendant culpability.

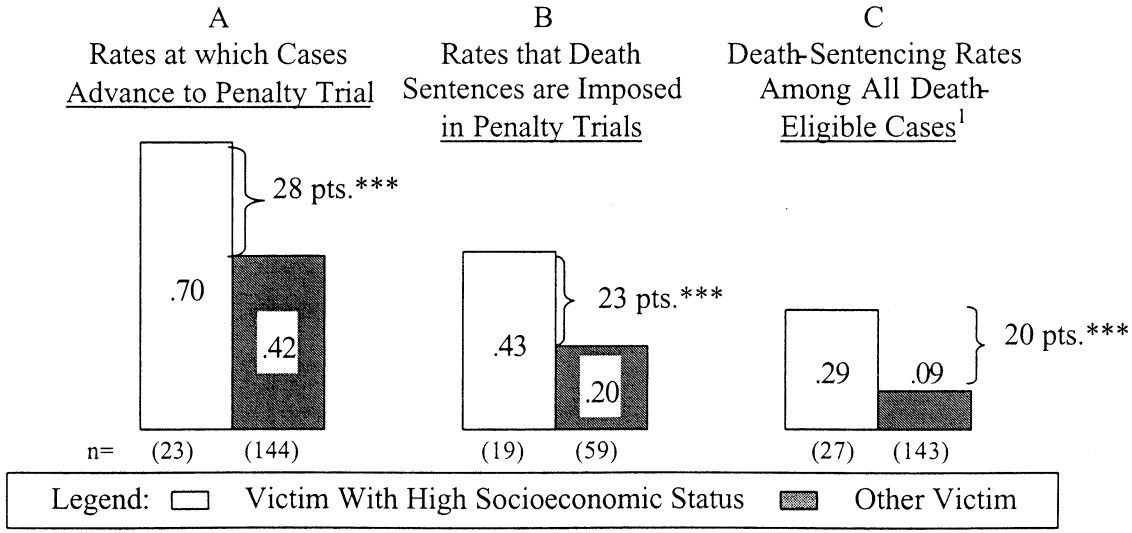
FIGURE 21

STATEWIDE HIGH VICTIM SOCIOECONOMIC STATUS (SES) DISPARITIES IN CHARGING AND SENTENCING OUTCOMES, CONTROLLING FOR THE NUMBER OF STATUTORY AGGRAVATING CIRCUMSTANCES IN THE CASES: NEBRASKA, 1973-1999

Part I. High Victim SES Effects in Death-Sentencing Rates Among All Death-Eligible Cases, Controlling for the Number of Statutory Aggravating Circumstances (Col. B-E)



Part II. High Victim Disparities in Charging and Sentencing Outcome Adjusted for the Number of Aggravating Circumstances in the Cases



[1] The 14 case difference in the "other victim" category in Part **A,** Column **A** and Part II, Column C is explained by the absence of both high SES cases and other victim cases in the three aggravator category (13 cases) and the six aggravator category (1 case).

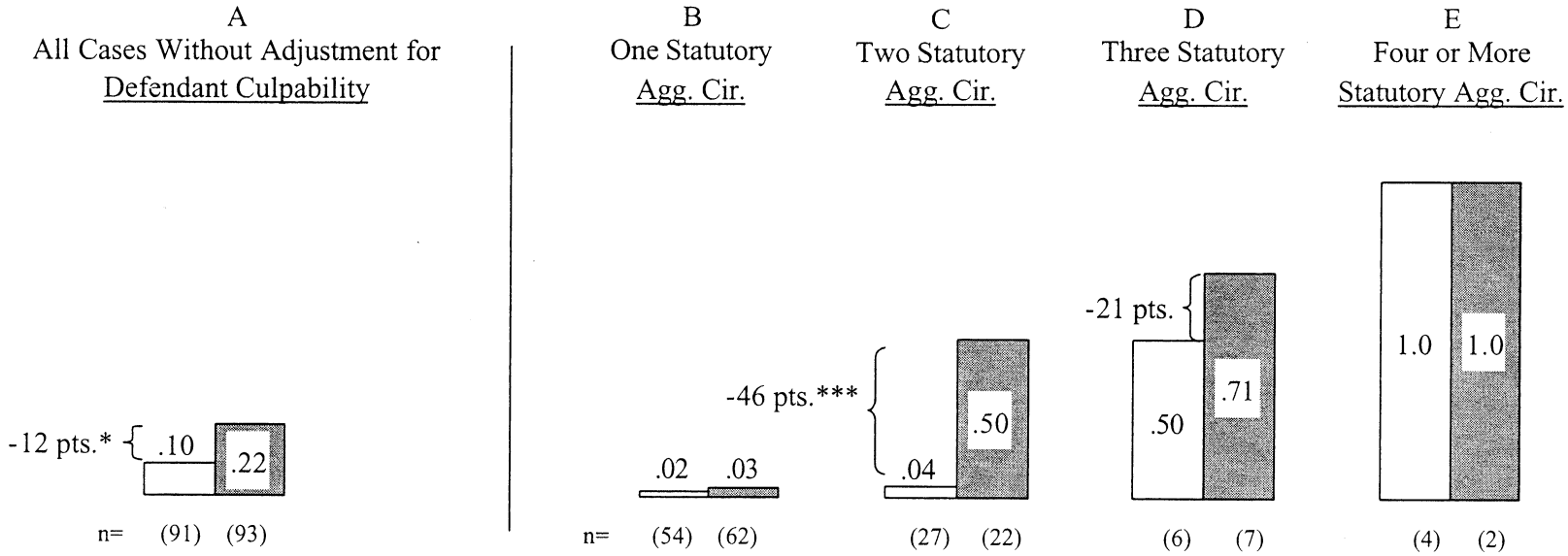
*=significant at the .10 level; **=significant at the .05 level; ***=significant at the .01 level; ****=significant at the .001 level.

xx Indicates no cases in the category.

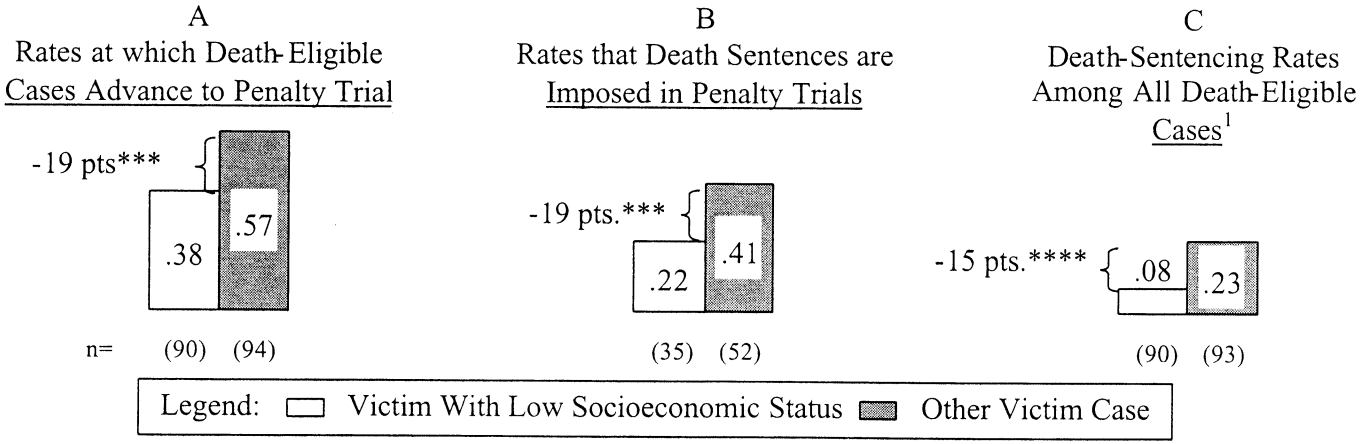
FIGURE 22

STATEWIDE LOW VICTIM SOCIOECONOMIC STATUS (SES) DISPARITIES IN CHARGING AND SENTENCING OUTCOMES, CONTROLLING FOR THE NUMBER OF STATUTORY AGGRAVATING CIRCUMSTANCES IN THE CASES: NEBRASKA, 1973-1999

Part I. Low Victim SES Disparities in Death-Sentencing Rates Among All Death-Eligible Cases[1]



Part II. Overall Low Victim SES Disparities in Charging and Sentencing Outcomes After Adjustment for the Number of Aggravators in the Cases[2]



[1] The one case difference between the number of low victim SES cases in Part I, Column A and in Part II, Column C is explained by the fact that there is a single low victim SES case with six aggravators for which there is no comparison case in the "Other Victim Case" category.

