**Supplemental Materials**

**Table S1** Item Descriptions of Life Satisfaction and School Satisfaction

|  |  |
| --- | --- |
| Constructs | Items |
| Life Satisfaction | I am satisfied with my life. |
| I am happy the way that I am living right now. |
| I like my life in a way like right now. |
| I have everything that is important to me. |
| School Satisfaction | I like going to school. |
| I feel comfortable in our school. |
| Our school looks friendly. |
| Learning is fun in our school. |

**Table S2**

*Model Comparison for the Latent Growth Curve Model (LGM) for Linear and Nonlinear Models in the Overall, Academic, and Nonacademic Groups*

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Construct | Sample | Model | CFI | TLI | RMSEA | SRMR | AIC | BIC |
| Life satisfaction1 | Overall group | Linear | .991 | .989 | .024 | .048 | 41877.110 | 42163.823 |
| Quadratic | .991 | .989 | .024 | .044 | 41870.817 | **42163.044** |
| Cubic | .991 | .989 | .023 | .043 | **41869.296** | 42167.036 |
| Academic track | Linear | .986 | .983 | .031 | .056 | 11815.048 | 12037.433 |
| Quadratic | .987 | .985 | .030 | .054 | 11810.414 | **12037.076** |
| Cubic | .988 | .985 | .029 | .052 | **11807.454** | 12038.392 |
| Nonacademic track | Linear | .989 | .987 | .027 | .053 | **30044.618** | **30313.504** |
| Quadratic | .989 | .987 | .027 | .050 | 30044.887 | 30318.944 |
| Cubic | .989 | .986 | .027 | .050 | 30046.783 | 30326.011 |
| School satisfaction2 | Overall group | Linear | .924 | .909 | .060 | .098 | 55154.092 | 55440.890 |
| Quadratic | .924 | .908 | .060 | .098 | 55155.194 | 55447.507 |
| Cubic | .946 | .934 | .051 | .067 | **54882.352** | **55180.181** |
| Academic track | Linear | .892 | .871 | .074 | .149 | 15443.372 | 15665.757 |
| Quadratic | .893 | .870 | .074 | .149 | 15444.514 | 15671.176 |
| Cubic | .919 | .901 | .065 | .111 | **15357.473** | **15588.412** |
| Nonacademic track | Linear | .917 | .900 | .061 | .084 | 39738.215 | 40007.220 |
| Quadratic | .917 | .899 | .061 | .084 | 39740.194 | 40014.374 |
| Cubic | .941 | .928 | .052 | .061 | **39555.954** | **39835.307** |

*Note.* The **bold** values indicate the smallest value across the three models.

1To assure model convergence in the cubic model for LS, the variances of the quadratic and cubic components had to be fixed at 0.

2To assure model convergence in the quadratic model, the variance of the quadratic component was fixed at 0, and in the cubic model, the variances of the quadratic and cubic components had to be fixed at 0.

**Table S3**

*Unstandardized Estimated Parameters for Life Satisfaction in the Multiple-Group Latent Growth Curve Model in the Academic and Nonacademic Tracks*

