**S5 Table. Model comparison: χ2-difference test for models with differentiation between twins who were assigned to the same classroom and twins who were assigned to different classrooms.**

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
|  | **Model** |  | **χ2** | ***df*** | ***Δ* χ2** | **Δ *df*** | ***p*** |
| Mathematics | **ACtE with G.D.** |  | **19.94** | **18** |  |  |  |
|  |  | ACtE without G.D. | 25.00 | 21 | 5.06 | 3 | .17 |
|  |  | sc: ACtE; dc:AE | 22.41 | 19 | 2.47 | 1 | .12 |
|  |  | sc: AE; dc: ACtE | 37.29 | 19 | 17.35 | 1 | .00\*\* |
|  |  | sc: ACtE; dc: CtE | 25.89 | 19 | 5.95 | 1 | .02\* |
|  |  | sc: CtE; dc: ACtE | 30.42 | 19 | 10.48 | 1 | .00\*\* |
| German | **ACtE with G.D.** |  | **28.97** | **18** |  |  |  |
|  |  | ACtE without G.D. | 35.70 | 21 | 6.73 | 3 | .08 |
|  |  | sc: ACtE; dc:AE | 29.25 | 19 | 0.29 | 1 | .59 |
|  |  | sc: AE; dc: ACtE | 49.90 | 19 | 20.93 | 1 | .00\*\* |
|  |  | sc: ACtE; dc: CtE | 48.25 | 19 | 19.28 | 1 | .00\*\* |
|  |  | sc: CtE; dc: ACtE | 47.38 | 19 | 18.42 | 1 | .00\*\* |
| GPA | **ACtE with G.D.** |  | **18.45** | **18** |  |  |  |
|  |  | ACtE without G.D. | 32.94 | 21 | 14.49 | 3 | .00\*\* |
|  |  | sc: ACtE; dc:AE | 22.97 | 19 | 4,52 | 1 | .03\* |
|  |  | sc: AE; dc: ACtE | 55.08 | 19 | 36.63 | 1 | .00\*\* |
|  |  | sc: ACtE; dc: CtE | 45.77 | 19 | 27.33 | 1 | .00\*\* |
|  |  | sc: CtE; dc: ACtE | 65.80 | 19 | 47.35 | 1 | .00\*\* |

*Note*. A = additive genetic effects; D = non-additive genetic effects; Ct = twin-shared environmental effects; E = non-shared environmental effects (including measurement error); ACtE model = *d*=*cs*=0; AE model = *d*=*cs*=*ct*=0; CtE model = *a*=*d*=*cs*=0; G.D. = group differentiation; sc = twins who were assigned to the same class; ds = twins who were assigned to different classes; *p* = two-sided significance; \*\* = *p* < .01 bilateral significance; \* = *p* < .05 bilateral significance