

Supplementary material

Table 4. Intraclass Correlation Coefficients at the neighbourhood and primary school level for the unconditional models of primary school advice

| | Neighbourhoods as level-2 units | Primary schools as level-2 units | Neighbourhoods and primary schools as cross- classified level-2 units | Neighbourhoods and primary schools as grouped level-2 units |
|-----------------------------------|------------------------------------|-------------------------------------|---|---|
| Neighbourhood | 0.184 | | 0.033 | |
| Primary school | | 0.232 | 0.173 | |
| Neighbourhood x primary school | | | | 0.294 |

Sources: CBS (2007-2016); OIS (2017), own calculations

Table 5. Multilevel ordered logistic models of individual, neighbourhood and primary school effects for primary school advice

| | Model 1 | Model 2 | Model 3 | Model 4 |
|---|----------------------|----------------------|----------------------|----------------------|
| <i>Fixed effects</i> | | | | |
| <i>Level 1: Individual level</i> | | | | |
| Schoolyear cohort (ref. 2007/'08) | | | | |
| 2008/'09 | 0.152*** (0.043) | 0.153*** (0.043) | 0.161*** (0.043) | 0.156*** (0.044) |
| 2009/'10 | 0.095* (0.041) | 0.095* (0.041) | 0.097* (0.042) | 0.098* (0.042) |
| 2010/'11 | 0.144*** (0.041) | 0.144*** (0.041) | 0.143*** (0.041) | 0.137*** (0.041) |
| Age | -0.932*** (0.029) | -0.932*** (0.029) | -0.949*** (0.030) | -0.952*** (0.030) |
| Gender (ref. male) | -0.066* (0.029) | -0.066* (0.029) | -0.082** (0.029) | -0.079** (0.030) |
| Migrant background (ref. native Dutch) | | | | |
| Surinamese/Antillean | -0.915*** (0.051) | -0.899*** (0.051) | -0.847*** (0.052) | -0.811*** (0.052) |
| Moroccan/Turkish | -0.670*** (0.047) | -0.637*** (0.047) | -0.598*** (0.050) | -0.555*** (0.051) |
| Other non-western migrant background | -0.359*** (0.051) | -0.342*** (0.051) | -0.296*** (0.052) | -0.253*** (0.053) |
| Western migrant background | 0.066 (0.057) | 0.074 (0.057) | 0.070 (0.057) | 0.090 (0.058) |
| Parental education (ref. low) | | | | |
| Intermediate | 0.603*** (0.037) | 0.596*** (0.037) | 0.542*** (0.038) | 0.544*** (0.039) |
| High | 1.427*** (0.045) | 1.418*** (0.045) | 1.313*** (0.046) | 1.316*** (0.047) |
| Standardized household income (x1000) | 0.017*** (0.001) | 0.016*** (0.001) | 0.016*** (0.001) | 0.015*** (0.001) |
| <i>Level 2: Neighbourhood level</i> | | | | |
| Neighbourhood SES (ref. medium) | | | | |
| Very Low | | -0.333** (0.108) | | -0.188** (0.072) |
| Low | | -0.251* (0.108) | | -0.174* (0.072) |

