**Appendix**

Table A0. Subcomponents of the LTC index

The LTC index combines information on three indicators:

1. Long-term care beds in institutions and hospitals, per 1,000 population aged 65 and over. This information was compiled with data from the OECD’s report “Health at a Glance” available at <https://www.oecd-ilibrary.org/social-issues-migration-health/health-at-a-glance_19991312>].
2. Long-term care workers as a share of the population aged 65 and over. Data came from the same report mentioned above.
3. Percentage of population aged 65 years and over receiving long-term care. We compiled data from OECD Health Statistics available at [<http://dx.doi.org/10.1787/health-data-en>].

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| **Country** | **Beds** | **Year** | **LTC workers** | **year** | **Expenditure** | **Year** | **LTC Index** |
| Austria | 0.13 | 2017 | -0.15 | 2016 | 0.17 | 2018 | 0.14 |
| Germany | 0.34 | 2017 | 0.12 | 2016 | 0.65 | 2018 | 1.10 |
| Belgium | 1.10 | 2019 | 0.04 | 2016 | 1.86 | 2018 | 2.99 |
| Luxembourg | 1.79 | 2017 | 0.87 | 2016 | -0.16 | 2018 | 2.50 |
| France | 0.29 | 2017 | -0.62 | 2016 | 0.40 | 2018 | 0.06 |
| Sweden | 1.21 | 2017 | 2.09 | 2016 | 2.06 | 2018 | 5.36 |
| Denmark | -0.51 | 2019 | 0.93 | 2016 | 1.19 | 2018 | 1.61 |
| Netherlands | 1.46 | 2017 | 0.90 | 2016 | 1.87 | 2018 | 4.24 |
| Spain | -0.54 | 2011 | -0.12 | 2011 | -0.34 | 2013 | -1.01 |
| Italy | -1.47 | 2017 | -0.75 | 2016 | -0.37 | 2018 | -2.58 |
| Greece | -2.23 | 2017 | -1.16 | 2016 | -1.00 | 2018 | -4.39 |
| Czech Republic | -0.04 | 2017 | -0.64 | 2016 | -0.01 | 2018 | -0.69 |
| Poland | -1.84 | 2017 | -1.12 | 2016 | -0.76 | 2018 | -3.72 |
| Slovenia | 0.33 | 2017 | -0.64 | 2016 | -0.29 | 2018 | -0.60 |
| Estonia | 0.10 | 2017 | 0.17 | 2016 | -0.79 | 2018 | -0.52 |
| Portugal | -1.41 | 2017 | -1.04 | 2016 | -0.90 | 2018 | -3.36 |
| United Kingdom | 0.20 | 2011 | -0.11 | 2011 | 0.25 | 2013 | -1.20 |
| Finland | 0.57 | 2017 | 0.80 | 2016 | 0.37 | 2018 | 3.10 |
| Hungary | 0.23 | 2017 | -0.66 | 2016 | -0.93 | 2018 | -1.19 |
| Ireland | 0.04 | 2017 | -0.18 | 2016 | 0.33 | 2018 | -1.35 |
| Latvia | -1.59 | 2017 | -0.91 | 2019 | -0.89 | 2018 | -3.84 |
| Lithuania | -0.41 | 2017 | -0.96 | 2019 | -0.60 | 2018 | -1.97 |
| Slovak Republic | 0.39 | 2017 | -0.85 | 2016 | -1.17 | 2018 | -1.04 |
| Norway | -0.08 | 2017 | 2.17 | 2016 | 2.09 | 2018 | 6.25 |
| Bulgaria | 0.23 | 2017 | -0.66 | 2016 | -1.00 | 2020 | -2.12 |
| Croatia | 0.23 | 2017 | -0.66 | 2016 | -0.97 | 2018 | -1.41 |
| Iceland | 0.54 | 2017 | 1.84 | 2019 | 0.78 | 2018 | 2.09 |
| Romania | 0.23 | 2017 | -0.66 | 2016 | -0.85 | 2018 | -0.22 |

