**Table S1** Students quality of life (mean±SD) stratified by sex, age, and region of residency

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Characteristics |  | Quality of life | | | |
| **Psychological function** | **Physical-mental health** | **Living environment** | **Life satisfaction** |
| Overall |  | 3.04±0.47 | 3.04±0.49 | 2.73±0.54 | 3.11±0.44 |
| Sex | Boys (n=1,722) | 2.94±0.41 | 2.98±0.46 | 2.67±0.52 | 3.08±0.44 |
| Girls (n=1,478) | 3.16±0.39 | 3.11±0.43 | 2.69±0.54 | 3.14±0.45 |
| *T* | 21.45 | 11.38 | 1.48 | 5.27 |
| *P* | <0.001 | <0.001 | 0.14 | <0.001 |
| Age (grade) | Low Grade (n=1,584) | 3.18±0.43 | 3.15±0.44 | 2.79±0.52 | 3.22±0.39 |
| High Grade (n=1,616) | 2.90±0.48 | 2.93±0.51 | 2.68±0.56 | 3.02±0.46 |
| *T* | 17.36 | 13.05 | 5.76 | 12.59 |
| *P* | <0.001 | <0.001 | <0.001 | <0.001 |
| Residency | City (n=3,234) | 3.14±0.43 | 3.05±0.44 | 2.76±0.51 | 3.05±0.46 |
| Township (n=2,914) | 2.95±0.45 | 3.03±047 | 2.56±0.53 | 3.16±0.43 |
| T | 16.92 | 1.72 | 13.56 | 9.66 |
| P | <0.001 | 0.085 | <0.001 | <0.001 |

**Table S2** Students quality of life (mean±SD) stratified by parents’ educational level and family socioeconomic status

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Parents’ educational level and family socioeconomic status | | Quality of life | | | |
| Psychological function | Physical-mental health | Living environment | Life satisfaction |
| Father’s education | Junior high school and below (n=569) | 2.83±0.45 | 2.92±0.52 | 2.43±0.54 | 2.94±0.52 |
| Senior high school (n=928) | 2.97±0.43a | 3.04±0.48a | 2.57±0.52a | 3.06±0.46a |
| Associate degree (n=1,469) | 3.10±0.41ab | 3.10±0.42ab | 2.69±0.49ab | 3.15±0.43ab |
| Bachelor degree and above (n=767) | 3.12±0.39ab | 3.07±0.44a | 2.76±0.43abc | 3.17±0.41ab |
| Mother’s education | Junior high school and below (n=705) | 2.84±0.47 | 2.95±0.50 | 2.45±0.52 | 2.92±0.53 |
| Senior high school (n=1,031) | 2.98±0.44a | 3.04±0.47a | 2.56±0.51a | 3.05±0.44a |
| Associate degree (n=1,963) | 3.11±0.42ab | 3.09±0.43ab | 2.69±0.48ab | 3.11±0.43ab |
| Bachelor degree and above (n=544) | 3.12±0.38ab | 3.08±0.42a | 2.77±0.43abc | 3.14±0.41ab |
| Monthly family income (RMB) | <5,000 (n=452) | 2.82±0.47 | 2.93±0.51 | 2.42±0.56 | 2.95±0.52 |
| 5,000-10,000 (n=623) | 2.95±0.42a | 3.06±0.46a | 2.58±0.50a | 3.10±0.44a |
| 10,000-15,000 (n=1,227) | 3.11±0.40ab | 3.12±0.41ab | 2.72±0.47ab | 3.12±0.41a |
| >15,000 (n=908) | 3.13±0.39ab | 3.09±0.44a | 2.74±0.43ab | 3.11±0.43a |
| Annual cost of extracurricular  books (RMB) | Less than 300(765) | 2.81±0.49 | 2.98±0.41 | 2.44±0.55 | 2.96±0.51 |
| 300-500 (1468) | 2.94±0.41 a | 3.19±0.35 a | 2.59±0.51 a | 3.11±0.42 a |
| 500-800(572) | 3.13±0.38ab | 3.04±0.42b | 2.73±0.46 ab | 3.12±0.43 a |
| >800(405) | 3.14±0.39 ab | 3.02±0.44 b | 2.73±0.44± | 3.10±0.44 a |

\*Father’s and mother’s education:avs. Junior high school and below, bvs. Senior high school, c vs. Associate degree; Monthly family income (RMB): avs. <5,000, bvs. 5000-10,000, c vs. 10,000-15,000; annual cost of extracurricular books (RMB): avs. <300, bvs. 300-500; P<0.05

**Table S3** Students quality of life (mean±SD) stratified by dietary behavior

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Dietary behavior |  | Quality of life | | | |
| Social psychological function | Physical mental health | Living environment | Life satisfaction |
| Breakfast intake | Never (n=93) | 2.76±0.55 | 2.89±0.49 | 2.63±0.57 | 3.05±0.49 |
| Sometimes (n=227) | 2.80±0.48 | 2.93±0.46 | 2.67±0.54 | 3.08±0.47 |
| Often (n=976) | 2.95±0.42 | 2.97±0.45 | 2.69±0.52 | 3.13±0.42 |
| Every day (n=1,904) | 3.21±0.34abc | 3.18±0.41abc | 2.70±0.48 | 3.19±0.38abc |
| Fruit intake | Seldom (n=586) | 2.94±0.44 | 2.92±0.45 | 2.56±0.55 | 2.97±0.47 |
| Often (n=1757） | 3.05±0.42a | 3.04±0.44a | 2.69±0.50a | 3.11±0.43a |
| Every day (n=857) | 3.16±0.39ab | 3.12±0.40ab | 2.81±0.43ab | 3.23±0.40ab |
| Balanced diet | Predominantly vegetables (n=655) | 2.95±0.44 | 2.96±0.43 | 2.57±0.55 | 3.07±0.46 |
| Predominantly meat (n=858) | 3.06±0.42a | 3.07±0.41a | 2.69±0.52a | 3.09±0.47 |
| Balanced diet (n=1,687) | 3.15±0.39ab | 3.12±0.40ab | 2.88±0.48ab | 3.20±0.44ab |

\*Breasfast intake：avs. never, bvs. sometimes, c vs. often; Fruit intake: avs. seldom, bvs. often; Balanced diet: avs. predominantly vegetables, bvs. predominantly meat; P<0.05