| | | | | |
|--|----------|----------|----------|-----------|
| | | (0.112) | | (0.073) |
| High | | 0.189 | | 0.063 |
| | | (0.112) | | (0.075) |
| Very High | | 0.437*** | | 0.194* |
| | | (0.117) | | (0.082) |
| <i>Level 2: Primary school level</i> | | | | |
| Number of pupils | | | -0.000 | -0.000 |
| | | | (0.000) | (0.000) |
| Denomination (ref. public) | | | | |
| General | | | 0.205 | 0.259** |
| | | | (0.126) | (0.085) |
| Protestant | | | -0.205* | -0.195** |
| | | | (0.091) | (0.067) |
| Catholic | | | -0.022 | -0.047 |
| | | | (0.089) | (0.065) |
| Islamic | | | 0.423* | 0.454*** |
| | | | (0.195) | (0.126) |
| Other | | | -0.320* | -0.357*** |
| | | | (0.128) | (0.095) |
| Primary school SES (ref. medium) | | | | |
| Very Low | | | -0.239* | -0.210** |
| | | | (0.101) | (0.081) |
| Low | | | -0.078 | -0.021 |
| | | | (0.103) | (0.079) |
| High | | | 0.315** | 0.260*** |
| | | | (0.101) | (0.072) |
| Very High | | | 0.791*** | 0.706*** |
| | | | (0.108) | (0.077) |
| Random effects | | | | |
| <i>Neighbourhood level</i> | 0.153*** | 0.077*** | | |
| | (0.030) | (0.017) | | |
| <i>Primary school level</i> | | | 0.144*** | |
| | | | (0.020) | |
| <i>Neighbourhood x school group</i> | | | | 0.193*** |
| | | | | (0.026) |
| ICC | | | | |
| <i>Neighbourhood level</i> | 0.044 | 0.023 | | |
| <i>Primary school level</i> | | | 0.044 | |
| <i>Neighbourhood x primary school</i> | | | | 0.059 |
| N | 16137 | 16137 | 16137 | 16137 |
| * p<0.05, ** p<0.01, *** p<0.001 | | | | |
| Sources: CBS (2007 - 2016); OIS (2017), own calculations | | | | |

Table 6. Multilevel ordered logistic models of individual, neighbourhood and primary school effects for primary school advice, including cross-level interaction effects

| | Model 2a | Model 3a | Model 4a | Model 4b |
|-----------------------------------|----------|----------|----------|----------|
| <i>Fixed effects</i> | | | | |
| <i>Level 1: Individual level</i> | | | | |
| Schoolyear cohort (ref. 2007/'08) | | | | |
| 2008/'09 | 0.155*** | 0.163*** | 0.157*** | 0.158*** |
| | (0.043) | (0.043) | (0.044) | (0.044) |
| 2009/'10 | 0.093* | 0.097* | 0.096* | 0.097* |
| | (0.041) | (0.042) | (0.042) | (0.042) |

| | | | | |
|--|----------------------|----------------------|----------------------|----------------------|
| 2010/'11 | 0.143*** (0.041) | 0.144*** (0.041) | 0.136** (0.042) | 0.136** (0.042) |
| Age | -0.933*** (0.029) | -0.948*** (0.030) | -0.953*** (0.030) | -0.952*** (0.030) |
| Gender (ref. male) | -0.065* (0.029) | -0.083** (0.029) | -0.078** (0.030) | -0.080** (0.030) |
| Migrant background (ref. native Dutch) | | | | |
| Surinamese/Antillean | -0.881*** (0.051) | -0.818*** (0.052) | -0.799*** (0.052) | -0.783*** (0.053) |
| Moroccan/Turkish | -0.628*** (0.047) | -0.575*** (0.050) | -0.550*** (0.051) | -0.535*** (0.051) |
| Other non-western migrant background | -0.330*** (0.051) | -0.273*** (0.052) | -0.243*** (0.053) | -0.231*** (0.053) |
| Western migrant background | 0.078 (0.057) | 0.077 (0.058) | 0.095 (0.058) | 0.095 (0.058) |
| Parental education (ref. low) | | | | |
| Intermediate | 0.816*** (0.095) | 0.501*** (0.075) | 0.712*** (0.098) | 0.505*** (0.076) |
| High | 1.694*** (0.097) | 1.562*** (0.094) | 1.522*** (0.103) | 1.560*** (0.096) |
| Standardized household income (x1000) | 0.016*** (0.001) | 0.015*** (0.001) | 0.015*** (0.001) | 0.015*** (0.001) |
| <i>Level 2: Neighbourhood level</i> | | | | |
| Neighbourhood SES (ref. medium) | | | | |
| Very Low | -0.103 (0.125) | | 0.019 (0.098) | -0.186** (0.071) |
| Low | -0.075 (0.130) | | -0.052 (0.102) | -0.175* (0.072) |
| High | 0.266 (0.144) | | 0.087 (0.119) | 0.058 (0.075) |
| Very High | 0.621*** (0.162) | | 0.255 (0.139) | 0.192* (0.082) |
| <i>Level 2: Primary school level</i> | | | | |
| Number of pupils | | -0.000 (0.000) | -0.000 (0.000) | -0.000 (0.000) |
| Denomination (ref. public) | | | | |
| General | | 0.198 (0.125) | 0.251** (0.085) | 0.251** (0.085) |
| Protestant | | -0.198* (0.090) | -0.192** (0.067) | -0.186** (0.067) |
| Catholic | | -0.009 (0.089) | -0.039 (0.065) | -0.037 (0.064) |
| Islamic | | 0.411* (0.195) | 0.441*** (0.126) | 0.437*** (0.126) |
| Other | | -0.309* (0.128) | -0.356*** (0.095) | -0.354*** (0.095) |
| Primary school SES (ref. medium) | | | | |
| Very Low | | -0.157 (0.111) | -0.222** (0.081) | -0.123 (0.093) |
| Low | | 0.040 (0.113) | -0.023 (0.079) | 0.103 (0.093) |
| High | | 0.122 (0.121) | 0.255*** (0.072) | 0.076 (0.099) |
| Very High | | 0.715*** | 0.696*** | 0.614*** |

