

Table A18. The Impact of Severity of Punishment on Crime Rates – Macro-level Cross-sectional Studies

Study	Sample	Analysis	Causal Order	Sample Type	Severity	Crime Type	#IV	INCAP	Findings
Gibbs (1968)	48 U.S. states, 1960	Phi- Coeff.	Lags	CE	Time Served	Murder	1	No	-, p> .05
Gray & Martin (1969)	48 U.S. states, 1960	OLS	Lags	CE	Time Served	Murder	5	No	-, p= ?
Bean & Cushing (1971)	48 U.S. states, 1960	OLS	None	CE	Time Served	Murder	3	No	-, p< .01
Antunes & Hunt (1973)	49 U.S. states, 1960	OLS	None	CE	Sentence Length	Murder	1	No	-, p= ?
						Rape			+, p= ?
						Robbery			+, p= ?
						Assault			+, p= ?
						Burglary			+, p= ?
						Larceny			+, p= ?
						Auto Theft			+, p= ?
Ehrlich (1973)	50 states, 1960	2SLS	I.V.	CE	Time Served	Robbery	5	No	-, p< .05
						Burglary			-, p< .05
						Larceny			-, p< .05
						Auto Theft			-, p< .05
						Multiple			-, p< .05
	50 states, 1950	OLS				Murder			-, p< .05
	50 states, 1960								-, p< .05
						Rape			-, p< .05
	50 states, 1940					Assault			-, p< .05
	50 states, 1950								-, p< .05
	50 states, 1960								-, p< .05
Erickson & Gibbs (1973)	48 states in 1960	OLS	None	CE	Time Served	Homicide	1	No	-, p< .05
Sjoquist (1973)	53 cities > 25,000, 1960	Tobit	None	Non Prob.	Time Served	Multiple Theft	8	No	-, p< .10
Bailey et al (1974)	46 states, 1950	Correl.	None	CE	Sentence Length	Murder	1	No	-, p=?
						Robbery			-, p=?
						Assault			+, p= ?
						Burglary			-, p=?
						Theft			-, p=?

Study	Sample	Analysis	Causal Order	Sample Type	Severity	Crime Type	#IV	INCAP	Findings
	47 states, 1960					Auto Theft			-, p=?
						Manslaughter			-, p=?
						Rape			-, p=?
						Murder			-, p=?
						Robbery			-, p=?
						Assault			+, p= ?
						Burglary			+, p= ?
						Theft			+, p= ?
	48 states, 1964					Auto Theft			+, p= ?
						Murder			-, p=?
						Robbery			-, p=?
						Assault			+, p= ?
						Burglary			+, p= ?
						Theft			+, p= ?
						Auto Theft			+, p= ?
Klein (1974)	49 police agencies, CA, 1970	MWU	Lags	Non Prob.	Arrest vs. Divers.	Rearrest	1	No	N.S.
Danzinger & Wheeler (1975)	57 large SMSAs, 1960	OLS	Lags	CE	Time Served	Burglary	11	No	-, p<.05
						Battery			-, p> .05
Erickson & Gibbs (1975)	48 states, 1960	Correl.	None	CE	Time Served (Gen)	Murder	1	No	-, p> .05
						Rape			-, p< .05
						Robbery			-, p> .05
						Assault			-, p> .05
						Burglary			-, p> .05
						Auto Theft			-, p> .05
						Larceny			-, p> .05
					Time Served (Spec)	Murder			-, p< .05
						Rape			+, p> .05
						Robbery			-, p> .05
						Assault			+, p> .05
						Burglary			+, p> .05
						Auto Theft			+, p> .05
						Larceny			+, p> .05