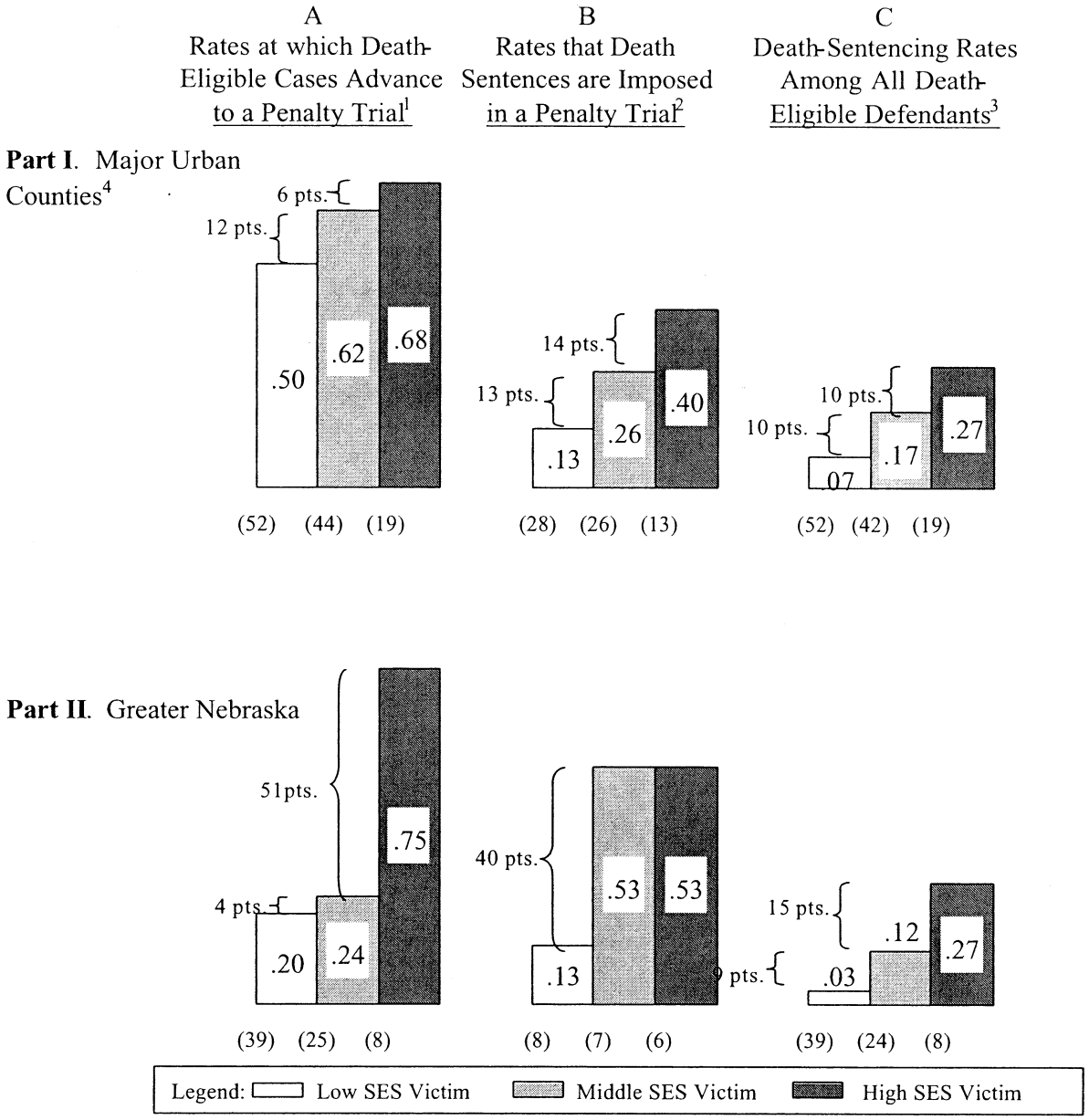
[2] The overall low victim SES disparity in the death-sentencing rate among all death-eligible defendants is –15 percentage points (.08 - .23), significant at the .002 level.

*= significant at the .10 level; **=significant at the .05 level; ***=significant at the .01 level; ****=significant at the .001 level.

FIGURE 23

VICTIM SOCIOECONOMIC STATUS (SES) EFFECTS IN CHARGING AND SENTENCING OUTCOMES IN MAJOR URBAN COUNTIES AND GREATER NEBRASKA, CONTROLLING FOR THE NUMBER OF STATUTORY AGGRAVATING CIRCUMSTANCES IN THE CASES

(the bars indicate penalty trial rates (Col. A) and death-sentencing rates (Col. B &C))



[1] The victim SES effects in Part I for this outcome are not significant (p=.15), while the effects in Part II are significant at the .01 level.

[2] The victim SES effects in Part I for this outcome are significant at the .01 level and the effects in Part II are significant at the .08 level.

[3] The victim SES effects in Parts I and II for this outcome are significant at the .01 level.

[4] In Lancaster County, there are no statically significant victim SES effects in either charging or sentencing outcomes. In Douglas and Sarpy Counties, there are significant victim SES effects in the rates that cases advance to a penalty trial (low .50; medium .76; high .80) (p=.02) and in penalty trial death sentencing rates (low .00; medium .20; high .37) (p=.01). In death sentencing among all death-eligible cases in Douglas and Sarpy Counties, the victim SES effects are significant at the .001 level (low .00; medium .18; high .31).

FIGURE 24

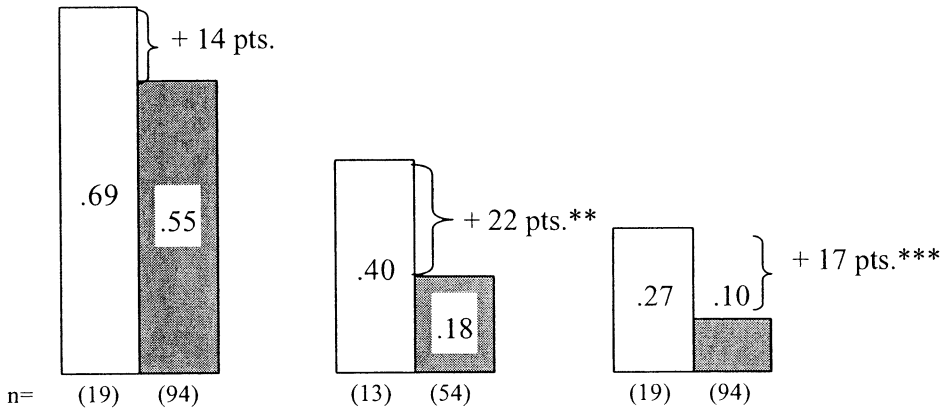
HIGH (PART I) AND LOW (PART II) VICTIM SOCIOECONOMIC STATUS (SES) DISPARITIES IN CHARGING AND SENTENCING OUTCOMES IN MAJOR URBAN COUNTIES AND GREATER NEBRASKA ADJUSTED FOR THE NUMBER OF STATUTORY AGGRAVATING CIRCUMSTANCES IN THE CASES: 1973-1999

(the bars indicate the penalty trial (Column B) and death-sentencing rates (Column C & D) after adjustment for the number of statutory aggravating circumstances in the cases)[1]

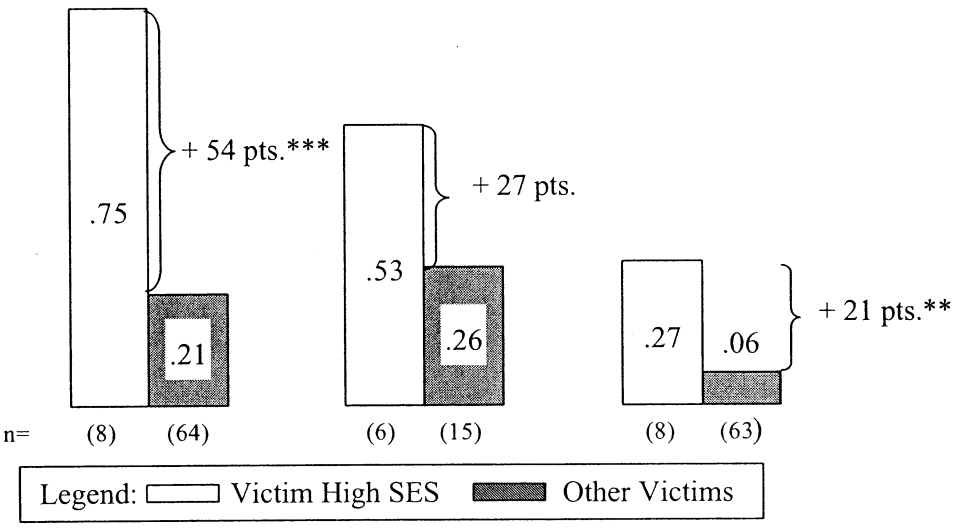
Part I.