Table A1. List of Macro-Indicators and country values

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
|  | Youth Unemployment | Care paid leave | Confidence in health system | Duty to care | Old age care regime |
| Austria | -0.79 | 1 | 85.47 | 40.74 | Moderate DF/SF |
| Germany | -1.07 | 1 | 38.79 | 45.22 | Moderate DF/SF |
| Belgium | -0.15 | 1 | 94.95 | 80.27 | Moderate DF/SF |
| Luxembourg | -0.02 | 1 | 82.06 | 84.37 | Moderate DF/SF |
| France | 0.53 | 1 | 81.34 | 73.11 | Moderate DF/SF |
| Sweden | 0.01 | 1 | 76.47 | 30.66 | Strong DF/SF |
| Denmark | -0.54 | 1 | 80.59 | 24.83 | Strong DF/SF |
| Netherlands | -1.06 | 1 | 72.63 | 19.14 | Strong DF/SF |
| Spain | 2.75 | 1 | 78.90 | 53.02 | Moderate DF/SF |
| Italy | 2.03 | 0 | 58.56 | 75.63 | FbD |
| Greece | 2.79 | 0 | 51.23 | 74.23 | FbD |
| Czech Republic | -0.80 | 1 | 42.35 | 69.86 | FbD |
| Poland | -0.46 | 1 | 49.60 | 73.69 | FbD |
| Slovenia | -0.70 | 1 | 68.75 | 57.83 | Moderate DF/SF |
| Estonia | -0.45 | 1 | 54.69 | 53.19 | FbD |
| Portugal | 0.60 | 0 | 52.66 | 79.04 | FbD |
| Finland | -0.07 | 1 | 80.52 | 21.11 | Strong DF/SF |
| Hungary | -0.45 | 0 | 40.46 | 59.96 | FbD |
| Ireland | -0.20 | 1 | 40.15 | 51.10 | Moderate DF/SF |
| Latvia | -0.30 | 0 | 50.24 | 56.67 | FbD |
| Slovak Republic | 0.29 | 0 | 56.85 | 72.79 | FbD |
| Norway | -0.74 | 1 | 63.63 | 31.49 | Strong DF/SF |
| Bulgaria | -0.15 | 0 | 40.46 | 59.96 | FbD |
| Croatia | 0.78 | 0 | 40.46 | 59.96 | FbD |
| Iceland | -1.02 | 1 | 94.88 | 29.02 | Strong DF/SF |
| Romania | 0.02 | 0 | 40.46 | 59.96 | FbD |
| United Kingdom | 0.34 | 0 | 85.34 | 40.43 | Moderate DF/SF |

Sources: LTC Index: OECD; Youth unemployment: Eurostat; Care Paid Leave: Colombi et al. (2011); Confidence and Duty: European Values Study; Care Regime: Van Damme and Spijker, 2023.

Table A2. P-values for the gap between carers and non-carers in being NEET, having low education and reporting fair/bad self-perceived health

