

Rovers, B. 1998. "Reporting Crimes to the Police; Individual and City-Level Effects." Pp. 268 in ASC 50th Annual Meeting. Washington DC: Conference Proceedings.

## **Reporting Crimes to the Police; Individual and city-Level Effects**

*Hand out*

Annual ASC-meeting  
November, 14, 1998

Ben Rovers

Erasmus University Rotterdam  
Section Criminal Law & Criminology  
Room L6-33  
Burgemeester Oudlaan 50  
P.O.-box 1738  
zip: 3000 DR  
Rotterdam Netherlands  
tel ++(31)10 408 2352 / 1547  
fax ++(31)10 453 2911  
email [Rovers@str.frg.eur.nl](mailto:Rovers@str.frg.eur.nl)

Table 1 Reporting crimes to the police by actor (%)<sup>1</sup>

	N	Victim	Reporting by		
			Someone else	Police was at the spot	No reporting
Bicycle theft	4807	45	14	< 1	41
Theft out of car	1569	58	16	2	25
Car damage	7756	21	7	1	71
Robbery (no violence)	899	58	8	1	33
Attempted burglary	1903	37	14	3	46
Succesful burglary	1161	65	19	3	13
Violent threat	1404	27	6	3	65

Source: Dutch Police Monitor 'Personal and Household Victimization' 1997

<sup>1</sup> Selection: last victimization in residence

Table 2 Description of variables

Variable	Type	Measurement/Labels
Crime reporting	Item	0 no reporting 1 reporting by victim (dichotomy)
<i>Socio-demographic factors</i>		
Sex	Item	0 woman; 1 man (dichotomy)
Age	Item	15-94 year (ratio)
Dutch origin	Item	0 respondent/parents born outside Holland 1 respondent/parents born in Holland (dichotomy)
Education level	Item	1-7; primary level to university (ordinal)
Working status	Item	0 no payed work; 1 payed work (dichotomy)
House owner	Item	0 renter; 1 house owner (dichotomy)
Household size	Item	1-19; number of persones ≥ 18 year (ratio)
<i>Previous victimization</i>		
Physical threat ever	Likert scale	0-4; ever victim of violent threat, burglary, robbery or assault/rape (0/1 values:4 items) (ratio)
Victimizations last year	Item	1-100; total number of victimizations (ratio)
<i>Fear of crime</i>		
Feeling unsafe	Item	0-3; never, seldom, sometimes, often (ordinal)
<i>Perception of neighborhood</i>		
Social problems	Likert scale	0-10; perception of property crimes, physical deterioration and social incivilities (14 items;ratio)
Police performance	Likert Scale	0-10; perception of police activity, availability and visibility (13 items;ratio)
<i>Crime-related factors</i>		
Financial loss	Item	0-6; nothing to \$2500 or more (ordinal)
Emotional problems	Item	0 no problems; 1 problems (dichotomy)
Physical injury	Item	1-5; from no injury to hospital admission (ordinal)
<i>city variables</i>		
Number of inhabitants	statistic	1.830-720.000; Central Bureau of Statistics (ratio)
Crimes per 1000 inhabitants	statistic	9-204; central police registration (ratio)
Mean income in city	statistic	\$16.000-\$28.000; registration income taxes (ratio)
% voters of right-wing parties	statistic	15-97; election national parliament 1994 (ratio)

