Figure A1

*Predicted probabilities and weights from Model 2 against age in PIAAC sample*



Table A1.

*Mean values for age, number of books, % females, % respondents in school in the PISA and PIAAC samples before and after weighting. Standardized mean differences in brackets*

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  | PISA sample | PIAAC | | |
| Variable | Unweighted | Model 1a | Model 2 |
| Age | 16.65 | 31.67 (-1.54) | 16.58 (0.14) | 16.62 (0.07) |
| Number of books (at age 15) | 3.23 | 3.40 (0.03) | 3.42 (-0.15) | 3.21 (0.01) |
| % of females | 0.52 | 0.49 (0.04) | 0.47 (0.08) | 0.51 (0.01) |
| % of respondent in school | 100.00 | 34.45 (1.95) | 96.86 (0.25) | 97.16 (0.24) |

Note: Model 1a (age only) and Model 2 (age plus additional variables and interactions).

Table A2.

*Concordance of PISA to PIAAC scores for numeracy and literacy scales*

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| PISA  Math score | PIAAC Numeracy | | | | PISA Reading score | PIAAC Literacy | | | |
| Age weighting | | Age + additional variable weighting | | Age weighting | | Age + additional variable weighting | |
| Score | (error) | Score | (error) | Score | (error) | Score | (error) |
| 358  (Proficiency Level 1) | 180.32 | (7.97) | 179.08 | (9.92) | 262  (Proficiency Level 1a) | 159.61 | (11.00) | 155.64 | (14.24) |
| 420  (Proficiency Level 2) | 208.88 | (6.56) | 207.45 | (7.81) | 335  (Proficiency Level 1b) | 193.02 | (8.78) | 189.42 | (11.33) |
| 482  (Proficiency Level 3) | 237.44 | (5.59) | 235.82 | (6.22) | 407  (Proficiency Level 2) | 225.99 | (6.74) | 222.74 | (8.63) |
| 545  (Proficiency Level 4) | 266.47 | (5.34) | 264.66 | (5.61) | 480  (Proficiency Level 3) | 259.40 | (5.05) | 256.52 | (6.30) |
| 607  (Proficiency Level 5) | 295.03 | (5.90) | 293.03 | (6.27) | 553  (Proficiency Level 4) | 292.82 | (4.20) | 290.31 | (4.98) |
| 669  (Proficiency Level 6) | 323.60 | (7.07) | 321.40 | (7.89) | 626  (Proficiency Level 5) | 326.24 | (4.68) | 324.09 | (5.48) |
|  | | | | | 698  (Proficiency Level 6) | 359.20 | (6.16) | 357.41 | (7.39) |

Table A3.

*Concordance of PIAAC to PISA scores for mathematics and reading scales*

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| PIAAC Numeracy Score | PISA Math | | | | PIAAC Literacy Score | PISA Reading | | | |
| Age weighting | | Age + additional variable weighting | | Age weighting | | Age + additional variable weighting | |
| Score | (error) | Score | (error) |  | Score | (error) | Score | (error) |
| 176  (Proficiency Level 1) | 348.65 | (17.37) | 351.24 | (21.44) | 176  (Proficiency Level 1) | 297.62 | (21.35) | 305.53 | (26.69) |
| 226  (Proficiency Level 2) | 457.20 | (12.53) | 460.56 | (14.05) | 226  (Proficiency Level 2) | 406.90 | (14.50) | 413.72 | (17.86) |
| 276  (Proficiency Level 3) | 565.76 | (11.84) | 569.87 | (12.59) | 276  (Proficiency Level 3) | 516.19 | (9.72) | 521.92 | (11.52) |
| 326  (Proficiency Level 4) | 674.31 | (15.86) | 679.18 | (18.53) | 326  (Proficiency Level 4) | 625.47 | (10.40) | 630.12 | (12.39) |
| 376  (Proficiency Level 5) | 782.87 | (22.15) | 788.49 | (27.41) | 376  (Proficiency Level 5) | 734.75 | (15.86) | 738.32 | (19.54) |