|  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  |  | % of young NEET | | Sig. Difference | % of primary and lower secondary education among young adults | | Sig. Difference | Prevalence of fair/bad self-perceived health | | Sig. Difference |
| Year | C. | Non-carers | Carers | P-value | Non-carers | Carers | P-value | Non-carers | Carers | P-value |
| 2019 | AT | 14.74 | 14.42 | 0.067 | 11.85 | 7.31 | 0.000 | 8.35 | 9.19 | 0.341 |
| BE | 7.66 | 11.31 | 0.035 | 20.07 | 23.52 | 0.000 | 5.46 | 18.59 | 0.000 |
| BG | 24.35 | 30.46 | 0.029 | 20.74 | 21.74 | 0.000 | 3.00 | 2.12 | 0.000 |
| CZ | 15.58 | 17.87 | 0.816 | 18.14 | 10.01 | 0.000 | 6.16 | 3.44 | 0.000 |
| 2020 | DE | 10.14 | 9.25 | 0.000 | 21.31 | 20.27 | 0.000 | 12.50 | 13.22 | 0.000 |
| 2019 | DK | 9.01 | 18.21 | 0.003 | 14.71 | 31.26 | 0.490 | 15.26 | 24.53 | 0.005 |
| EE | 14.00 | 12.58 | 0.075 | 23.54 | 38.78 | 0.019 | 15.73 | 12.46 | 0.000 |
| EL | 23.50 | 32.40 | 0.000 | 6.66 | 3.99 | 0.000 | 2.61 | 9.38 | 0.000 |
| 2011 | ES | 18.42 | 20.18 | 0.000 | 29.48 | 30.03 | 0.000 | 7.80 | 7.96 | 0.291 |
|  | FI | 11.82 | 13.82 | 0.521 | 25.10 | 28.93 | 0.051 | 17.66 | 18.82 | 0.000 |
| FR | 12.04 | 15.73 | 0.147 | 25.12 | 33.33 | 0.000 | 10.64 | 12.68 | 0.004 |
| HR | 24.45 | 25.18 | 0.675 | 11.78 | 14.54 | 0.000 | 4.80 | 4.64 | 0.000 |
| HU | 17.58 | 32.70 | 0.134 | 19.36 | 26.18 | 0.000 | 12.18 | 25.33 | 0.014 |
| IE | 31.84 | 35.91 | 0.019 | 5.28 | 4.97 | 0.251 | 5.37 | 29.18 | 0.670 |
| IS | 6.15 | 9.02 | 0.028 | 24.17 | 35.49 | 0.739 | 15.20 | 19.79 | 0.149 |
| IT | 24.33 | 25.43 | 0.005 | 23.72 | 17.13 | 0.000 | 5.77 | 6.10 | 0.000 |
| LT | 14.06 | 21.99 | 0.019 | 11.01 | 7.68 | 0.000 | 12.59 | 13.61 | 0.000 |
| LU | 10.06 | 5.59 | 0.002 | 15.06 | 12.33 | 0.000 | 15.83 | 14.79 | 0.001 |
| LV | 15.70 | 14.33 | 0.084 | 21.34 | 20.74 | 0.000 | 15.75 | 17.01 | 0.000 |
| 2019 | NL | 6.76 | 5.63 | 0.000 | 18.70 | 21.96 | 0.000 | 12.67 | 22.87 | 0.198 |
| NO | 7.28 | 10.05 | 0.000 | 35.35 | 36.12 | 0.766 | 13.42 | 20.20 | 0.032 |
| PL | 15.20 | 21.07 | 0.000 | 15.01 | 19.55 | 0.000 | 7.07 | 14.17 | 0.000 |
| PT | 12.49 | 21.10 | 0.000 | 20.18 | 19.64 | 0.000 | 14.29 | 22.42 | 0.125 |
| RO | 19.61 | 21.06 | 0.003 | 21.82 | 22.57 | 0.001 | 2.09 | 1.37 | 0.009 |
| SE | 11.87 | 18.15 | 0.000 | 23.57 | 33.30 | 0.000 | 18.70 | 28.31 | 0.000 |
| SI | 7.62 | 9.73 | 0.068 | 14.39 | 13.89 | 0.000 | 9.35 | 9.41 | 0.000 |
| SK | 17.62 | 11.01 | 0.005 | 14.02 | 6.57 | 0.000 | 5.39 | 8.50 | 0.043 |
| 2013 | UK | 14.88 | 26.40 | 0.000 | 14.09 | 19.68 | 0.235 | 8.54 | 17.24 | 0.000 |

Wave 3 EHIS, except UK (wave 2) and Spain (ENSE)