Figure 1

### Reporting crimes to the police by previous exposure to physical threat

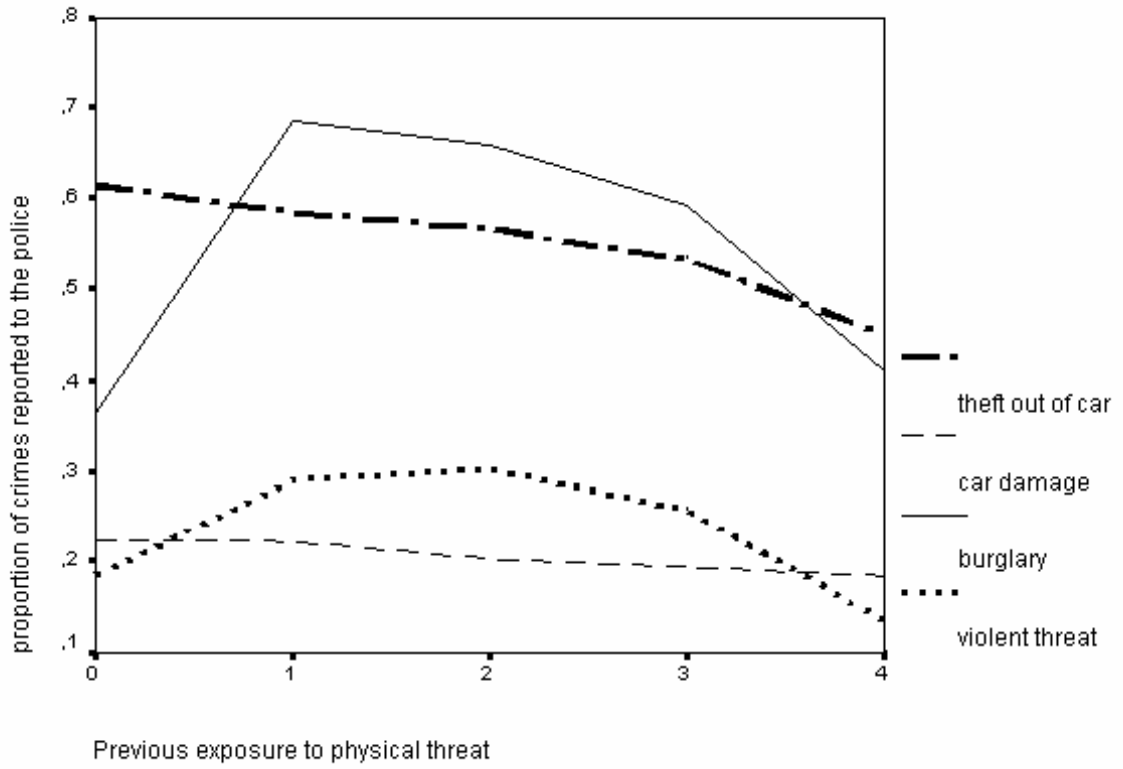


Table 4

Differences in crime reporting between cities (random-coefficients ANOVA model; chi-square test of between-city variance)

	N (victims)	N (cities)	$\chi^2$ (df)	P-value
Bicycle theft	3958	441	681 (440)	0.000
Theft out of car	1251	266	331 (265)	0.004
Car damage	6643	526	558 (525)	0.157
Robbery (no violence)	801	185	207 (184)	0.114
Attempted burglary	1422	329	310 (328)	>.500
Succesful burglary	814	261	241 (260)	>.500
Violent threat	1260	283	300 (282)	0.219

Table 5

Direct and interaction effects of city variables on reporting bicycle theft and car damage to the police (random-coefficients regression model; chi-square test of between-city variance)<sup>1</sup>

	Reporting bicycle theft		Reporting car damage	
	$\chi^2$ (58 df)	p-value	$\chi^2$ (72 df)	p-value
<i>Level-1 coefficients</i>				
Intercept	179	0.000	100	0.017
Dutch origin	71	0.111	57	>.500
Education level	61	0.380	--	--
Working status	58	0.458	--	--
House owner	42	>.500	--	--
Household size	--	--	85	0.138
Physical threat ever	59	0.432	68	>.500
Victimizations last year	63	0.299	--	--
Financial loss	71	0.115	114	0.001

<sup>1</sup> Selection: cities with enough resp.'s to compute parameters; bicycle theft (N=59), car damage (N=73)  
 -- not in analysis

Table 6  
 Individual and city-level effects on reporting car damage to the police  
 (full multi-level model)

	Coefficient	Std. error	t-value
City effects on individual-level parameters			
<i>City-mean reporting (<math>\beta_0</math>)</i>			
Intercept	-1.330***	0.044	-29.87
Number of inhabitants	-0.000**	0.000	-2.92
	0.001	0.002	0.48
Mean income in city	0.000	0.000	-0.05
% Voters of right wing parties	-0.001	0.004	-0.102
<i>Effect of financial loss on reporting (<math>\beta_1</math>)</i>			
Intercept	0.574***	0.026	22.08
Number of inhabitants	0.000	0.000	0.91
Crimes per 1000 inhabitants	-0.002	0.001	-1.66
Mean income in city	0.000	0.000	0.60
% Voters of right wing parties	-0.005*	0.002	-2.11
Analysis of variance			
	Variance	$\chi^2$ (df)	P-value
Intercept (city-mean reporting) ( $\beta_0$ )	0.043	415 (400)	0.292
Slope (financial loss) ( $\beta_1$ )	0.023	418 (400)	0.253

N\_cities = 405

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

Table 3  
Individual-level effects on reporting crimes to the police by the victim (logistic regression; % model improvement and direction of effect)

	Bicycle theft	Theft out of car	Car damage	Robbery (no violence)	Attempted burglary	Successful Burglary	Violent threat
<i>Socio-demographic factors</i>							
Sex	ns	ns	ns	[-] 5	ns	ns	[-] 9
Age	ns	ns	ns	ns	9	[-] 2	18
Dutch origin	2	7	1	ns	ns	ns	ns
Education level	[-] 9	ns	ns	ns	ns	ns	[-] 9
Working status	[-] 2	ns	ns	ns	ns	ns	8
House owner	8	5	ns	ns	[-] 2	ns	ns
Household size	ns	ns	1	ns	ns	ns	ns
<i>Previous victimization</i>							
Physical threat ever	[-] 4	[-] 7	[-] 2	ns	ns	[-] 3	ns
Victimizations last year	[-] 2	ns	ns	[-] 18	ns	[-] 13	ns
<i>Fear of crime</i>							
feeling unsafe	ns	ns	ns	[-] 4	ns	ns	ns
<i>Perception of neighborhood</i>							
social problems	ns	ns	ns	ns	6	4	ns
police performance	ns	ns	ns	ns	ns	ns	ns
<i>Crime-related factors</i>							
Financial loss	74	82	96	72	77	72	--
Emotional problems	--	--	--	--	6	7	37
Physical injury	--	--	--	--	--	--	19
<i>Model Chi Square (df)</i>							
	700 (7)	212 (4)	1103 (6)	94 (4)	247 (5)	187 (6)	103 (6)
<i>N</i>							
	3963	1253	6655	802	1426	815	1262
<i>Pseudo-R<sup>2</sup></i>							
	.15	.15	.14	.11	.15	.19	.08

ns: no significant effect: p > .05  
--: not asked