Table A5. The Impact of Perceived Certainty at Earlier times on Criminal Behavior at Later Times (Panel Studies)

Study	Sample	Sample Type	Analysis	#IV	INF	Certainty	Crime Type	Findings
Burkett & Hickman (1982)	378 High School students Pacific Northwest	Non Prob.	Path	5	No	Composite-Self	Marijuana	**?, p> .05**
Minor & Harry (1982)	488 college students, state university	Non Prob.	OLS	1	No	Caught-Self	Marijuana	-, p> .05
							Cocaine	-, p> .05
							Drunk	+, p> .05
							Shoplift	-, p> .05
Paternoster et al. (1982a)	300 college students, Florida	Probability	Gamma	1	No	Arrest-Self	Theft<$10	**-, p< .05**
						Arrest-Others		-, p> .05
						Arrest-Self	Marijuana	**-, p< .05**
						Arrest-Others		**-, p< .05**
Saltzman et al. (1982)	300 college students, Florida	Probability	OLS	3	No	Arrest-Self	Theft<$10	-, p> .05
							Marijuana	+, p> .05
							Bad Checks	-, p> .05
			Yules Q	1	No	Arrest-Others	Theft<$10	-, p> .05
							Marijuana	-, p> .05
							Bad Checks	-, p> .05
Paternoster et al. (1983a)	300 college students, Florida	Probability	OLS	3	No	Arrest-Self	Multiple	-, p= .27
						Caught-Others		**-, p= .03**
						CBP-Others		-, p= .21
						Arrest-Others		-, p= .24
						Convicted-Others		-, p= .23
						CBP-Others		-, p= .07
						Caught-Others		-, p= .10
			Gamma	1	No	Arrest-Self	Theft<$10	**-, p< .05**
							$10-$100 Theft	-, p> .05
							Marijuana	-, p> .05
							Bad Checks	-, p> .05
							Vandalism	-, p> .05
						Arrest-Others	Theft<$10	-, p> .05
Study	**Sample**	**Sample Type**	**Analysis**	**#IV**	**INF**	**Certainty**	**Crime Type**	**Findings**

							$10-$100 Theft	-, p> .05
							Marijuana	**-, p< .05**
							Bad Checks	-, p> .05
							Vandalism	-, p> .05
						Caught-Others	Theft<$10	-, p> .05
							$10-$100 Theft	-, p> .05
							Marijuana	**-, p< .01**
							Bad Checks	-, p> .05
							Vandalism	-, p> .05
						CBP-Others	Theft<$10	-, p> .05
							$10-$100 Theft	-, p> .05
							Marijuana	**-, p< .01**
							Bad Checks	-, p> .05
							Vandalism	-, p> .05
						Convicted-Others	Theft<$10	**-, p< .05**
							$10-$100 Theft	**-, p< .05**
							Marijuana	-, p> .05
							Bad Checks	-, p> .05
							Vandalism	-, p> .05
	262 HS students, Florida			1	No	Caught-Others	Theft<$10	-, p> .05
							$10-$100 Theft	-, p> .05
							Marijuana	**-, p< .05**
							Alcohol Use	-, p> .05
							Vandalism	-, p> .05
						Convicted-Others	Theft<$10	-, p> .05
							Theft<$10	-, p> .05
							Marijuana	**-, p< .01**
							Alcohol Use	-, p> .05
							Vandalism	-, p> .05
Paternoster et al. (1983b)	300 college students, Florida	Probability	OLS	8	Yes	Arrest-Self	Mult. Nonviolent	+, p> .05
Bishop (1984a)	2147 students, Virginia	Probability	OLS	5	No	Caught-Others	Multiple	**-, p< .001**
	8^{th} & 9^{th} graders							**-, p< .05**
	10^{th}-12^{th} graders							**-, p< .05**

Study	**Sample**	**Sample Type**	**Analysis**	**#IV**	**INF**	**Certainty**	**Crime Type**	**Findings**