Table A3. Multilevel Logistic Regression of being in NEET status

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | |  | **Model 2** | | | **Model 3** | | |
|  | |  | *OR* | *SE* | *P-value* | *OR* | *SE* | *p-value* |
| Intensity of care (No care) | | Less than 10 hours | 1.07 | 0.06 | 0.278 | 1.27 | 0.32 | 0.348 |
| 10-20 hours | 1.25 | 0.16 | 0.080 | 0.50 | 0.29 | 0.237 |
| More than 20 hours | 1.34 | 0.17 | 0.019 | 1.25 | 0.59 | 0.630 |
| Sex (Men) | | Women | 1.63 | 0.05 | 0.000 | 1.64 | 0.05 | 0.000 |
| Age (18-19) | | 20-24 | 0.25 | 0.01 | 0.000 | 0.25 | 0.01 | 0.000 |
| 25-29 | 0.56 | 0.02 | 0.000 | 0.56 | 0.02 | 0.000 |
| Education (Primary) | | Lower secondary | 0.44 | 0.04 | 0.000 | 0.43 | 0.04 | 0.000 |
| Upper secondary | 0.23 | 0.02 | 0.000 | 0.23 | 0.02 | 0.000 |
| Tertiary | 0.15 | 0.01 | 0.000 | 0.15 | 0.01 | 0.000 |
| Household type (One-person) | | Lone parent | 2.27 | 0.18 | 0.000 | 2.28 | 0.18 | 0.000 |
| Couple without children | 1.29 | 0.10 | 0.001 | 1.30 | 0.10 | 0.001 |
| Couple with children | 2.44 | 0.18 | 0.000 | 2.43 | 0.18 | 0.000 |
| Other types of HH | 1.97 | 0.15 | 0.000 | 1.97 | 0.15 | 0.000 |
| Number of persons living in the household | | | 1.08 | 0.02 | 0.000 | 1.08 | 0.02 | 0.000 |
| Birth Place (Native-born) | | Born in EU | 1.12 | 0.10 | 0.188 | 1.12 | 0.10 | 0.208 |
| Born outside EU | 1.20 | 0.07 | 0.003 | 1.20 | 0.07 | 0.002 |
| No info | 0.72 | 0.25 | 0.338 | 0.66 | 0.19 | 0.142 |
| Care Regime (Strong DF/SF) | | Moderate DF/SF | 1.49 | 0.31 | 0.053 | 1.50 | 0.31 | 0.047 |
| FbD | 2.09 | 0.40 | 0.000 | 2.05 | 0.39 | 0.000 |
| Youth unemployment | | | 1.18 | 0.08 | 0.016 | 1.22 | 0.06 | 0.000 |
| Care Intensity \*Care Regime | Less than 10\*Moderate | |  |  |  | 0.86 | 0.27 | 0.631 |
| Less than 10\*FdB | |  |  |  | 0.76 | 0.23 | 0.376 |
| 10-20\*Moderate | |  |  |  | 2.76 | 1.76 | 0.113 |
| 10-20\*FdB | |  |  |  | 2.43 | 1.53 | 0.158 |
| More than 20\*Moderate | |  |  |  | 0.84 | 0.45 | 0.744 |
| More than 20\*FdB | |  |  |  | 1.13 | 0.60 | 0.821 |
| Constant | | | 0.45 | 0.10 | 0.000 | 0.47 | 0.10 | 0.000 |
| Variance between countries | | | 0.11 | 0.03 |  | 0.11 | 0.03 |  |
| Intraclass correlation coeff. | | | 0.03 | 0.01 |  |  |  |  |
| N Respondents | | | 37,146 | | | | | |
| N Countries | | | 28 | | | | | |

Sources: Wave 3 EHIS, except UK (wave 2) and Spain (ENSE)

Table A4. Multilevel Logistic Regression of reporting fair/poor self-perceived health