A	B	C	D
High Victim SES Effects	Rates at Which Cases Advance to a Penalty Trial	Rates that Death Sentences are Imposed in Penalty Trials	Death-Sentencing Rates Among All Death-Eligible Cases

A. Major Urban Counties[1]



B. Greater Nebraska[2]



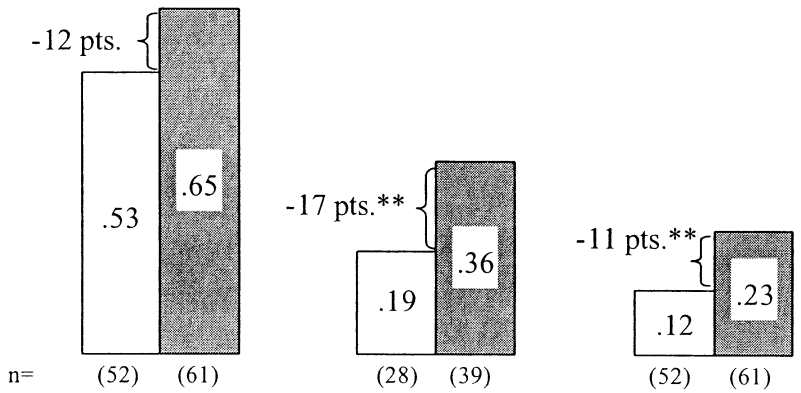
[1] The source of the high victim SES disparities shown in this panel are Douglas and Sarpy Counties where there is a 20 point disparity (.80 v .60) (p = .18) in the adjusted rates that cases advance to a penalty trial; a 26 point disparity (.37 v .11) (p = .02) in penalty trial death-sentencing rates; and a 25 point disparity (.31 v .06) (p = .01) in the rates death sentences are imposed among all death-eligible cases. In Lancaster County, the charging and sentencing rates are *lower* in the high victim SES cases than in the other cases.

[2] The discrepancies in case counts between Part II, Columns A and C reflect the fact that in one case the sentencing court believed it had no discretion to impose a death sentence under the law. Accordingly, that case is omitted from Columns C and D.

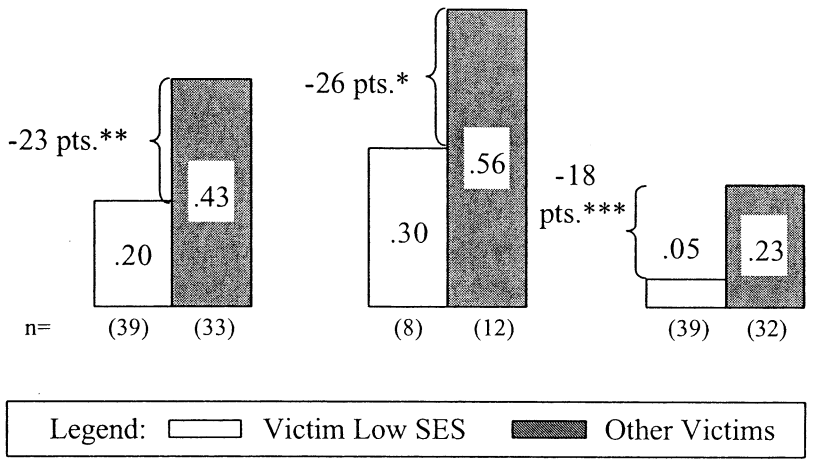
*=significant at .10 level; **=significant at .05 level; ***=significant at the .01 level; ****=significant at the .0001 level.

Part II.	A Low Victim SES Effects	B Rates at Which Cases Advance to a Penalty Trial	C Rates that Death Sentences are Imposed in Penalty Trials	D Death-Sentencing Rates Among All Death-Eligible Cases

A. Major Urban Counties[3]



B. Greater Nebraska[4]



[3] Douglas and Sarpy Counties are the source of the low victim SES adjusted disparities shown in this panel. For those two counties, the overall disparity in the adjusted rates at which cases advance to penalty trial is –26 points (.52 v .78), (p = .02); the penalty trial death sentencing disparity is –25 points (.06 v 31) (p = .02); the overall adjusted disparity in death sentences imposed among all death-eligible cases is –22 points (.04 - .26) (p = .001). In Lancaster County, the adjusted charging and sentencing rates are *higher* in the cases with low SES victims.

[4] The discrepancies in case counts between Part II, Columns A and D reflect the fact that in one case the sentencing court believed it had no discretion to impose a death sentence under the law. Accordingly, this case is omitted from Columns C and D.

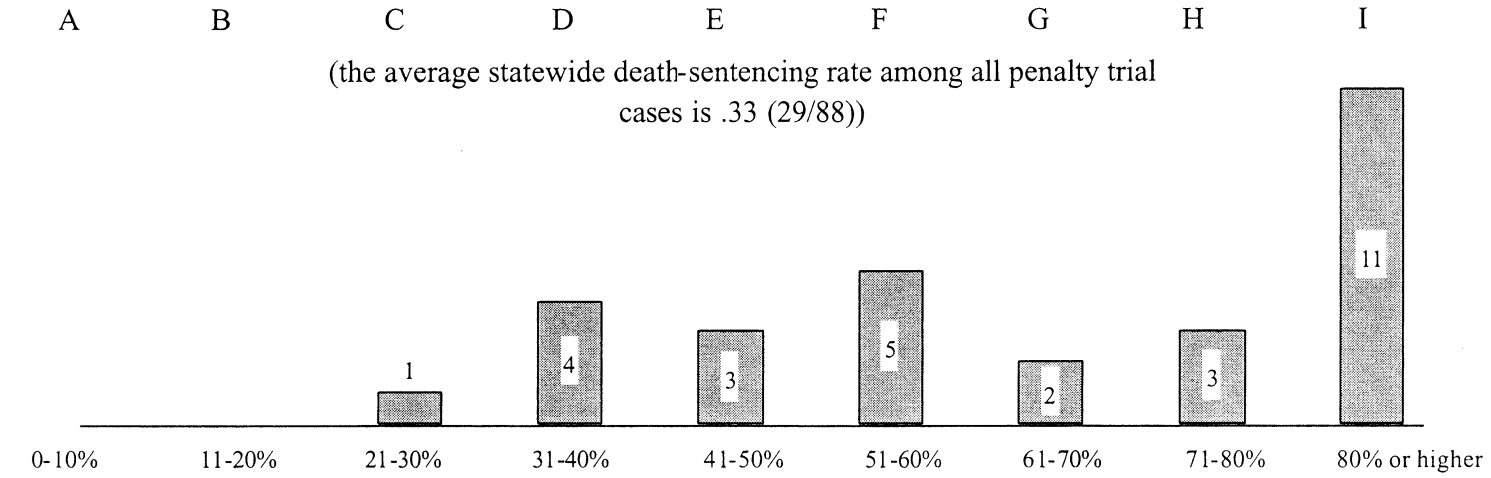
*=significant at .10 level; **=significant at .05 level; ***=significant at the .01 level; ****=significant at the .001 level.