Study	Sample	Analysis	Causal Order	Sample Type	Severity	Crime Type	#IV	INCAP	Findings
Kau & Rubin (1975)	60 U.S. cities, 1960	2SLS	I.V.	Non Prob.	Time Served	Robbery	7	No	-, p> .05
	Violent					-, p> .05			
Passell (1975)	60 U.S. cities, 1970	2SLS	I.V.	Non Prob.	Time Served	Property	6	No	+, p> .05
	Violent					+, p> .05			
Erickson & Gibbs (1976)	41 states, 1950	2SLS	I.V.	Non Prob.	Time Served	Property	6	No	+, p> .05
	44 states, 1960					Homicide			-, p> .05
Erickson & Gibbs (1976)	24 - 33 states, 1970	Correl.	Lags	CE	Time Served	Assault	1	No	-, p= ?
						Auto Theft			+, p= ?
						Burglary			+, p= ?
						Murder			-, p= ?
						Larceny			+, p= ?
						Rape			-, p= ?
						Robbery			-, p= ?
Forst (1976)	50 states in 1970	2SLS	I.V.	CE	Sentence Length	13	Yes	-, p> .05	
Bailey (1977)	50 states, 1951	OLS	Lags	CE	Time Served	Rape	11	No	-, p< .05
	50 states, 1961					-, p> .001			
Blumstein & Nagin (1977)	50 states, 1970&1971	OLS	None	CE	Sentence Length	12	No	-, p> .05	
Boyes & McPheters (1977)	47 states, 1960	OLS	None	CE	Time Served	Homicide	11	No	-, p< .05
						Rape			+, p> .05
						Assault			+, p> .05
Ehrlich (1977a)	33 states with DP, 1940	GLS	None	Non Prob.	Time Served	Murder	7	No	-, p< .05
	34 states with DP, 1950								-, p< .05
Avio & Clark (1978)	54 census tracks, Ont, 1971	2SLS	I.V.	CE	Sentence Length	Robbery	10	No	-, p> .05
						Burglary			-, p> .05
						Theft			-, p> .05
						Fraud			-, p> .05
Black & Orsagh (1978)	43 states, 1950	2SLS	Lags	CE	Time Served	Homicide	6	No	+, p> .05
	47 states, 1960					-, p< .01			
Holtmann & Yap (1978)	43 states in 1970	2SLS	I.V.	CE	Time Served	Burglary	11	No	-, p> .10
						Robbery			-, p> .10
						Larceny			-, p> .10

Study	Sample	Analysis	Causal Order	Sample Type	Severity	Crime Type	#IV	INCAP	Findings								
Mathur (1978)	cities over 100,000, 1960	2SLS	I.V.	CE	Time Served	Murder	9	No	-, p> .15								
						Robbery			-, p> .05								
						Burglary			-, p> .15								
						Battery			-, p> .15								
						Rape			-, p> .10								
						Auto Theft			-, p> .05								
						Theft			-, p< .05								
Nagin (1978a)	50 states, 1960	2SLS	I.V.	CE	Time Served	Index	11	No	+, p> .05								
						Vandaele (1978)			50 states, 1940, 1959, 1960	2SLS	I.V.	CE	Time Served	Index	14	Yes	-, p< .05
Parker & Smith (1979)	32 states, 1960 & 1970	OLS	Lags	CE	Time Served	Murder	7	No	+, p> .05								
						Sentence Length			-, p> .05								
						Bailey (1980b)			50 states, 1960	OLS	Lags	CE	Time Served	Murder	8	No	-, p>.05
														Loftin (1980)			50 states, 1960
						Myers (1980)			26 U.S. cities > 250,000 1970	2SLS	I.V.	CE	Sentence Length	Robbery	24	No	-, p> .05
														Burglary			-, p> .05
														Larceny			-, p> .05
Auto Theft	-, p> .05																
Sesnowitz & Hester (1982)	31 states in 1970	2SLS	I.V.	Non Prob.	Time Served	Robbery	6	No	-, p > .05								
						Burglary			-, p< .05								
Zedlewski (1983)	137 SMSAs, 1977.	OLS	None	Non Prob.	Sentence Length	Burglary	12	No	-, p> .05								
						Larceny			+, p> .05								
						Multiple			-, p> .05								
						Burglary			+, p> .05								
						Larceny			+, p> .05								
Multiple	-, p> .05																