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | |  | **Model 2** | | | **Model 3** | | |
|  | |  | *OR* | *SE* | *P-value* | *OR* | *SE* | *p-value* |
| Intensity of care (No care) | | Less than 10 hours | 1.24 | 0.08 | 0.001 | 1.52 | 0.38 | 0.093 |
| 10-20 hours | 1.45 | 0.21 | 0.009 | 2.44 | 0.92 | 0.018 |
| More than 20 hours | 1.62 | 0.23 | 0.001 | 1.37 | 0.58 | 0.460 |
| Sex (Men) | | Women | 1.29 | 0.05 | 0.000 | 1.29 | 0.05 | 0.000 |
| Age (18-19) | | 20-24 | 0.47 | 0.03 | 0.000 | 0.47 | 0.03 | 0.000 |
| 25-29 | 0.75 | 0.03 | 0.000 | 0.75 | 0.03 | 0.000 |
| Education (Primary) | | Lower secondary | 0.78 | 0.08 | 0.018 | 0.78 | 0.08 | 0.017 |
| Upper secondary | 0.46 | 0.05 | 0.000 | 0.46 | 0.05 | 0.000 |
| Tertiary | 0.27 | 0.03 | 0.000 | 0.27 | 0.03 | 0.000 |
| Household type (One-person) | | Lone parent | 1.16 | 0.09 | 0.060 | 1.17 | 0.09 | 0.056 |
| Couple without children | 0.95 | 0.07 | 0.469 | 0.95 | 0.07 | 0.494 |
| Couple with children | 0.98 | 0.08 | 0.812 | 0.98 | 0.08 | 0.814 |
| Other types of HH | 1.09 | 0.09 | 0.293 | 1.09 | 0.09 | 0.290 |
| Number of persons living in the household | | | 0.95 | 0.02 | 0.010 | 0.95 | 0.02 | 0.007 |
| Birth Place (Native-born) | | Born in EU | 0.86 | 0.09 | 0.168 | 0.86 | 0.09 | 0.155 |
| Born outside EU | 0.82 | 0.06 | 0.014 | 0.83 | 0.07 | 0.016 |
| No info | 0.76 | 0.27 | 0.446 | 0.81 | 0.21 | 0.431 |
| Household income (Below 1st quintile) | | 1st-2nd quintile | 0.87 | 0.05 | 0.014 | 0.87 | 0.05 | 0.012 |
| 2nd-3rd quintile | 0.75 | 0.04 | 0.000 | 0.75 | 0.04 | 0.000 |
| 3rd-4th quintile | 0.73 | 0.04 | 0.000 | 0.73 | 0.04 | 0.000 |
| 4th-5th quintile | 0.57 | 0.04 | 0.000 | 0.57 | 0.04 | 0.000 |
| Unknown | 0.70 | 0.06 | 0.000 | 0.71 | 0.06 | 0.000 |
| Care Regime (Strong DF/SF) | | Moderate DF/SF | 0.53 | 0.12 | 0.007 | 0.54 | 0.12 | 0.006 |
| FbD | 0.44 | 0.10 | 0.000 | 0.45 | 0.09 | 0.000 |
| Youth unemployment | | | 0.83 | 0.07 | 0.028 | 0.89 | 0.05 | 0.041 |
| Care Intensity \*Care Regime | Less than 10\*Moderate | |  |  |  | 0.76 | 0.25 | 0.392 |
| Less than 10\*FdB | |  |  |  | 0.77 | 0.24 | 0.419 |
| 10-20\*Moderate | |  |  |  | 0.58 | 0.27 | 0.248 |
| 10-20\*FdB | |  |  |  | 0.40 | 0.20 | 0.068 |
| More than 20\*Moderate | |  |  |  | 1.15 | 0.59 | 0.783 |
| More than 20\*FdB | |  |  |  | 1.37 | 0.71 | 0.546 |
| Constant | | | 0.37 | 0.10 | 0.000 | 0.40 | 0.09 | 0.000 |
| Variance between countries | | | 0.15 | 0.04 |  | 0.14 | 0.03 |  |
| Intraclass correlation coeff. | | | 0.04 | 0.01 |  |  |  |  |
| N Respondents | | | 35,397 | | | | | |
| N Countries | | | 28 | | | | | |

Sources: Wave 3 EHIS, except UK (wave 2) and Spain (ENSE)