FIGURE 25

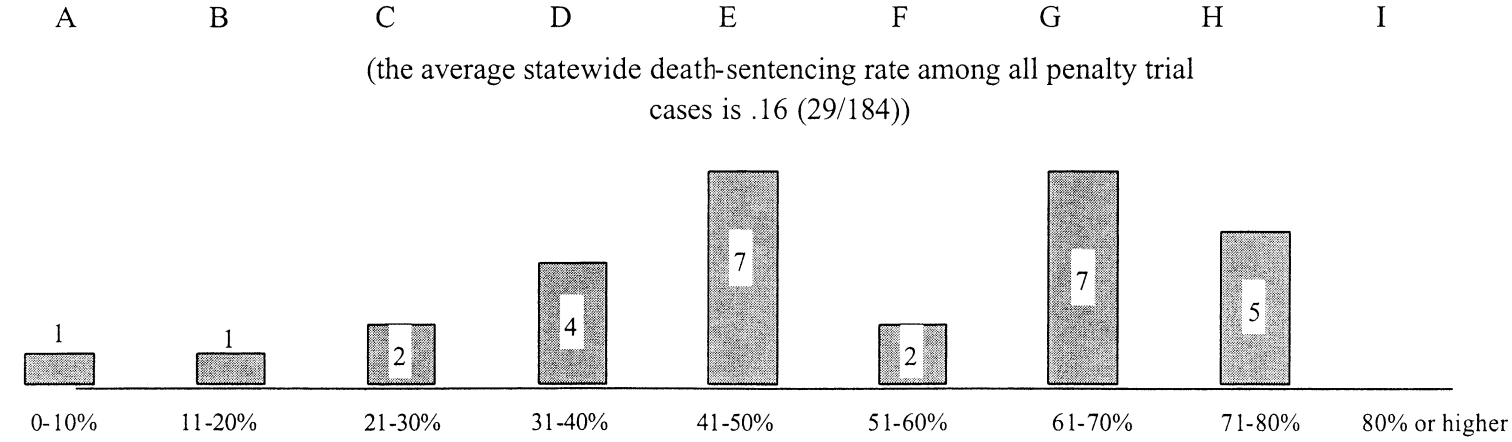
EVIDENCE OF INCONSISTENCY AND COMPARATIVE EXCESSIVENESS IN NEBRASKA DEATH SENTENCED CASES, 1973-1999: A CLASSIFICATION OF DEATH SENTENCED OFFENDERS ACCORDING TO THE DEATH-SENTENCING RATE AMONG CASES WITH COMPARABLE LEVELS OF CULPABILITY ("NEAR NEIGHBORS"), MEASURED WITH AN AVERAGE OF FOUR DIFFERENT MEASURES OF DEFENDANT CULPABILITY[1]

(the bars indicate the number of death sentenced offenders with the death-sentencing rates among near neighbors that is indicated at the foot of each bar).[2]

Part I. Average Death-Sentencing Rates Among Near Neighbors Whose Cases Advanced to a Penalty Trial



Part II. Average Death-Sentencing Rates Among Near Neighbors Identified Among All Death-Eligible Offenders



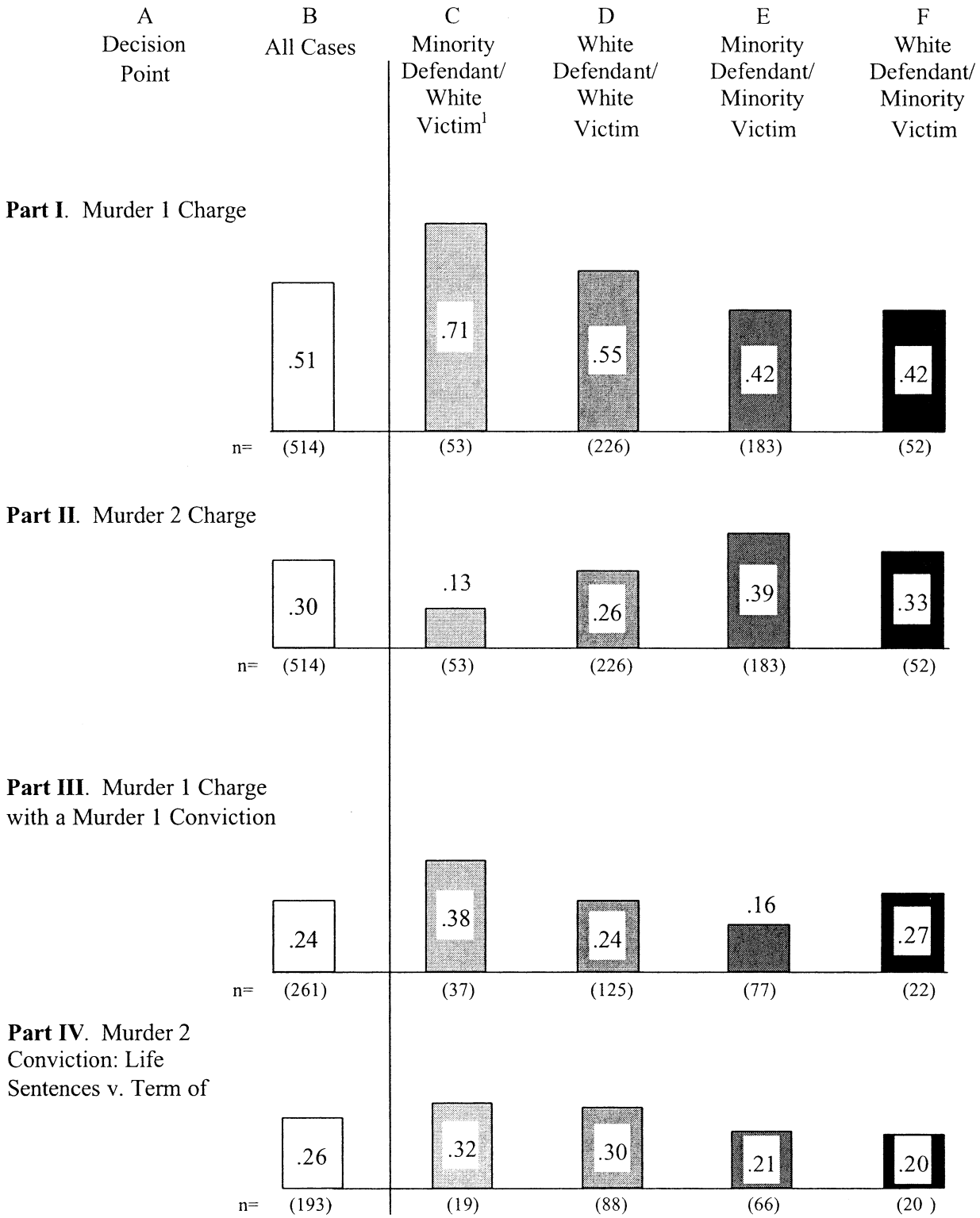
[1] The measures of culpability are the number of aggravating circumstances, the number of aggravating and mitigating circumstances, the salient factors of the case measure, and regression based scales measures. See supra Section IV.A.3 for a description of the measures. Detail on the death-sentencing rates among each death sentenced offender's near neighbors is presented in Appendix B.

[2] For example, Part I, Column F indicates that for 5 death sentenced offenders our data indicate that the death-sentencing rate among near neighbors was between 51% and 60%.

FIGURE 26

CHARGING, CONVICTION, AND SENTENCING OUTCOMES AMONG NON-CAPITAL CASES, CONTROLLING FOR THE DEFENDANT/VICTIM RACIAL COMBINATION

(the bars represent the selection rates (charge, conviction, or sentence) for each subgroup of cases, e.g. Row 1, Col. D indicates that of the 226 white defendant/white victim cases, 55% were charged with M1)



[1] 30 cases with race of the victim unknown are omitted from the chart.

Appendices
Table of Contents

APPENDIX A

The Salient Factors of the Case Measure of Defendant Culpability[1]

[1] This is found on pages 54-55 of the Data Collection Instrument (D.C.I.).

SALIENT FACTORS

Measure No. 2

HOMICIDE CASE TYPOLOGY BASED ON STATUTORY AGGRAVATING AND MITIGATING CIRCUMSTANCES:

VN606_____|_____
Letter

NO.

Coder Note: Enter one choice only. If more than one category applies, code the most aggravated category, with category A being the most aggravated and category J being the least aggravated category.