	males							**-, p< .05**
	females							-, p= ?
	blacks							-, p= ?
	whites							-, p= ?
Bishop (1984b)	2147 students, Virginia	Probability	OLS	5	No	Caught-others	Multiple	**-, p< .001**
Meier et al. (1984)	265 HS students, Pacific NW city.	Non Prob.	Path	1	No	Caught-Self	Marijuana	N.S.
						Caught-Others		N.S.
Thomas & Bishop (1984)	2,147 HS students, Virginia	Probability	Correl.	1	No	Caught-Others	Multiple	-, p= ?
Paternoster et al. (1985)	300 college students, South	Probability	OLS	12	Yes	Arrest-self	Theft<$10	**-, p< .01**
							Marijuana	+, p> .05
							Bad Checks	**-, p< .01**
Paternoster (1986)	1463 HS students, Southeast city	Non Prob.	MLF	5	No	CBP-Self	Multiple	+, p> .05
							Mult. Drug Use	+, p< .05
Paternoster & Iovanni (1986)	1173 HS students, Southeast	Non Prob.	OLS	11	Yes	CBP-Self	Mult. Nonviolent	-, p > .05
						CxS-Self		-, p> .05
Piliavin et al. (1986)	1,497 adult offenders, U.S.	Non Prob.	MLE	21	No	Composite-Self	Mult. Property	-, p> .05
	974 adult offenders, U.S.							+, p> .05
	861 HS dropouts ages 17-20							-, p> .05
Smith & Paternoster (1987)	645 male HS students, Southeast	Non Prob.	Probit	13	Yes	CBP-Self	Marijuana	**-, p< .05**
							Theft	+, p> .05
	738 female HS students, Southeast						Marijuana	-, p> .05
							Theft	**-, p< .05**
Lanza-Kaduce (1988)	139 students, Southeast university	Non Prob.	OLS	4	No	Arrest-Self	DUI	-, p> .05
Paternoster (1988)	1,178 HS students, Southeast	Non Prob.	Path	5	No	CBP-Self	Marijuana	**-, p< .05**
							Theft<$5	**-, p< .05**
Paternoster & Triplett (1988)	1,544 HS students, Southeast	Non Prob.	Probit	17	No	CBP-Self	Marijuana	+, p> .05
							Alcohol Use	-, p> .05
							Theft<$10	**-, p< .05**
							Vandalism	-, p> .05
Green (1989a)	245 adults, Minneapolis	Probability	Gamma	1	No	Arrest-Self	DUI	-, p> .05
Green (1989b)	245 adults, Minneapolis	Probability	Logit	10	Yes	Arrest-Self	DUI	?, p> .05
Paternoster (1989a)	1,250 HS students, Southeast	Non Prob.	Logit	19	Yes	CBP-Self	Marijuana	**-, p< .05**
							Alcohol Use	-, p> .05
							Theft<$5	-, p> .05
Study	**Sample**	**Sample Type**	**Analysis**	**#IV**	**INF**	**Certainty**	**Crime Type**	**Findings**

							Vandalism	**-, p< .05**
Paternoster (1989b)	1,478 HS students, Southeast	Non Prob.	Tobit	25	Yes	CBP-Self	Marijuana	**-, p< .001**
							Alcohol Use	**-, p< .05**
							Theft<$5	-, p> .05
							Vandalism	**-, p< .05**
Schneider & Ervin (1990)	876 delinquents, U.S.	Non Prob.	OLS	14	No	Caught-Self	Multiple	+, p> .05
Nagin & Paternoster (1991)	1,123 HS students, Southeast	Non Prob.	Tobit	16	Yes	Arrest-Self	Theft	**-, p< .05**
							Drug Use	-, p> .05
Williams (1992)	646 married adult couples, U.S.	Probability	Logit	8	No	CBP-Self	Dom. Violence	+, p> .10
						CxS-Self		**-, p<.05**
Keane et al. (1993)	9,295 male drivers, Ontario	Non Prob.	Tobit	24	No	Caught-Self	DUI	+, p< .001
	3,325 female drivers, Ontario							+, p> .01
Paternoster & Piquero (1995)	1422 HS students, Southeast	Non Prob.	MLR	9	No	CBP-Self	Mult. Drug Use	**-, p< .05**
		Non Prob.	Correl.	1		CBP-Others		-, p= ?
Paternoster et al. (1997)	825 males, Milwaukee	Non Prob.	Binomial	19	Yes	Composite-Self	Dom. Violence	**-, p< .05**
Heckert & Gondolf (2000)	395 batterers, 4 U.S. cities	Non Prob.	Logistic	11	No	Jail-Self	Dom. Violence	+, p> .05
Maxwell & Gray (2000)	516 drug offenders in New Jersey, 1989-90	Non Prob.	Cox Reg.	15	No	Caught-Other	Drug Crimes	**-, p < .05**
Uggen & Thompson (2003)	2,268 addicts & youth dropouts, U.S.	Non Prob.	OLS	17	No	Prison-Self	Illegal Earnings	**-, p< .01**
Wright et al. (2004)	26 citizens in New Zealand over 26 years	Non Prob.	OLS	11	Yes	Caught- Self	Any Crime	**-, p< .05**
Carmichael et al. (2005)	2,700 10th graders, Southeast	Non Prob.	Tobit	7	No	Caught-Self	Drinking	**-, p< .05**
							Marijuana	**-, p< .05**
							Theft	**-, p< .05**
							Vandalism	**-, p< .05**
	males			6	No		Drinking	-, p> .05
							Marijuana	**-, p< .05**
							Theft	-, p> .05
							Vandalism	**-, p< .05**
	females						Drinking	**-, p< .05**
							Marijuana	**-, p< .05**
							Theft	-, p> .05
							Vandalism	-, p> .05
Lochner (2005)	4,621 males age 12-16, 1997-2000	Unclear	2SLS	9	No	Arrested-Self	Auto Theft	**-, p< .05**
McCarthy & Hagan (2005)	482 homeless youth, Toronto & Vancouver	Non Prob.	OLS	23	No	Arrest- Self	Theft Index	-, p> .05