Table A5. Multilevel Logistic Regression of reporting worse mental health scores

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | |  | **Model 2** | | | **Model 3** | | |
|  | |  | *OR* | *SE* | *P-value* | *OR* | *SE* | *p-value* |
| Intensity of care (No care) | | Less than 10 hours | 1.52 | 0.12 | 0.000 | 1.65 | 0.53 | 0.116 |
| 10-20 hours | 1.77 | 0.32 | 0.002 | 2.11 | 0.95 | 0.098 |
| More than 20 hours | 1.97 | 0.34 | 0.000 | 2.48 | 1.16 | 0.051 |
| Sex (Men) | | Women | 1.84 | 0.09 | 0.000 | 1.84 | 0.09 | 0.000 |
| Age (18-19) | | 20-24 | 0.86 | 0.07 | 0.046 | 0.86 | 0.07 | 0.059 |
| 25-29 | 0.95 | 0.05 | 0.327 | 0.95 | 0.05 | 0.332 |
| Education (Primary) | | Lower secondary | 0.77 | 0.12 | 0.085 | 0.78 | 0.12 | 0.097 |
| Upper secondary | 0.47 | 0.07 | 0.000 | 0.47 | 0.07 | 0.000 |
| Tertiary | 0.31 | 0.05 | 0.000 | 0.32 | 0.05 | 0.000 |
| Household type (One-person) | | Lone parent | 1.07 | 0.11 | 0.532 | 1.07 | 0.11 | 0.502 |
| Couple without children | 0.73 | 0.07 | 0.001 | 0.73 | 0.07 | 0.001 |
| Couple with children | 0.85 | 0.09 | 0.126 | 0.85 | 0.09 | 0.133 |
| Other types of HH | 1.10 | 0.11 | 0.333 | 1.09 | 0.11 | 0.393 |
| Number of persons living in the household | | | 0.91 | 0.02 | 0.000 | 0.91 | 0.02 | 0.000 |
| Birth Place (Native-born) | | Born in EU | 1.04 | 0.13 | 0.730 | 1.03 | 0.13 | 0.785 |
| Born outside EU | 1.08 | 0.10 | 0.429 | 1.08 | 0.10 | 0.417 |
| No info | 0.65 | 0.33 | 0.389 | 0.66 | 0.23 | 0.233 |
| Household income (Below 1st quintile) | | 1st-2nd quintile | 0.92 | 0.06 | 0.222 | 0.92 | 0.06 | 0.215 |
| 2nd-3rd quintile | 0.79 | 0.06 | 0.002 | 0.79 | 0.06 | 0.001 |
| 3rd-4th quintile | 0.67 | 0.05 | 0.000 | 0.67 | 0.05 | 0.000 |
| 4th-5th quintile | 0.58 | 0.05 | 0.000 | 0.58 | 0.05 | 0.000 |
| Unknown | 0.68 | 0.08 | 0.002 | 0.68 | 0.08 | 0.002 |
| Care Regime (Strong DF/SF) | | Moderate DF/SF | 0.53 | 0.18 | 0.059 | 0.53 | 0.16 | 0.034 |
| FbD | 0.17 | 0.05 | 0.000 | 0.16 | 0.05 | 0.000 |
| Youth unemployment | | | 0.70 | 0.08 | 0.003 | 0.78 | 0.06 | 0.001 |
| Care Intensity \*Care Regime | Less than 10\*Moderate | |  |  |  | 0.75 | 0.32 | 0.489 |
| Less than 10\*FdB | |  |  |  | 1.15 | 0.49 | 0.745 |
| 10-20\*Moderate | |  |  |  | 0.72 | 0.42 | 0.569 |
| 10-20\*FdB | |  |  |  | 0.63 | 0.43 | 0.500 |
| More than 20\*Moderate | |  |  |  | 0.54 | 0.31 | 0.287 |
| More than 20\*FdB | |  |  |  | 1.08 | 0.68 | 0.909 |
| Constant | | | 0.21 | 0.07 | 0.000 | 0.23 | 0.07 | 0.000 |
| Variance between countries | | | 0.30 | 0.09 |  | 0.25 | 0.06 |  |
| Intraclass correlation coeff. | | | 0.08 | 0.02 |  |  |  |  |
| N Respondents | | | 34,997 | | | | | |
| N Countries | | | 28 | | | | | |

Sources: Wave 3 EHIS, except UK (wave 2) and Spain (ENSE)

A6. Average marginal effects of caring and intensity on the probability of being in NEET status (reference category: non-carers)

With Education Without Education

A graph of a line

Description automatically generated A graph of a line

Description automatically generated

Notes: AMEs calculated on the basis of Model 3 (see table 5 for completed regression results for models including education. Regression coefficients for model without education are available upon request)

A7. Average marginal effects of caring and intensity on the probability of reporting fair/bad self-perceived health

With Education Without Education

A graph of a line

Description automatically generated A graph of a line

Description automatically generated

Notes: AMEs calculated on the basis of Model 3 (see table 5 for completed regression results for models including education. Regression coefficients for model without education are available upon request)

A8. Average marginal effects of caring and intensity on the probability of reporting worse mental health

With Education Without Education

A graph of a line

Description automatically generated A graph of a line

Description automatically generated

Notes: AMEs calculated on the basis of Model 3 (see table 5 for completed regression results for models including education. Regression coefficients for model without education are available upon request)