| | | (0.145) | (0.077) | (0.126) |
|--|----------------------|----------------------|---------------------|----------------------|
| <i>Cross-level interaction effects</i> | | | | |
| Parental education (ref. low) x neighbourhood SES (ref. medium) | | | | |
| Intermediate x Very Low | -0.394*** (0.113) | | -0.335** (0.116) | |
| Intermediate x Low | -0.282* (0.115) | | -0.199 (0.119) | |
| Intermediate x High | -0.012 (0.134) | | 0.038 (0.139) | |
| Intermediate x Very High | -0.115 (0.150) | | -0.026 (0.154) | |
| High x Very Low | -0.366** (0.127) | | -0.379** (0.134) | |
| High x Low | -0.188 (0.126) | | -0.120 (0.133) | |
| High x High | -0.208 (0.132) | | -0.110 (0.140) | |
| High x Very High | -0.340* (0.148) | | -0.144 (0.153) | |
| Parental education (ref. low) x primary school SES (ref. medium) | | | | |
| Intermediate x Very Low | | -0.104 (0.111) | | -0.108 (0.112) |
| Intermediate x Low | | -0.173 (0.108) | | -0.162 (0.109) |
| Intermediate x High | | 0.338** (0.110) | | 0.331** (0.112) |
| Intermediate x Very High | | 0.316* (0.135) | | 0.321* (0.137) |
| High x Very Low | | -0.583** (0.180) | | -0.587** (0.183) |
| High x Low | | -0.593*** (0.150) | | -0.578*** (0.152) |
| High x High | | 0.084 (0.122) | | 0.068 (0.125) |
| High x Very High | | -0.172 (0.140) | | -0.146 (0.143) |
| Random effects | | | | |
| <i>Neighbourhood level</i> | 0.077*** (0.017) | | | |
| <i>Primary school level</i> | | 0.143*** (0.020) | | |
| <i>Neighbourhood x school group</i> | | | 0.191*** (0.026) | 0.188*** (0.026) |
| ICC | | | | |
| <i>Neighbourhood level</i> | 0.023 | | | |
| <i>Primary school level</i> | | 0.042 | | |
| <i>Neighbourhood x primary school</i> | | | 0.055 | 0.054 |
| N | 16137 | 16137 | 16137 | 16137 |

* p<0.05, ** p<0.01, *** p<0.001

Sources: CBS (2007 - 2016); OIS (2017), own calculations