A low mitigation case refers to one with two or fewer statutory mitigating circumstances (a) found (or recognized with respect to the catchall factor) in penalty trial cases or (b) present in non-penalty trial cases. However, catchall factors account for only one mitigator regardless of their number. A high mitigation case refers to one with three or more mitigating circumstances found (or recognized with respect to the catchall factor in penalty trials) or present in non penalty trial cases (with catchall factors counting as only one mitigator regardless of their number).

A. **PRIOR HOMICIDE -** Murder by a defendant with a prior murder or manslaughter conviction - 1(a):

1. Aggravated[1] Low Mitigation
2. Aggravated[1] High Mitigation
3. Other Low Mitigation
4. Other High Mitigation

B. **POLICE VICTIM -** Victim was a law officer killed in the line of duty and defendant knew or should reasonable have known that the victim was a law officer - 1**(i)**:

1. Low Mitigation
2. High Mitigation

C. **JAILER VICTIM -** The victim was a law enforcement officer or public servant having the custody of the defendant or another - 1(g):

1. Low Mitigation
2. High Mitigation

D. **MULTIPLE VICTIMS -** Multiple-victim murder - 1(e):

1. Aggravated[2] Low Mitigation
2. Aggravated[2] High Mitigation

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[1] Aggravated refers to the presence of an additional statutory aggravating circumstance.

[2] An aggravated multiple victim case involves a contemporaneous felony (e.g., robbery, kidnapping) other than a drug crime, or an additional statutory aggravating circumstance.

3. Other Low Mitigation

4. Other High Mitigation

E. **VIOLENT RECORD -** Murder by a defendant with a substantial history of serious assaultive or terrorizing criminal activitv or with a prior conviction of a crime involving the use of a threat of violence to the person. - 1(a):

1. Aggravated[1] Low Mitigation
2. Aggravated[1] High Mitigation
3. Other Low Mitigation
4. Other High Litigation

F. **CONTRACT KILLING -** Murder for hire by a principal or agent (shooter). - 1(c):

1. Aggravated[1] Low Mitigation
2. Aggravated[1] High Mitigation
3. Other Low Mitigation
4. Other High Mitigation

G. **ESCAPE DETECTION -** A murder committed in which the defendant's motive was an apparent effort to conceal either the commission of a crime or the identity of the perpetrator of a crime - 1(b)

1. Aggravated[1] Low Mitigation
2. Aggravated[1] High Mitigation
3. Other Low Mitigation
4. Other High Mitigation

H. **HAC OR DEPRAVITY -** Murder was especially heinous, atrocious, and cruel (HAC) or defendant manifested exceptional depravity by ordinary standards of morality and intelligence - 1(d):

1. Low Mitigation
2. High Mitigation

I. **GRAVE RISK -** A murder in which the defendant knowingly created a grave risk of death to at least two or more persons - 1(f):

1. Low Mitigation
2. High Mitigation

J. **HINDER GOVERNMENT FUNCTION -** The defendant committed the crime to disrupt or hinder the lawful exercise of any governmental function or the enforcement of the laws - 1(h):

1. Low Mitigation
2. High Mitigation

Appendix B

Evidence Of Comparative Excessiveness in
Nebraska Death Sentencing Decisions
1973-1999

APPENDIX B

EVIDENCE OF COMPARATIVE EXCESSIVENESS IN NEBRASKA DEATH SENTENCING DECISIONS (1973-1999): DEATH SENTENCING RATES AMONG COMPARABLE CASES IN (A) PENALTY TRIALS AND (B) AMONG ALL DEATH ELIGIBLE CASES

A	B	C		D	E		F	G		H	I	J	K		L	M
	Number of Aggravating Circumstances			Number of Aggravating & Mitigating Circumstances			Salient Factors Measure			Penalty Based Scales Based on:					Average Death Sentencing Rate Among Penalty Trial Near Neighbors	Average Death Sentencing Rate Among Near Neighbors From All Death Eligible Cases
										Penalty Trial Sentencing Model		Death Sentence Imposed Among All Death Eligible				
Defendants Name	Case Classification	Death Sentencing Rate in Classification		Case Classification	Death Sentencing Rate in Classification		Case Classification	Death Sentencing Rate in Classification		Case Classification	Death Sentencing Rate in Classification	Case Classification	Death Sentencing Rate in Classification			
		PT Death	Death		PT Death	Death		PT Death	Death		PT Death		PT Death	Death		
1.	2	.48 (12/25)	.24 (12/49)	2,2	.44 (4/9)	.17 (4/24)	FI	1.0 (2/2)	1.0 (2/2)	2	.48 (12/25)	4	.54 (13/24)	.30 (13/44)	.48	.24
2.	3	.89 (8/9)	.62 (8/13)	3,1	.80 (4/5)	.57 (4/7)	EI	.67 (6/9)	.40 (6/15)	3	.93 (14/15)	5	.93 (13/14)	.93 (13/14)	.84	.63
3.	3	.89 (8/9)	.62 (8/12)	3,2	1.0 (3/3)	.60 (3/5)	EI	.67 (6/9)	.40 (6/15)	3	.93 (14/15)	5	.93 (13/14)	.93 (13/14)	.88	.64
4.	2	.48 (12/25)	.24 (12/49)	2,1	.71 (5/7)	.50 (5/10)	GI	.54 (7/13)	.28 (7/25)	2	.48 (12/25)	4	.54 (13/24)	.30 (13/44)	.55	.33
5.	4	1.0 (5/5)	1.0 (5/5)	4,1	1.0 (2/2)	1.0 (2/2)	DI	.60 (6/10)	.43 (6/14)	3	.93 (14/15)	5	.93 (13/14)	.93 (13/14)	.86	.79
6.	2	.48 (12/25)	.24 (12/49)	2,2	.44 (4/9)	.17 (4/24)	FI	1.0 (2/2)	1.0 (2/2)	2	.48 (12/25)	4	.54 (13/24)	.30 (13/44)	.48	.24
7.	4	1.0 (5/5)	1.0 (5/5)	4,2	1.0 (3/3)	1.0 (3/3)	EI	.67 (6/9)	.40 (6/15)	3	.93 (14/15)	5	.93 (13/14)	.93 (13/14)	.91	.83
8.	2	.48 (12/25)	.24 (12/49)	2,2	.44 (4/9)	.17 (4/24)	HI	.40 (2/5)	.12 (2/17)	2	.48 (12/25)	4	.54 (13/24)	.30 (13/44)	.47	.21
9.	2	.48 (12/25)	.24 (12/49)	2,1	.71 (5/7)	.50 (5/10)	DI	.60 (6/10)	.43 (6/14)	2	.48 (12/25)	4	.54 (13/24)	.30 (13/44)	.56	.37
10.	3	.89 (8/9)	.62 (8/13)	3,2	1.0 (3/3)	.60 (3/5)	HI	.40 (2/5)	.12 (2/17)	3	.93 (14/15)	5	.93 (13/14)	.93 (13/14)	.83	.57
11.	3	.89 (8/9)	.62 (8/13)	3,2	1.0 (3/3)	.60 (3/5)	DI	.60 (6/10)	.43 (6/14)	3	.93 (14/15)	4	.54 (13/24)	.30 (13/44)	.79	.49
12.	3	.89 (8/9)	.62 (8/13)	3,1	.80 (4/5)	.57 (4/7)	GI	.54 (7/13)	.28 (7/25)	3	.93 (14/15)	5	.93 (13/14)	.93 (13/14)	.82	.60
13.	3	.89 (8/9)	.62 (8/13)	3,2	1.0 (3/3)	.60 (3/5)	GI	.54 (7/13)	.28 (7/25)	3	.93 (14/15)	5	.93 (13/14)	.93 (13/14)	.86	.61
14.	2	.48 (12/25)	.26 (12/47)	2,1	.71 (5/7)	.50 (5/10)	GI	.54 (7/13)	.28 (7/25)	2	.48 (12/25)	4	.54 (13/24)	.30 (13/44)	.55	.33
15.	2	.48 (12/25)	.26 (12/47)	2,0	.33 (2/6)	.33 (2/6)	GI	.54 (7/13)	.28 (7/25)	2	.48 (12/25)	4	.54 (13/24)	.30 (13/44)	.47	.29
16.	2	.48 (12/25)	.26 (12/47)	2,0	.33 (2/6)	.33 (2/6)	GI	.54 (7/13)	.28 (7/25)	2	.48 (12/25)	4	.54 (13/24)	.30 (13/44)	.47	.29
17.	2	.48 (12/25)	.26 (12/47)	2,1	.71 (5/7)	.50 (5/10)	GI	.54 (7/13)	.28 (7/25)	2	.48 (12/25)	4	.54 (13/24)	.30 (13/44)	.55	.33
18.	4	1.0 (5/5)	1.0 (5/5)	4,1	1.0 (2/2)	1.0 (2/2)	EI	.67 (6/9)	.40 (6/15)	3	.93 (14/15)	5	.93 (13/14)	.93 (13/14)	.88	.78
19.	3	.89 (8/9)	.62 (8/13)	3,1	.80 (4/5)	.57 (4/7)	DI	.60 (6/10)		3	.93 (14/15)	5	.93 (13/14)	.93 (13/14)	.83	.64

