**Table S**1. Demographic information of the survey sample (*n* = 436).

|  |  |  |  |
| --- | --- | --- | --- |
| Demographic variables | Category | Number | Percentage (%) |
| gender | boy | 219 | 50.2 |
| girl | 217 | 49.8 |
| grade | grade 7 | 202 | 46.3 |
| grade 8 | 154 | 81.7 |
| grade 9 | 80 | 18.3 |
| source place of students | villages | 207 | 47.5 |
| cities and towns | 229 | 52.5 |

**Table S2:** Tests of Measurement Invariance.

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| **Variables** | **Measurement Invariance** | ***χ2* (df)** | **RMSEA** | **CFI** | **TLI** | **∆CFI** | **∆RMSEA** |
| **FF** | Configural Invariance | 398.217(114) | 0.076 | 0.958 | 0.943 |  |  |
|  | Metric Invariance | 435.985(124) | 0.076 | 0.954 | 0.943 | -0.004 | 0.000 |
|  | Scalar Invariance | 481.961(134) | 0.077 | 0.948 | 0.941 | -0.006 | 0.001 |
|  | Strict Invariance | 481.961(134) | 0.077 | 0.948 | 0.941 | 0.000 | 0.000 |
| **PS** | Configural Invariance | 708.498(165) | 0.087 | 0.927 | 0.908 |  |  |
|  | Metric Invariance | 734.061(177) | 0.085 | 0.926 | 0.912 | -0.001 | -0.002 |
|  | Scalar Invariance | 787.176(189) | 0.085 | 0.920 | 0.911 | -0.006 | 0.000 |
|  | Strict Invariance | 787.176(189) | 0.085 | 0.920 | 0.911 | 0.000 | 0.000 |
| **SA** | Configural Invariance | 39.003(39) | 0.000 | 1.000 | 1.000 |  |  |
|  | Metric Invariance | 46.435(45) | 0.009 | 1.000 | 1.000 | 0.000 | 0.009 |
|  | Scalar Invariance | 64.617(51) | 0.025 | 0.997 | 0.996 | -0.003 | 0.014 |
|  | Strict Invariance | 64.617(51) | 0.028 | 0.997 | 0.996 | 0.000 | 0.003 |

Note: FF, Family Functioning; PS, Preference for Solitude; SA, Social Avoidance.

**Table S3.** Coefficient a (n = 436).

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Model | B | SE | Beta | *t* | *p* | Collinearity diagnostics | |
| Tolerance | VIF |
| Constant | 4.583 | 2.161 |  | 2.121 | 0.035 |  |  |
| Class 1 (FF) | -2.668 | 0.960 | -0.270 | -2.779 | 0.006 | 0.199 | 5.021 |
| Class 2 (FF) | -0.474 | 0.908 | -0.660 | -0.522 | 0.602 | 0.119 | 8.415 |
| Class 3 (FF) | 1.482 | 0.902 | 0.213 | 1.643 | 0.101 | 0.112 | 8.903 |
| age | 0.281 | 0.151 | 0.820 | 1.859 | 0.064 | 0.980 | 1.021 |
| gender | -0.116 | 0.304 | -0.017 | -0.382 | 0.703 | 0.981 | 1.019 |

Note:adependent variable: social avoidance; FF, family functioning.

**Table S4.** Average Posterior Probabilities for Four- and Five-Class Family Functioning (n =436).

|  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Class** | Five-Class Family Functioning | | | | | | | | | | |
| **1** | | **2** | | **3** | | **4** | | **5** | | ***n*** |
| **1** | **0.96** | | **0.03** | | **0.01** | | 0 | | 0 | | 192 |
| **2** | **0.02** | | **0.96** | | 0 | | **0.02** | | 0 | | 157 |
| **3** | **0.02** | | 0 | | **0.88** | | **0.01** | | **0.09** | | 10 |
| **4** | 0 | | 0 | | **0.04** | | **0.94** | | **0.02** | | 64 |
| **5** | 0 | | **0.01** | | **0.07** | | **0.03** | | **0.89** | | 13 |
| **Class** | | Four-Class Family Functioning | | | | | | | | | |
| **1** | | **2** | | **3** | | **4** | | ***n*** | |
| **1** | | **0.96** | | **0.02** | | 0 | | **0.02** | | 63 | |
| **2** | | **0.02** | | **0.95** | | **0.03** | | 0 | | 159 | |
| **3** | | 0.00 | | 0.03 | | **0.97** | | 0 | | 200 | |
| **4** | | **0.02** | | 0.00 | | 0.00 | | **0.98** | | 14 | |

Note: Non-zero entries are bolded. Each row contains information for individuals who were most likely to be in the class represented by that row.