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | Academic track | | | | | |  | Nonacademic track | | | | | |
|  | Model 1  (Track) | | Model 2  (+School-level  performance) | | Model 3  (+Covariates) | |  | Model 1  (Track) | | Model 2  (+School-level  performance ) | | Model 3  (+Covariates) | |
| *Construct* | Parameter | *SE* | Parameter | *SE* | Parameter | *SE* |  | Parameter | *SE* | Parameter | *SE* | Parameter | *SE* |
| ***Latent mean*** | | | | | | | | | | | | | |
| Intercept | 3.472\*\*\* | .027 | 3.471\*\*\* | .027 | 3.552\*\*\* | .109 |  | 3.346\*\*\* | .021 | 3.345\*\*\* | .021 | 3.389\*\*\* | .086 |
| Linear slope | -.089\*\*\* | .009 | -.089\*\*\* | .009 | -.078\* | .039 |  | -.058\*\*\* | .007 | -.058\*\*\* | .007 | -.046 | .028 |
| ΔLinear slope (a-non) | -.031\*\* | .011 | -.031\*\* | .011 | -.032 | .048 |  |  |  |  |  |  |  |
| ***Latent variance*** | | | | | | | | | | | | | |
| Intercept | .180\*\*\* | .023 | .173\*\*\* | .023 | .157\*\*\* | .026 |  | .322\*\*\* | .024 | .322\*\*\* | .024 | .302\*\*\* | .028 |
| Linear slope | .013\*\*\* | .003 | .013\*\*\* | .003 | .013\*\*\* | .003 |  | .022\*\*\* | .003 | .022\*\*\* | .003 | .022\*\*\* | .003 |
| ***Intercept component*** | | | | | | | | | | | | | |
| Girl (0 = boy) |  |  |  |  | -.046 | .057 |  |  |  |  |  | -.150\*\* | .051 |
| Family SES |  |  |  |  | -.001 | .002 |  |  |  |  |  | .001 | .002 |
| Immigrant (0 = no immigrant) |  |  |  |  | .057 | .071 |  |  |  |  |  | -.014 | .054 |
| Prior achievement |  |  |  |  | -.080 | .056 |  |  |  |  |  | -.060 | .056 |
| School-level achievement |  |  | .085\*\* | .028 | .121\*\* | .041 |  |  |  | .013 | .023 | .029 | .040 |
| ***Linear component*** | | | | | | | | | | | | | |
| Girl (0 = boy) |  |  |  |  | -.038 | .019 |  |  |  |  |  | -.016 | .017 |
| Family SES |  |  |  |  | .000 | .001 |  |  |  |  |  | .000 | .001 |
| Immigrant (0 = no immigrant) |  |  |  |  | -.020 | .024 |  |  |  |  |  | .013 | .018 |
| Prior achievement |  |  |  |  | .016 | .022 |  |  |  |  |  | .025 | .020 |
| School-level achievement |  |  | -.019\* | .010 | -.029 | .016 |  |  |  | -.012 | .007 | -.023 | .012 |
| ΔSchool-level. ach. (a-non) |  |  | -.007 | .012 | -.006 | .020 |  |  |  |  |  |  |  |
| ***Covariance*** |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Intercept with linear slope | -.008 | .006 | -.006 | .006 | -.007 | .006 |  | -.041\*\*\* | .006 | -.040\*\*\* | .006 | -.044\*\*\* | .008 |

*Note*. Prior performance = individual-level achievement in grade 6. School-level achievement = school-level achievement in grade 9. Nonacad. = nonacademic track. Δa-non = Difference between academic and nonacademic tracks for the specific parameter (i.e., mean, slope, or regression effect difference, respectively). Ach.= achievement

\**p*<.05. \*\**p*<0.01. \*\*\* *p* <.001

**Table S4**

*Unstandardized Estimated Parameters for School Satisfaction in the Nonlinear Multiple-Group Latent Growth Curve Model in the Academic and Nonacademic Tracks*

