

Table A.1. Data for Figure 1; predicted probabilities (P) and their 95% confidence intervals (CI)

| Older sibling crime | Age difference (months) | P | 95% CI | |
|---------------------|-------------------------|-------|--------|-------|
| | | | Lower | Upper |
| No | < 13 | 0.153 | 0.139 | 0.166 |
| | 13-16 | 0.146 | 0.140 | 0.151 |
| | 17-20 | 0.135 | 0.131 | 0.139 |
| | 21-24 | 0.131 | 0.127 | 0.135 |
| | 25-28 | 0.130 | 0.126 | 0.135 |
| | 29-32 | 0.132 | 0.127 | 0.137 |
| | 33-36 | 0.129 | 0.124 | 0.135 |
| | 37-40 | 0.135 | 0.129 | 0.143 |
| | 41-44 | 0.136 | 0.129 | 0.143 |
| | 45-48 | 0.133 | 0.126 | 0.141 |
| > 48 | 0.129 | 0.125 | 0.133 | |
| Yes | < 13 | 0.318 | 0.286 | 0.350 |
| | 13-16 | 0.299 | 0.284 | 0.314 |
| | 17-20 | 0.283 | 0.270 | 0.296 |
| | 21-24 | 0.267 | 0.255 | 0.280 |
| | 25-28 | 0.253 | 0.240 | 0.267 |
| | 29-32 | 0.259 | 0.244 | 0.274 |
| | 33-36 | 0.253 | 0.237 | 0.270 |
| | 37-40 | 0.229 | 0.211 | 0.247 |
| | 41-44 | 0.231 | 0.210 | 0.251 |
| | 45-48 | 0.225 | 0.203 | 0.247 |
| > 48 | 0.230 | 0.219 | 0.241 | |

Table A.2. Data for Figure 2; predicted probabilities (P) and their 95% confidence intervals (CI)

| Older sibling crime | Age difference (months) | <u>Both boys</u> | | | <u>Both girls</u> | | | <u>Boy (o) - Girl (y)</u> | | | <u>Girl (o) -Boy (y)</u> | | |
|------------------------|----------------------------|------------------|--------|-------|-------------------|--------|-------|---------------------------|--------|-------|--------------------------|--------|-------|
| | | P | 95% CI | | P | 95% CI | | P | 95% CI | | P | 95% CI | |
| No | < 13 | 0.169 | 0.140 | 0.197 | 0.082 | 0.062 | 0.102 | 0.117 | 0.093 | 0.141 | 0.236 | 0.206 | 0.266 |
| | 13-16 | 0.182 | 0.170 | 0.194 | 0.096 | 0.087 | 0.105 | 0.098 | 0.088 | 0.107 | 0.205 | 0.193 | 0.217 |
| | 17-20 | 0.165 | 0.156 | 0.175 | 0.086 | 0.079 | 0.093 | 0.094 | 0.087 | 0.101 | 0.194 | 0.184 | 0.203 |
| | 21-24 | 0.161 | 0.152 | 0.169 | 0.089 | 0.082 | 0.095 | 0.089 | 0.082 | 0.096 | 0.183 | 0.175 | 0.192 |
| | 25-28 | 0.154 | 0.145 | 0.164 | 0.093 | 0.086 | 0.101 | 0.088 | 0.081 | 0.096 | 0.183 | 0.173 | 0.193 |
| | 29-32 | 0.165 | 0.154 | 0.175 | 0.086 | 0.078 | 0.094 | 0.088 | 0.079 | 0.096 | 0.188 | 0.177 | 0.199 |
| | 33-36 | 0.154 | 0.142 | 0.165 | 0.089 | 0.081 | 0.098 | 0.083 | 0.075 | 0.092 | 0.189 | 0.177 | 0.200 |
| | 37-40 | 0.182 | 0.168 | 0.196 | 0.084 | 0.074 | 0.094 | 0.083 | 0.072 | 0.094 | 0.190 | 0.176 | 0.203 |
| | 41-44 | 0.172 | 0.157 | 0.188 | 0.099 | 0.086 | 0.111 | 0.090 | 0.077 | 0.102 | 0.181 | 0.165 | 0.197 |
| | 45-48 | 0.168 | 0.151 | 0.186 | 0.085 | 0.072 | 0.098 | 0.092 | 0.078 | 0.106 | 0.186 | 0.169 | 0.204 |
| > 48 | 0.161 | 0.152 | 0.169 | 0.089 | 0.082 | 0.095 | 0.083 | 0.077 | 0.090 | 0.181 | 0.173 | 0.190 | |
| Yes | < 13 | 0.421 | 0.358 | 0.484 | 0.260 | 0.187 | 0.333 | 0.191 | 0.147 | 0.235 | 0.410 | 0.323 | 0.496 |
| | 13-16 | 0.407 | 0.378 | 0.436 | 0.236 | 0.201 | 0.271 | 0.178 | 0.156 | 0.199 | 0.365 | 0.324 | 0.406 |
| | 17-20 | 0.400 | 0.376 | 0.425 | 0.229 | 0.199 | 0.259 | 0.173 | 0.155 | 0.191 | 0.300 | 0.268 | 0.333 |
| | 21-24 | 0.344 | 0.321 | 0.366 | 0.218 | 0.188 | 0.249 | 0.172 | 0.154 | 0.191 | 0.331 | 0.297 | 0.365 |
| | 25-28 | 0.322 | 0.296 | 0.347 | 0.194 | 0.163 | 0.225 | 0.174 | 0.154 | 0.193 | 0.311 | 0.275 | 0.348 |
| | 29-32 | 0.346 | 0.317 | 0.374 | 0.201 | 0.166 | 0.235 | 0.168 | 0.146 | 0.191 | 0.299 | 0.259 | 0.339 |
| | 33-36 | 0.339 | 0.307 | 0.370 | 0.224 | 0.182 | 0.265 | 0.153 | 0.130 | 0.175 | 0.295 | 0.251 | 0.340 |
| | 37-40 | 0.298 | 0.265 | 0.332 | 0.175 | 0.133 | 0.216 | 0.140 | 0.114 | 0.165 | 0.304 | 0.252 | 0.357 |
| | 41-44 | 0.310 | 0.270 | 0.349 | 0.185 | 0.138 | 0.233 | 0.146 | 0.116 | 0.175 | 0.269 | 0.216 | 0.322 |
| | 45-48 | 0.299 | 0.257 | 0.341 | 0.183 | 0.130 | 0.236 | 0.133 | 0.102 | 0.164 | 0.284 | 0.224 | 0.343 |
| > 48 | 0.306 | 0.285 | 0.327 | 0.152 | 0.128 | 0.175 | 0.154 | 0.138 | 0.169 | 0.282 | 0.253 | 0.311 | |