20.	4	1.0 (5/5)	1.0 (5/5)	4,2	1.0 (3/3)	1.0 (3/3)	E1	.67 (6/9)	.40 (6/15)	3	.93 (14/15)	5	.93 (13/14)	.93 (13/14)	.91	.83
21.	2	.48 (12/25)	.26 (12/47)	2,2	.44 (4/9)	.17 (4/24)	E1	.67 (6/9)	.40 (6/15)	2	.48 (12/25)	4	.54 (13/24)	.30 (13/44)	.52	.28
22.	2	.48 (12/25)	.26 (12/47)	2,3	.50 (1/2)	.14 (1/7)	G2	.20 (1/5)	.14 (1/7)	2	.48 (12/25)	4	.54 (13/24)	.30 (13/44)	.42	.21
23.	3	.89 (8/9)	.67 (8/12)	3,1	.80 (4/5)	.57 (4/7)	D1	.60 (6/10)	.43 (6/14)	3	.93 (14/15)	5	.93 (13/14)	.93 (13/14)	.83	.65
24.	1	.02 (1/40)	.01 (1/107)	1,1	.07 (1/14)	.09 (3/33)	A3	1.0 (1/1)	.25 (1/4)	1	.03 (1/36)	3	.05 (1/19)	.03 (1/44)	.04	.09
25.	6	1.0 (6/6)	1.0 (6/6)	6,2	1.0 (1/1)	1.0 (1/1)	D2	.25 (1/4)	.20 (1/5)	3	.93 (14/15)	5	.93 (13/14)	.93 (13/14)	.78	.71
26.	2	.48 (12/25)	.26 (12/47)	2,1	.71 (5/7)	.50 (5/10)	A1	.50 (1/2)	.50 (1/2)	2	.48 (12/25)	4	.54 (13/24)	.30 (13/44)	.55	.35
27.	4	1.0 (5/5)	1.0 (5/5)	4,2	1.0 (3/3)	1.0 (3/3)	D1	.60 (6/10)	.43 (6/14)	3	.93 (14/15)	5	.93 (13/14)	.93 (13/14)	.89	.84

APPENDIX C

Procedures for Adjusting Rates Estimated for Charging and Sentencing Outcomes in Different Subgroups of Defendants To Account for Differences in the Distribution Of Defendant Culpability Levels[1]

[1] This Appendix is an excerpt from David C. Baldus et al., The Use of Peremptory Challenges in Capital Murder Trials: a Legal and Empirical Analysis, 3 *University of Pennsylvania J. of Constitutional L.* 3, 162-66 (2001)

V. DIRECT STANDARDIZATION PROCEDURES FOR ADJUSTMENT OF DEATH-SENTENCING RATES IN SUBPOPULATIONS OF CASES TO ACCOUNT FOR DIFFERENCES IN THE DISTRIBUTION OF DEFENDANT CULPABILITY LEVELS

A number of times in this Article we estimated death-sentencing rates for different subgroups of cases and compared the results of the different estimates. For example, as a basis for inferring the impact of the defendant's race on penalty trial sentencing decisions, we compared the death-sentencing rate in black defendant cases with the rate for the non-black defendant cases. As a basis for inferring the impact of the racial composition of juries on death-sentencing rates, we compared the death sentencing rate in cases with more than the median number of black jurors to the rate in cases with fewer than the median number of black jurors. A possible problem with these comparisons is that the difference in death-sentencing rates that we documented may have reflected differences in the culpability levels of the defendants in the two subgroups rather than the impact of the defendant's race or the racial composition of the jury. An extreme form of the problem would exist if the defendants in one group of cases were the most aggravated in the sample while the defendants in the other group of cases were the least aggravated. In practice, disparities in the distributions of defendant culpability levels are never this extreme, but they are often sufficiently different to present a risk of an erroneous inference. To avoid the risks, we needed a procedure to control for the culpability of the defendant in each case.

One method to control for defendant culpability in these situations is to subject the cases to a logistic multiple regression analysis that takes into account, and controls for, the culpability level of each defendant. An alternative method, which we have found more ac-

cessible for this research, is a process of adjustment for case culpability known as "direct standardization."[343] It enabled us to estimate an overall death-sentencing rate for two or more groups of actual cases, on the assumption that the cases in each group have the same levels or distribution of defendant criminal culpability. For this purpose, our measure of defendant culpability was an eight-level scale, which built upon the result of a logistic multiple regression analysis of 318 penalty trial sentencing decisions in Philadelphia from 1983 to 1994.

We can illustrate the risk of bias that might occur in the absence of an adjustment for offender culpability by comparing the death sentencing rate in black defendants/non-black victim cases (.42) to the death-sentencing rate for the other cases in our sample (.25). This comparison produced a 17-percentage point disparity (.42 vs. .25). Our concern with this comparison is that the culpability level of the two groups of cases may differ, which could explain why the unadjusted death sentencing rate is higher in the BD/NBV cases. In fact, analysis shows that the BD/NBV cases were more aggravated.[345] Specifically, in contrast to the other cases, the BD/NBV cases were

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[343] JOSEPH L. FLEISS, STATISTICAL METHODS FOR RATES AND PROPORTIONS 162-64 (1973) and PRITHWIS DAS GUPTA, STANDARDIZATION AND DECOMPOSITION OF RATES: A USER'S MANUAL 23-186 (1993) present a more technical discussion of the issues and procedures involved with the use of the standardization procedure. We prefer the directly standardized results as the principal mode for the presentation of our findings because they are easier to depict and explain than are regression coefficients and odds multipliers estimated for race of defendant and victim variables. For this reason, they are widely used. *See, e.g.,* LESTER R. CURTIN & RICHARD J. KLEIN, U.S. DEP'T OF HEALTH AND HUMAN SERVS., DIRECT STANDARDIZATION (AGE-ADJUSTED DEATH RATES) (1995) (direct standardization for age); Seiji Nakata et al., *Trends and Characteristics in Prostate Cancer Mortality in Japan*, 7 INT'L J. UROLOGY 254 (2000) (direct standardization for age differences); R.M. Bray & M.E. Marsden, *Trends in Substance Use Among U.S. Military Personnel: The Impact of Changing Demographic Composition*, 35 SUBSTANCE USE & MISUSE 949 (2000) (direct standardization for differences in demographics of military personnel); Arlene C. Sena et al., *Trends of Gonorrhea and Chlamydial Infection During 1985-1996 Among Active-Duty Soldiers at a United States Army Installation*, 30 CLINICAL INFECTIOUS DISEASES 742 (2000) (direct standardization for age, sex, and race/ethnicity); Alexa Beiser et al., *Computing Estimates of Incidence, Including Lifetime Risk: Alzheimer's Disease in the Framingham Study; The Practical Incidence Estimatores (PIE)* Macro, 19 STAT. MED. 1495 (2000) (direct standardization for age).

[344] Baldus et al., *Charging and Sentencing Study*, *supra* note 289, at 1758-59 (the regression model): *id*. at 1766 (the eight-level scale after the effects of the race and the socioeconomic status of the defendant and victim have been purged). The regression model included twenty-five aggravating and mitigating circumstances that were either conceptually important (the statutory aggravating and mitigating circumstance) or were important predictors of the defendants who were sentenced to death. These results enabled us to predict for each defendant a probability, given the specific facts of his or her case, that he or she would be sentenced to death. This estimated probability provides a measure of culpability with high culpability, associated with the high estimates and lower culpability associated with the lower predictions. In addition, we rank-ordered the predictions and grouped the defendants into eight groups of "near neighbor" in terms of their predicted probability of receving a death sentence. These groupings underlie the eight-level culpability that we used to adjust cases for defendant culpability in this study.