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | Academic track | | | | | |  | Nonacademic track | | | | | |
|  | Model 1  (Track) | | Model 2  (+School-level math) | | Model 3  (+Covariates) | |  | Model 1  (Track) | | Model 2  (+School-level math) | | Model 3  (+Covariates) | |
|  | Parameter | *SE* | Parameter | *SE* | Parameter | *SE* |  | Parameter | *SE* | Parameter | *SE* | Parameter | *SE* |
| **Latent mean** | | | | | | | | | | | | | |
| Intercept | 3.119\*\*\* | .031 | 3.119\*\*\* | .031 | 2.975\*\*\* | .097 |  | 2.886\*\*\* | .025 | 2.885\*\*\* | .025 | 2.765\*\*\* | .069 |
| Linear slope | .805\*\*\* | .111 | .806\*\*\* | .111 | .908\*\*\* | .195 |  | .918\*\*\* | .098 | .905\*\*\* | .098 | 1.186\*\*\* | .151 |
| Quadratic | -.414\*\*\* | .047 | -.414\*\*\* | .046 | -.403\*\*\* | .063 |  | -.463\*\*\* | .041 | -.459\*\*\* | .041 | -.547\*\*\* | .055 |
| Cubic | .011\*\*\* | .001 | .011\*\*\* | .001 | .010\*\*\* | .001 |  | .013\*\*\* | .001 | .013\*\*\* | .001 | .014\*\*\* | .001 |
| ΔLinear slope (a-non) | -.113 | .147 | -.099 | .147 | -.279 | .245 |  |  |  |  |  |  |  |
| ΔQuadratic (a-non) | .050 | .061 | .045 | .061 | .144 | .082 |  |  |  |  |  |  |  |
| ΔCubic (a-non) | -.002 | .002 | -.002 | .002 | -.004\* | .002 |  |  |  |  |  |  |  |
| **Latent variance**a | | | | | | | | | | | | | |
| Intercept | .085\*\*\* | .016 | .074\*\*\* | .016 | .067\*\*\* | .018 |  | .185\*\*\* | .018 | .173\*\*\* | .017 | .151\*\*\* | .019 |
| Linear slope | .011\*\*\* | .002 | .011\*\*\* | .002 | .014\*\*\* | .003 |  | .017\*\*\* | .002 | .017\*\*\* | .002 | .019\*\*\* | .003 |
| **Intercept predicted by** | | | | | | | | | | | | | |
| Girl (0 = boy) |  |  |  |  | .130\*\* | .049 |  |  |  |  |  | .201\*\*\* | .043 |
| Family SES |  |  |  |  | .001 | .001 |  |  |  |  |  | .000 | .001 |
| Immigrant (0 = no immigrant) |  |  |  |  | .086 | .062 |  |  |  |  |  | .094\* | .045 |
| Prior achievement |  |  |  |  | -.048 | .046 |  |  |  |  |  | .055 | .047 |
| School-level achievement |  |  | .123\*\*\* | .033 | .154\*\*\* | .044 |  |  |  | .081\*\* | .024 | .094\*\* | .035 |
| **Linear slopepredicted by** | | | | | | | | | | | | | |
| Girl (0 = boy) |  |  |  |  | -.074 | .076 |  |  |  |  |  | -.148\* | .063 |
| Family SES |  |  |  |  | -.002 | .002 |  |  |  |  |  | -.001 | .002 |
| Immigrant (0 = no immigrant) |  |  |  |  | -.195\* | .090 |  |  |  |  |  | -.190\*\* | .067 |
| Prior performance |  |  |  |  | -.032 | .068 |  |  |  |  |  | -.018 | .067 |
| School- level achievement |  |  | -.131 | .135 | -.222 | .145 |  |  |  | .239\* | .100 | .074 | .124 |
| ΔLS,School-level ach. (a-non) |  |  | -.371\* | .172 | -.295 | .193 |  |  |  |  |  |  |  |
| **Quadraticpredicted by** | | | | | | | | | | | | | |
| Girl (0 = boy) |  |  |  |  | .022 | .019 |  |  |  |  |  | .030 | .016 |
| Family SES |  |  |  |  | .000 | .001 |  |  |  |  |  | .000 | .000 |
| Immigrant (0 = no immigrant) |  |  |  |  | .044\* | .022 |  |  |  |  |  | .050\*\* | .017 |
| Prior achievement |  |  |  |  | .012 | .018 |  |  |  |  |  | .006 | .017 |
| School-level achievement |  |  | .062 | .058 | .098 | .061 |  |  |  | -.096\* | .042 | -.038 | .052 |
| ΔQuadratic,School-level ach. (a-non) |  |  | .159\* | .073 | .136 | .081 |  |  |  |  |  |  |  |
| **Cubic predicted by** |  |  |  |  |  |  |  |  |  |  |  |  |  |
| School-level achievement |  |  | -.002 | .002 | -.003 | .002 |  |  |  | .002 | .001 | .001 | .001 |
| ΔCubic,School-level ach. (a-non) |  |  | -.004\* | .002 | -.004 | .002 |  |  |  |  |  |  |  |
| **Covariance** |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Intercept with linear slope | .000\* | .004 | .002 | .004 | -.003 | .004 |  | -.019\*\* | .005 | -.018\*\*\* | .005 | -.018\*\* | .006 |

*Note*. Prior performance = individual-level achievement in grade 6. School-level achievement = school-level achievement in grade 9. Nonacad. = nonacademic track. Δa-non = Difference between academic and nonacademic tracks for the specific parameter (i.e., mean, slope, or regression effect difference, respectively). Ach.= achievement

\**p*<.05. \*\**p*<0.01. \*\*\* *p* <.001