Table A9. Multilevel Logistic Regression for our main three outcomes. No controls for Education

|  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  |  | **NEET** | | | **Fair/bad self-perceived health** | | | **Worse scores of mental health** | | |
|  |  | *OR* | *SE* | *P-value* | *OR* | *SE* | *p-value* | *OR* | *SE* | *p-value* |
| Intensity of care (No care) | Less than 10 hours | 1.07 | 0.12 | 0.558 | 1.29 | 0.19 | 0.086 | 1.62 | 0.30 | 0.009 |
| 10-20 hours | 1.18 | 0.21 | 0.366 | 1.45 | 0.30 | 0.072 | 1.57 | 0.44 | 0.105 |
| More than 20 hours | 1.31 | 0.23 | 0.126 | 1.74 | 0.35 | 0.007 | 2.08 | 0.53 | 0.004 |
| Sex (Men) | Women | 1.50 | 0.05 | 0.000 | 1.20 | 0.04 | 0.000 | 1.74 | 0.09 | 0.000 |
| Age (18-19) | 20-24 | 0.35 | 0.02 | 0.000 | 0.69 | 0.04 | 0.000 | 1.23 | 0.09 | 0.004 |
| 25-29 | 0.58 | 0.02 | 0.000 | 0.81 | 0.03 | 0.000 | 1.02 | 0.06 | 0.710 |
| Education (Primary) | Lower secondary |  |  |  |  |  |  |  |  |  |
| Upper secondary |  |  |  |  |  |  |  |  |  |
| Tertiary |  |  |  |  |  |  |  |  |  |
| Household type (One-person) | Lone parent | 2.48 | 0.19 | 0.000 | 1.28 | 0.10 | 0.002 | 1.17 | 0.12 | 0.130 |
| Couple without children | 1.29 | 0.10 | 0.001 | 0.93 | 0.07 | 0.329 | 0.71 | 0.07 | 0.000 |
| Couple with children | 2.46 | 0.18 | 0.000 | 1.03 | 0.08 | 0.750 | 0.89 | 0.09 | 0.278 |
| Other types of HH | 1.97 | 0.15 | 0.000 | 1.11 | 0.09 | 0.162 | 1.14 | 0.11 | 0.208 |
| Number of persons living in the household | | 1.11 | 0.02 | 0.000 | 0.97 | 0.02 | 0.144 | 0.92 | 0.02 | 0.003 |
| Birth Place (Native-born) | Born in EU | 1.17 | 0.10 | 0.073 | 0.88 | 0.09 | 0.202 | 1.00 | 0.12 | 0.969 |
| Born outside EU | 1.35 | 0.08 | 0.000 | 0.89 | 0.07 | 0.114 | 1.16 | 0.10 | 0.106 |
| No info | 0.76 | 0.21 | 0.316 | 1.21 | 0.35 | 0.523 | 0.82 | 0.30 | 0.601 |
| Household income (Below 1st quintile) | 1st-2nd quintile | 0.58 | 0.02 | 0.000 | 0.84 | 0.05 | 0.001 | 0.89 | 0.06 | 0.092 |
| 2nd-3rd quintile | 0.38 | 0.02 | 0.000 | 0.68 | 0.04 | 0.000 | 0.74 | 0.05 | 0.000 |
| 3rd-4th quintile | 0.25 | 0.01 | 0.000 | 0.63 | 0.04 | 0.000 | 0.60 | 0.05 | 0.000 |
| 4th-5th quintile | 0.15 | 0.01 | 0.000 | 0.46 | 0.03 | 0.000 | 0.49 | 0.04 | 0.000 |
| Unknown | 0.54 | 0.03 | 0.000 | 0.65 | 0.06 | 0.000 | 0.65 | 0.08 | 0.000 |
| LTC index |  | 0.92 | 0.02 | 0.000 | 1.06 | 0.03 | 0.082 | 1.24 | 0.05 | 0.000 |
| Youth unemployment | | 1.20 | 0.06 | 0.000 | 0.91 | 0.06 | 0.168 | 0.85 | 0.08 | 0.068 |
| LTC index \* Caregiving intensity | Less than 10 hours | 1.02 | 0.04 | 0.583 | 1.02 | 0.05 | 0.636 | 0.99 | 0.06 | 0.928 |
| 10-20 hours | 0.95 | 0.05 | 0.384 | 1.11 | 0.07 | 0.105 | 1.08 | 0.09 | 0.372 |
| More than 20 hours | 0.96 | 0.05 | 0.478 | 0.95 | 0.06 | 0.449 | 0.97 | 0.08 | 0.684 |
| Constant | | 0.19 | 0.03 | 0.000 | 0.11 | 0.02 | 0.000 | 0.03 | 0.01 | 0.000 |
| Variance between countries | | 0.12 | 0.03 |  | 0.22 | 0.05 | 0.33 | 0.08 |  |  |
| N Respondents | | 37,146 | | | 35,397 | | | 34,997 | | |
| N Countries | | 28 | | | | | | | | |