[345] The difference between the two distributions was statistically significant at the .01 level.

more heavily concentrated in the higher levels (6-8) of the eight-level culpability scale that we used to measure defendant culpability and under-represented in the least aggravated cases (levels 1-3 of the scale), a difference that may explain why the death sentencing rate was higher for this group.[346] After adjustment for the difference in the culpability levels of the two groups of cases, the death sentencing rates for the two groups were .32 for the BD/NBV cases and .26 for the other cases. This 6-percentage point disparity suggests that eleven points of the initial 17-point percentage point disparity were the result of the differences in the culpability levels of the defendants in the two groups of cases.

The direct method of adjusting for differences among populations of defendants[347] focuses on computing the overall death-sentencing rate that would result for a subpopulation of defendants if, instead of having a different distribution of criminal culpability, both the whole population of defendants and the subpopulation of defendants being compared to the whole population had the same distribution of culpability.[348] Table 10 illustrates the adjustment procedure. Our purpose there is to adjust the .42 (25/60) death-sentencing rate for the hypothetical subpopulation of 60 penalty trial cases shown in Column C, Row 3.a. This rate is adjusted to the death sentencing rate we would expect to see if the distribution of defendant culpability levels for the young defendants in Column C were the same as the distribution for the whole population of defendants shown in Column B. The adjusted rate of .37 is shown in Column C, Row 3.b.

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[346] The eight-level scale is described above, *supra* note 344.

[347] To illustrate the process of direct adjustment, we draw on a presentation in a leading textbook by Professors Pagno and Gauvreau of the Harvard University Schools of Public Health and Medicine, respectively, which wc have modified to fit the subject matter of this Article. MARCELLO PAGNO & KIMBERLEE GAUVREAU, PRINCIPLES OF BIOSTATISTICS 72-73 (2000).

[348] *Id* at 72. The same principles apply when the death sentencing rates among multiple subgroups are being compared, as is the case in several Figures in this Article.

APPENDIX A TABLE 10

DIRECT STANDARDIZATION PROCEDURE FOR ADJUSTMENT OF DEATH SENTENCING RATES FOR A HYPOTHETICAL SUBPOPULATION OF YOUNG PENALTY TRIAL DEFENDANTS CONTROLLING FOR DEFENDANT CULPABILITY

A	B	C	D
1. Culpability Level	Whole Defendant Population	Subpopulation of Young Defendants Actual Death Sentencing Rate	Expected # of Death Sentences if the Whole Defendant Population (Col. B) were Sentenced at Same Rate as the Subpopulation of Young Defendants (Col. C)
a. (Low)	250	.10 (3/30)	25
b. (Med)	160	.50 (5/10)	80
c. (High)	100	.85 (17/20)	85
2. Total	510		190
3. Subpopulation Death Sentencing Rates:			
a. Unadjusted Rate		.42 (25/60)	
b. Adjusted Rate		.37 (190/510)	

The first step in applying this technique is to identify the standard distribution of culpability levels for the whole population of defendants.[349] Column A of Table 10 shows three levels of culpability[350] and Column B indicates the distribution of the whole population of defendants on that scale. We then calculate the number of death sentences that would have occurred in the subpopulation of young defendants, assuming that the defendants in it had the same culpability distribution as the whole population of defendants, while retaining its own individual death sentencing rates specific to each culpability level.[351]

The expected numbers of death sentences for the subpopulation of defendants are calculated by multiplying Column B by Column C, which produces a total expected pool of 190 death sentences. This is shown in Column D, Row 2. The culpability-adjusted death-

[349] *Id.*

[350] We use a three-level culpability scale here to simplify the explanation. In the actual research, we used an eight-level culpability scale.

[351] PAGNO & GAUVREAU, *supra* note 347, at 73.

sentencing rate for the subpopulation of young defendant is then calculated by dividing its total expected number of 190 death sentences by the whole defendant population of 510, which is shown in Column B, Row 2.[352] This produces the culpability adjusted death-sentencing rate of .37 (190/510) for the subpopulation of young defendants in Column C.

This culpability-adjusted death-sentencing rate is the rate that would apply if both the young defendant subpopulation in Column C and the whole defendant population in Column B had the same culpability distribution.[353] The .37 adjusted rate is 5-percentage points lower than the .42 unadjusted rate because, as a comparison of the distribution of cases in Columns B and C reveals, the young defendant (Column D) subpopulation is more heavily weighted toward the upper end of the culpability scale than are the cases in the whole population in Column B.[354]

In the Figures presented in this Article, the adjusted death-sentencing fates that we report for each subpopulation of cases were based on a comparison of its distribution of culpability scores to the distribution of culpability scores for the whole population of defendants in our universe.[355]

One limitation of the direct standardization adjustment procedure illustrated in Table 10 is the requirement that each subgroup of cases for which an adjustment is made contains one or more cases at each of the culpability levels involved in the analysis. This requirement becomes problematic when the subgroups being estimated are comparatively small.[356] When one or two "no data" gaps appeared in a subgroup's culpability distribution, we collapsed the level with missing data into the adjacent level with the smaller sample size. If there were three or more gaps overall, we considered the data too thin to support a reliable estimate using this procedure and we flagged the estimate to warn the reader of possible unreliability.[357] Under both those circumstances, we relied more heavily on our alternative regression based estimates.[358]

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[352] *Id.*

[353] *Id.*

[354] *See* App. tbl.9.

[355] *See* App. tbl.2.

[356] This problem is also more 1ikely to occur in this research than in the hypothetical situation presented in Table 9, because our adjustments were based on an eight-level culpability scale, which tends to thin the data out more than does a three-level culpability scale.

[357] We report such data in the belief that doing so is more informative than no data, so long as the risks of unreliability are taken into account in their interpretation.

[368] Note that the adjustments illustrated in the Appendix A Table 9 hypothetical adjustment problem ignored the sample sizes of the tases at each culpability level of Column C. However, when we compared the adjusted death-sentencing rates of two subgroups of cases, i.e., the rate for black defendants versus the rate for non-black defendants, we used an estimation procedure that first calculated the disparity of death-sentencing rates at each level of culpability and then estimated an overall disparity weighted to reflect the different sample sizes of cases at each culpability 1eve1.

APPENDIX D

Glossary of Social Science and Statistical Concepts and Terminology Relevant to this Research

Glossary

aggravation level of cases. See *blameworthiness of a defendant.*

blameworthiness of a defendant. The degree of criminal culpability associated with a defendant in a death-eligible case as a result of the case's aggravating and mitigating circumstances.

case culpabiIity. See *blameworthiness of a defendant.*

clearly death-eligible. There is strong or overwhelming evidence in the case establishing its death-eligibility.

correlation coefficient r. A measure of the strength of the association or linear correlation between two quantities measured on a collection of observed units. This measure is known more precisely as the Pearsonian product moment correlation coefficient.

culpability/aggravation scale. A system which identifies subgroups of cases in terms of their aggravation levels.

culpability index. A quantitative ranking system designed to measure defendant culpability.

