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

Hand out

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Table 1 Reporting crimes to the police by actor (%)¹

| | 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

¹ 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

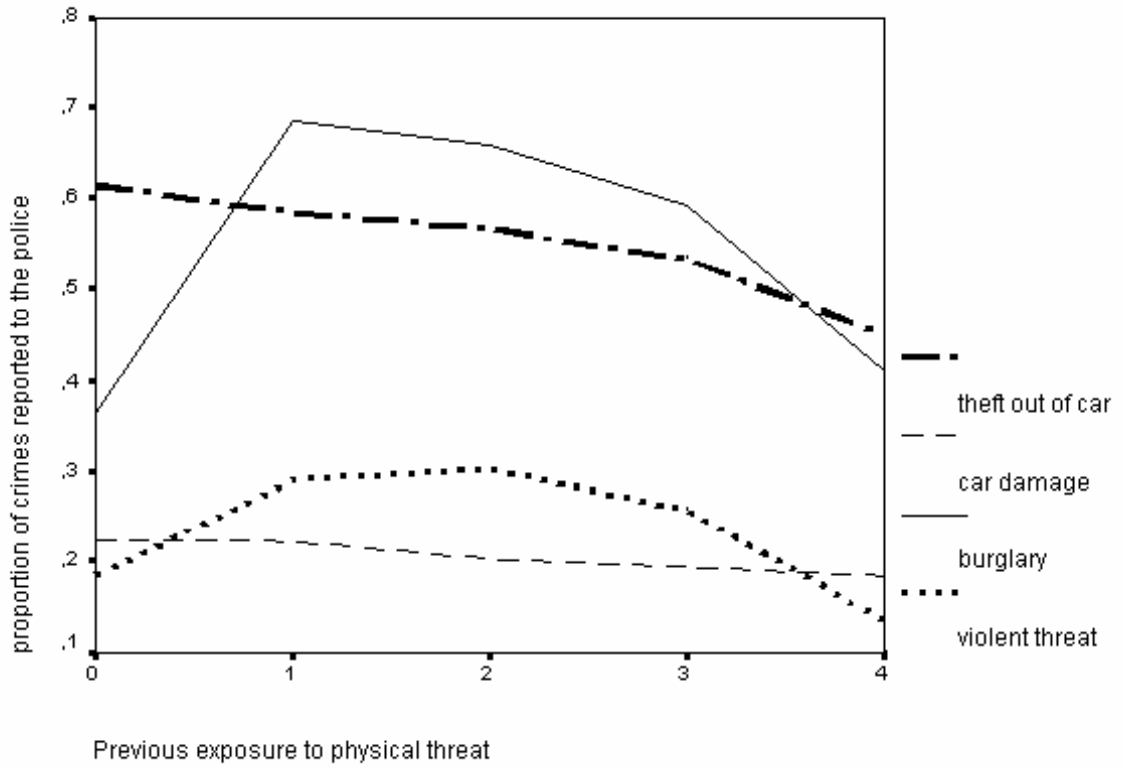


Table 4

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

| | N (victims) | N (cities) | χ^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)¹

| | Reporting bicycle theft | | Reporting car damage | |
|-----------------------------|-------------------------|---------|----------------------|---------|
| | χ^2 (58 df) | p-value | χ^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 |

¹ 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 (β_0)</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 (β_1)</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 | χ^2 (df) | P-value |
| Intercept (city-mean reporting) (β_0) | | 0.043 | 415 (400) | 0.292 |
| Slope (financial loss) (β_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-R²</i> | | | | | | | |
| | .15 | .15 | .14 | .11 | .15 | .19 | .08 |

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