Sources: Wave 3 EHIS, except UK (wave 2) and Spain (ENSE)

Table A10. Percentage of missing information in Self-perceived health and Mental health in EHIS original sample

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
|  |  | **Self-perceived health** | | | **Mental health** | | |
| *Country* | *Year* | *Good/very good* | *Fair/poor* | *Missing* | *Best scores* | *Worse Scores* | *Missing* |
| AT | 2019 | 91.57 | 8.43 | 0 | 96.0 | 4.0 | 0 |
| BE | 64.22 | 6.42 | 29.36 | 62.94 | 6.17 | 30.89 |
| BG | 90.2 | 2.94 | 6.85 | 91.89 | 0.67 | 7.44 |
| CZ | 92.19 | 5.93 | 1.87 | 96.72 | 1.41 | 1.87 |
| DE | 2020 | 87.37 | 12.63 | 0 | 89.23 | 9.57 | 1.2 |
| DK | 2019 | 82.98 | 16.76 | 0.26 | 76.57 | 15.93 | 7.5 |
| EE | 84.17 | 15.5 | 0.33 | 89.25 | 9.84 | 0.9 |
| EL | 96.2 | 3.11 | 0.68 | 98.54 | 0.38 | 1.08 |
| ES | 2011-12 | 88.32 | 11.68 | 0 | 97.22 | 2.43 | 0.35 |
| FI | 2019 | 75.42 | 17.78 | 6.8 | 77.39 | 12.22 | 10.38 |
| FR | 88.98 | 11.02 | 0 | 89.02 | 10.98 | 0 |
| HR | 88.47 | 4.78 | 6.75 | 91.03 | 2.12 | 6.85 |
| HU | 86.26 | 13.31 | 0.43 | 92.49 | 4.82 | 2.69 |
| IE | 93.16 | 6.84 | 0 | 92.18 | 6.16 | 1.66 |
| IS | 83.52 | 16.38 | 0.1 | 85.39 | 12.1 | 2.51 |
| IT | 91.16 | 5.79 | 3.04 | 93.7 | 1.96 | 4.34 |
| LT | 86.79 | 12.67 | 0.55 | 91.98 | 4.93 | 3.09 |
| LU | 82.89 | 15.75 | 1.36 | 81.73 | 12.39 | 5.88 |
| LV | 2019 | 80.4 | 15.88 | 3.72 | 96.38 | 3.39 | 0.23 |
| NL |  | 86.68 | 13.32 | 0 | 89.46 | 10.05 | 0.49 |
| NO | 85.84 | 14.16 | 0 | 89.8 | 9.07 | 1.13 |
| PL | 64.39 | 7.51 | 28.11 | 70.61 | 0.98 | 28.41 |
| PT | 85.07 | 14.85 | 0.08 | 90.92 | 4.17 | 4.92 |
| RO | 97.92 | 2.05 | 0.04 | 97.71 | 0.47 | 1.82 |
| SE | 79.76 | 19.28 | 0.95 | 79.86 | 15.91 | 4.23 |
| SI | 90.34 | 9.36 | 0.3 | 89.35 | 7.95 | 2.7 |
| SK | 94.37 | 5.63 | 0 | 99.1 | 0.9 | 0 |
| UK | 2013 | 62.04 | 9.43 | 28.52 | 66.55 | 4.42 | 29.04 |
| Total |  | 85.59 | 9.95 | 7.46 | 85.69 | 5.86 | 8.45 |

Source: European Health Interview Survey wave 3, UK: wave 2, ES: Encuesta Nacional de Salud 11-12