Table A.3. Data for Figure 3; predicted probabilities (P) and their 95% confidence intervals (CI)

| Age difference (months) | Model ¹ | P | 95% CI | |
|-------------------------|--------------------|-------|--------|-------|
| | | | Lower | Upper |
| < 13 | M1 | 0.081 | 0.059 | 0.104 |
| 13-16 | M1 | 0.068 | 0.058 | 0.078 |
| 17-20 | M1 | 0.055 | 0.047 | 0.063 |
| 21-24 | M1 | 0.046 | 0.039 | 0.054 |
| 25-28 | M1 | 0.032 | 0.025 | 0.040 |
| 29-32 | M1 | 0.028 | 0.020 | 0.036 |
| 33-36 | M1 | 0.027 | 0.019 | 0.036 |
| 37-40 | M1 | 0.019 | 0.010 | 0.028 |
| 41-44 | M1 | 0.017 | 0.006 | 0.028 |
| 45-48 | M1 | 0.010 | -0.001 | 0.021 |
| > 48 | M1 | 0.011 | 0.006 | 0.017 |
| < 13 | M2 | 0.081 | 0.059 | 0.103 |
| 13-16 | M2 | 0.068 | 0.058 | 0.078 |
| 17-20 | M2 | 0.055 | 0.047 | 0.062 |
| 21-24 | M2 | 0.046 | 0.039 | 0.054 |
| 25-28 | M2 | 0.032 | 0.025 | 0.040 |
| 29-32 | M2 | 0.028 | 0.020 | 0.036 |
| 33-36 | M2 | 0.027 | 0.019 | 0.036 |
| 37-40 | M2 | 0.019 | 0.010 | 0.028 |
| 41-44 | M2 | 0.017 | 0.006 | 0.028 |
| 45-48 | M2 | 0.010 | -0.001 | 0.021 |
| > 48 | M2 | 0.011 | 0.006 | 0.017 |

¹Time-varying covariates: age (M1/M2), coresident parents, coresident siblings, parental unemployment

Table A.4. The temporal ordering of earliest police-reported offending among older and younger siblings (%) according to age difference among sibling pairs where at least one sibling committed a crime in 1996-2017 (n=65,663)

| Age difference (months) | Older first | Same year | Younger first | Younger did not commit | Older did not commit |
|-------------------------|-------------|-----------|---------------|------------------------|----------------------|
| < 13 | 13.4 | 6.0 | 12.1 | 32.6 | 35.9 |
| 13-16 | 11.6 | 4.6 | 8.9 | 34.0 | 41.0 |
| 17-20 | 10.7 | 3.8 | 7.1 | 36.5 | 41.8 |
| 21-24 | 10.5 | 3.3 | 7.0 | 37.1 | 42.0 |
| 25-28 | 10.0 | 2.8 | 6.5 | 40.0 | 40.8 |
| 29-32 | 10.4 | 2.7 | 6.4 | 39.0 | 41.5 |
| 33-36 | 11.3 | 2.9 | 5.4 | 39.7 | 40.8 |
| 37-40 | 10.5 | 2.1 | 5.6 | 40.7 | 41.1 |
| 41-44 | 11.5 | 2.0 | 5.4 | 40.7 | 40.4 |
| 45-48 | 12.7 | 1.5 | 5.2 | 41.9 | 38.7 |
| > 48 | 14.4 | 1.4 | 3.5 | 44.6 | 36.1 |
| Total | 11.4 | 2.9 | 6.3 | 39.2 | 40.3 |

Figure A.1. Predicted probabilities of crime at ages 11-20 by older sibling crime and sibling age difference (n=213,911); based on a generalized additive model (fitting method: restricted maximum likelihood) that features a smooth function of age difference (measured at the precision of one month) and adjusts for all control variables