DCI. Data collection instrument.

death-eligible case. A case is death-eligible when the facts of the case concerning mens rea, own conduct, and the presence of a statutory aggravating factor would authorize the imposition of a death sentence.

deathworthiness of a case or defendant. Deathworthiness of a case or defendant refers to the extent to which prosecutors or judges believe a death sentence should be imposed in a death-eligible case.

dependent variable (also, *outcome variable).* The variable representing the outcome (e.g., the sentencing result) in quantitative analyses depicting a decision process. The dependent variable is frequently denoted by y.

distribution. Most generally, a collection of numbers; more particularly, a collection of numbers described in a manner that emphasizes where the numbers fall on a numerical scale, through the use of a frequency table or frequency polygon, for example.

independent variables (in a quantitative analysis describing a decision process). Variables that represent factors (e.g., robbery, sexual assault) which may influence the outcomes of the decision process or alter the influence of other factors. The independent variables are sometimes denoted by x or by x1, x2, etc., but more often by acronyms like "VBEAT".

level of *statistical significance.* See *test of significance.*

Measure. A concept or rule which is used to assign numbers to relevant objects or events in a case, e.g, a measure of defendant culpability. A measure may also refer to the number that results when such a concept or rule is applied to the facts of a particular case, e.g., a defendant culpability level of 4 on a regression based measure of culpability.

multiple regression (also, *multivariate* regression). A computational procedure which produces a formula (the regression formula or regression equation) describing how the average value of a dependent or outcome variable relates to differences in the levels of two or more predictor or independent variables. Logistic multiple regression is designed for the analysis of dichotomous (yes/no) outcomes, e g , whether or not a death sentence was imposed.

not death-eligible case. The facts and/or procedure in the case indicate that the case is not death-eligible under *controlling* law.

p value (also, *p level).* The probability value produced in a *test of significance* which indicates the likelihood that an observed result is the product of chance. See also *test of significance.*

preliminary case screening. A procedure established in this project to identify death-eligible homicides.

questionable as to death-eligibility. Although there is strong evidence concerning some elements required for a classification of deathworthiness in a case, there are also legal or evidentiary issues concerning one or more of those elements.

regression. The use of an algebraic formula to express the influence of one or more independent variables (e.g., robbery, sexual assault, one or more qualifications) on the average level of a dependent variable (e.g., death-sentencing rate). Also, the computational procedure through which the terms of this formula are estimated. See *multiple regression.*

regression coefficient. A number estimate as part of a regression formula that indicates how the average value of the *dependent variable* (or *outcome variable)* varies with changes in the level of the *independent* or *predictor variable.* When independent variables take values of one or zero to reflect the presence or absence of particular characteristics, regression coefficients estimated for them can be interpreted as the weights attached to the estimated impact those characteristics.

significance level. See *test of significance.*

statistically significant. Having a *p* value small enough to support the conclusion that a null hypothesis is not true. Typically, if the *p* value associated with a result is less than 0.05, the result is considered statistically significant. If the *p* value is sufficiently small, say less than 0.01 or 0.001, the result is considered highly statistically significant. If the *p* value falls between .10 and .05 the result is considered close to statistical significance.

strength-of-evidence screening. A system of case evaluation used in this project to identify cases with overwhelming or strong evidence concerning death-eligibility.

test of significance. A statistical tool which can be used to evaluate disparities observed in a sample of decisions, e.g., a 20-percentage-point difference in death-sentencing rates between cases with and without sexual assault. The test of significance provides an estimate of the probability that the observed level of disparity would result from chance variation if no such disparity exists in the capital sentencing system. The term "test of significance" is used interchangeably with "significance test," "hypothesis test," "test of hypothesis," and "test of statistical significance."

universe. A pool of previously decided cases involving a death-eligible offense that an appellate court routinely consults in the conduct of a proportionality review of a death sentence. It also refers to the pools of capital and non-capital cases that are the focus of this project.

Appendix E

Supplemental Findings on the Impact
Of Illegitimate and Suspect Case Characteristics

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In addition to the analysis presented in the main report, we examined the impact of other suspect case characteristics, some of which were raised in the RFP (Request for Proposals) for this project. For most of these characteristics, there were substantial missing data and small samples. In the paragraphs below, we reference the DCI and ISI question numbers and the variable names.

1. For Hispanic defendants (DCI Q.41 X84), a characteristic where we have complete data, we found that they were more likely to receive a negotiated plea .91 (n=12) v. .44 (n=165) (p=.002) and were less likely to advance to penalty trial .08 (n=12) v. .48 (n=165) (p=.007). For non capital cases, there was either no significant difference in the outcome variables or the number of Hispanics in the subsample was too small to make comparisons.

2. For Hispanic victims (DCI Q.80 X93), only 6% of the data were missing but the sample of Hispanic six victims was not large enough to make valid inferences. In non-capital cases (ISI Q. 38 X93), 19% of the data were missing. Defendants were more likely to receive a murder 1 charge if the victim was Hispanic .70 (n=27) v. .51 (n=393) (p=.05) and less likely to receive a murder 2 charge .11 (27) v. .30 (393) (p=.05). Also, defendants were less likely to receive a life sentence with a murder 2 charge if the victim was Hispanic .0 (12) v. .27 (142) (p=.04). See also Table 6, Row 13.

3. There are six Native American defendants in the sample of capital cases. Four of their cases advanced to a penalty trial and two resulted in a death sentence. The sample sizes were too small

to support an independent analysis of Native American effects beyond these computations. Native Americans are classified as racial minorities in our principal analyses.

4. On the impact of appointed counsel (DCI Q.13 VR16), 46% of the data were missing and there was no significant association with any of the outcome variables.

5. On the impact of gay defendants (DCI Q.39 V629-V632), 9% of the data were missing and there was no significant association with any of the outcome variables.

6. On the impact of gay victims (DCI Q.81 VN610-VN613), 28% of the data were missing and there was no significant association with any of the outcome variables.

7. On the impact of the gender of the defendant (DCI Q.38 X82), a characteristic where we have complete data, there was no significant association with any of the outcome variables in the capital cases. In non-capital cases (ISI Q.30 X82), the data were complete and men were found more likely to be charged with Murder 1 than women .52 (n=425) v. .38 (n=67) (p=.04) as well as less likely to receive a term in years over a death sentence .77 (n=446) v. .90 (n=73) (p=.008). See also Table 6, Row 8.

8. On the impact of the gender of the victim (DCI Q.80 X94), 1% of the data were missing and there was no significant association with any of the outcome variables in the capital cases. In the non-capital cases (ISI Q.38 X94), however, 9% of the data were missing and defendants were less likely to receive a murder 1 charge if the victim was male .47 (n=345) v. 58 (130) (p=.03),

more likely to receive a murder 2 charge if the victim was male .33 (n=345) v. .22 (n=130) (*p*=.01), and more likely to receive a term in years over a life sentence .82 (364) v. .71 (137) (*p*=.007). See also Table 6, Row 7.

9. On the impact of defendant's religious preference (DCI Q.42 X85), 15% of the data were missing. Most of the individual religion categories had too small a sample size to make any inference. Of the groups that were large enough, none showed a significant association. The same applies to non-capital cases (ISI Q.33 X85) where 37% of the data were missing.

10. On the impact of the victim's religious preference (DCI Q.80 X95), 97% of the data were missing, thus making inference impossible. The same applies to non-capital cases (ISI Q.38 X95) where 97% of the data were missing.

11. On the impact of the defendant's language ability (DCI Q.46 VN46), 1% of the data were missing, but there were not enough defendants who were not fluent in English to make any valid inferences.

12. On the impact of the defendant's place of residence (DCI Q.47 V47), 88% of the data were missing making valid inference impossible.

13. On the impact of physically disabled defendants (DCI Q.75 V197), none of the data were missing. Physically disabled defendants were less likely to receive a negotiated plea .29 (n=21) v. .50 (n=l56) (*p*=.06), more likely to advance to a penalty trial .71 (n=21) v. .42 (n=l56)

(p=.01). The penalty trial death sentencing rates for disabled and other defendants are the same. However, because the penalty trial rate for the disabled is above average, the death sentencing rate among all death eligible offenders is also, i.e., .24 (5/21) v. .14 (22/154). We introduced the disabled variable in two core regression models. In the model for the rate that cases advance to penalty trial, the coefficient for physical disability was .95 (p=.10). However, because of the absence of any effect for the variable in the penalty trial sentencing process, in the model for death sentences imposed among all death eligible cases, the coefficient for physical disability was .08 (p=.95).

14. On the impact of the birthplace of the defendant (DCI Q.43 VR43), 1% of the data were missing, but not enough of the defendants were born outside of the United States to make valid inferences.

15. On the impact of addiction (DCI Q.72 V185-V186), 30% of the data were missing. In the capital cases, alcoholics were more likely to receive a negotiated plea .63 (n=71) than drug addicts .42 (n=19) and non-addicts .37 (n=46). Alcoholics were less likely to advance to a penalty trial .32 (n=59) than drug addicts .47 (n=19) and non-addicts .58 (n=46). Alcoholics were less likely to have a penalty trial death outcome .22 (n=l8) than drug addicts .56 (n=9) and non-addicts .41 (n=27). Alcoholics were much less likely to receive a death penalty .07 (n=58) than drug addicts .26 (n=l9) and non-addicts .24 (n=46).