Study	Sample	Analysis	Causal Order	Sample Type	Severity	Crime Type	#IV	INCAP	Findings
Witte & Woodbury (1985)	567 Zip codes, U.S., 1969	SUR	None	Non Prob.	Combined Measure	Tax Cheating	11	No	?, p> .05
Stafford, et al (1986)	48 states 1959-1961	OLS	Lags	CE	Time Served	Murder	3	No	-, p< .05
Howsen & Jarrell (1987)	120 counties in K.Y., 1980	2SLS	I.V.	Non Prob.	Sentence Length	Robbery	15	No	+, p> .10
						Burglary			-, p> .10
						Larceny			+, p> .10
McAleer & Veall (1989)	44 states, 1950	OLS	Lags	CE	Time Served	Murder	13	No	-, p> .05
Trumbull (1989)	98 counties, NC	OLS	Lags	CE	Sentence Length	Multiple	14	No	-, p< .05
Decker & Kohfeld (1990a)	32 states, 1970	OLS	Lags	Non Prob.	Time Served	Robbery	5	No	-, p> .05
						Burglary			-, p> .05
						Larceny			-, p> .05
Jarrell & Howsen (1990)	120 counties in KY, 1980	2SLS	I.V.	CE	Sentence Length	Burglary	20	No	-, p> .10
						Larceny			-, p> .10
						Robbery			-, p> .10
						Assault			-, p> .10
						Murder			-, p> .10
						Rape			-, p> .10
Bailey (1991)	42 states, 1960	OLS	Lags	CE	Time Served	Murder	8	No	-, p> .05
						Manslaughter			-, p> .05
						Assault			-, p> .05
						Rape			-, p> .05
						Robbery			-, p> .05
						Burglary			-, p> .05
						Larceny			-, p> .05
						Auto Theft			-, p> .05
	49 states, 1950					Murder			-, p< .05
						Assault			-, p> .05
						Robbery			-, p> .05
						Burglary			-, p< .05
						Larceny			-, p> .05
						Auto Theft			-, p> .05
Veal (1992)	44 states, 1950	GLS	Lags	CE	Time Served	Murder	6	No	-, p> .05
Andreoni (1995)	47 states, 1960	Correl.	Lags	CE	Time Served	Multiple	1	No	-, p< .01

Study	Sample	Analysis	Causal Order	Sample Type	Severity	Crime Type	#IV	INCAP	Findings
Ehrlich & Liu (1999)	44 states, 1950	3SLS	I.V.	CE	Time Served	Murder	14	No	-, p< .05
						Assault			-, p< .05
Mendes & McDonald (2001)	32 states, 1970	Logistic	None	Non Prob.	Time Served	Robbery	8	No	-, p< .05
						Burglary			-, p< .05
						Larceny			-, p> .05
						Robbery			-, p< .05
		Log-linear			Burglary	-, p< .05			
					Larceny	-, p> .05			
					Robbery	-, p< .05			
					Burglary	-, p< .05			
Logistic	Expected Cost	Robbery	-, p< .05						
		Burglary	-, p< .05						
		Larceny	-, p> .05						
		Larceny	-, p> .05						
Mendes (2004)	32 states, 1970	OLS	None	Non Prob.	Time Served	Robbery	5	No	-, p< .05
						Burglary			-, p< .05

Clarification of Commonly Used Abbreviations in Table 18

Column Headings

#IV- Number of Independent Variables in the Analysis
 INCAP- Did the study control for an incapacitation variable?

Abbreviations Located Under Column Headings

Sample

CA- California
 D.P. – Death Penalty
 KY- Kentucky
 NC- North Carolina
 Ont.- Ontario
 SMSA- Standard Metropolitan Statistical Area

Analysis

Correl- Correlation Coefficient
GLS- Generalized Least Squares Regression
MWU- Mann Whitney U Test
OLS- Ordinary Least Squares Regression
SUR- Seemingly Unrelated Regression

Causal Order

I.V.- Instrumental Variables

Sample Type

CE- Complete Enumeration
Non Prob. – Non Probability

Severity

Arrest vs Divers. – Arrests vs. Diversion
Expected Cost- Formula Determining Expected Cost for Committing Crime
Time Served (Gen.)- Time Served General Deterrence
Time Served (Spec.)- Time Served Specific Deterrence

Crime Type

Multiple- Multiple Crimes