Study	**Sample**	**Sample Type**	**Analysis**	**#IV**	**INF**	**Certainty**	**Crime Type**	**Findings**

							Drug Dealing	-, p> .05
							prostitution	-, p> .05
Matsueda et al. (2006)	1,459 children & teens, 7-15, Denver	Probability	Bayesian	19	No	Arrest-Self	Multiple-Assault	**-, p< .001**
							Multiple Theft	**-, p< .001**
Fagan & Piquero (2007)	1355 juvenile offenders in AZ and PA	Non Prob.	OLS	23	Yes	Arrest-Other	Multiple	**-, p< .001**
							Multiple-Violent	**-, p< .001**
							Multiple-Property	**-, p < .001**
Matthews & Agnew (2008)	1,625 High School Students, S.C., 1981-82	Non Prob.	Neg. Bin.	17	No	Caught-Self	Vandalism	-, p> .05
							Shoplifting	-, p> .05
							Marijuana Use	**-, p< .001**
							Underage Drink	-, p> .05
McGrath (2009)	193 adolescents in Wales	Non Prob.	Survival	7	Yes	CBP- Self	Any Crime	**-, p= .013**
Loughran et al (2011)	1,354 juvenile offenders in AZ and PA	Non Prob.	OLS	8	No	Arrest-Self	Personal Violent	**-, p= .000**
							Non Violent	**-, p= .000**
Feld & Larsen (2012)	4,422 citizens in Germany, 2001-2008	Non Prob.	Logistic	42	Yes	Caught-Self	Tax Fraud	**-, p< .05**
	Sample of Males							**-, p< .05**
	Sample of Females							**-, p< .05**
Lapham & Todd (2012)	544 DUI offenders, New Mex, 1989-2004	Non Prob.	Path	8	Yes	Composite-Self	DUI	-, p> .05
Loughran et al (2012a)	1,354 juvenile offenders in AZ and PA	Non Prob.	OLS	2	No	Caught-Self	Arrest-Any Crime	**-, p= 007**
						Caught-Other		-, p=.800
Loughran et al (2012d)	1,354 juvenile offenders in AZ and PA	Non Prob.	Logit	1	No	Arrest-Self	Multiple	**-, p< .05**
Zhang et al (2012)	1,139 HS students, South Carolina, 1979-81	Non Prob.	Path	31	Yes	CBP-Self	Multiple	?, p> .05
						Arrest-Others		?, > .05

Clarification of Commonly Used Abbreviations in Table 5

Column Headings

#IV- Number of Independent Variables in the Analysis
INF- Did the Study Control For Informal Sanctions?
Certainty- All measures represent respondents' perceived likelihood that a type criminal justice contact will occur. The most commonly used abbreviations in Table 1 are listed below. Thus, CBP represents the respondent's perceived likelihood that they would be caught by police if they committed a crime. The "self" or "other" feature denotes whether the perceived certainty was for the respondents themselves or others. Some researchers asked respondents the chances that they themselves would be caught (self) if committing the crime, while others asked respondents the chances that others would be caught if they committed the crime.

Abbreviations Located Under Column Headings

AZ- Arizona
CBP- Caught By Police
Composite- Composite of Several Perception of Certainty Questions
Cox Reg.- Cox Regression
CxS- Certainty multiplied with Severity
HS- High School
Multiple- Multiple Crimes Combined into one Measure
Mult. Nonviolent- Multiple Crimes Combined into One Non-Violent Measure
Mult. Drugs- Multiple Crimes Combined into One Drugs Use Measure
Mult. Property/Multiple Property - Multiple Crimes Combined into Property Crime Measure
MLF- Maximum Likelihood Factor Analysis
Neg. Bin- Negative Binomial Regression
Non Prob. – Non Probability
N.W. - Northwest
OLS- Ordinary Least Squares Regression
GAM- Generalized Additive Model
New Mex.- New Mexico
PA- Pennsylvania
Path- Path Analysis
S.C.- South Carolina
Neg. Bin.- Negative Binomial Regression

Citation

Paternoster et al. 1982a in this table refers to the study: Paternoster, Raymond, Linda Saltzman, Theodore Chiricos and Gordon Waldo. 1982. "Perceived Risk and Deterrence: Methodological Artifacts in Perceptual Deterrence Research." The Journal of Criminal Law and Criminology 73 (3): 1238-1259

Loughran et al 2012a in this table refers to the study: Loughran, Thomas, Raymond Paternoster, Alex Piquero and Jeffrey Fagan 2012. "A Good Man Always Knows His Limitations." The Role of Overconfidence in Criminal Offending. *Journal of Research in Crime and Delinquency* 50 (3): 327-358.

Loughran et al 2012d in this table refers to the study: Loughran, Thomas, Greg Pogarsky, Alex Piquero and Raymond Paternoster. 2012. "Re-Examining the Functional Form of the Certainty Effect in Deterrence Theory. *Justice Quarterly* 29 (5): 712-741.