

**Supplementary Table S1.** The cumulate number of people for each sport in adolescence exercise habits, called "Bukatsudo."

|                       | All (n=857) |        | Men (n=428) |        | Women (n=429) |        |
|-----------------------|-------------|--------|-------------|--------|---------------|--------|
|                       | n           | (%)    | n           | (%)    | n             | (%)    |
| Volleyball            | 185         | (21.6) | 37          | (8.6)  | 148           | (34.5) |
| Baseball and Softball | 137         | (16.0) | 99          | (23.1) | 38            | (8.9)  |
| Tennis                | 132         | (15.4) | 45          | (10.5) | 87            | (20.3) |
| Table tennis          | 118         | (13.8) | 46          | (10.7) | 72            | (16.8) |
| Basketball            | 118         | (13.8) | 65          | (15.2) | 53            | (12.4) |
| Track & Field         | 71          | (8.3)  | 41          | (9.6)  | 30            | (7.0)  |
| Judo                  | 49          | (5.7)  | 49          | (11.4) | 0             | (0.0)  |
| Swimming              | 45          | (5.3)  | 29          | (6.8)  | 16            | (3.7)  |
| Gymnastics            | 43          | (5.0)  | 11          | (2.6)  | 32            | (7.5)  |
| Mountaineering        | 36          | (4.2)  | 20          | (4.7)  | 16            | (3.7)  |
| Soccer                | 23          | (2.7)  | 23          | (5.4)  | 0             | (0.0)  |
| Kendo                 | 18          | (2.1)  | 15          | (3.5)  | 3             | (0.7)  |
| Ski and Skating       | 14          | (1.6)  | 8           | (1.9)  | 6             | (1.4)  |
| Dance                 | 13          | (1.5)  | 0           | (0.0)  | 13            | (3.0)  |
| Rugby football        | 12          | (1.4)  | 12          | (2.8)  | 0             | (0.0)  |
| Badminton             | 7           | (0.8)  | 3           | (0.7)  | 4             | (0.9)  |
| Kyudo                 | 6           | (0.7)  | 5           | (1.2)  | 1             | (0.2)  |
| Boxing                | 6           | (0.7)  | 6           | (1.4)  | 0             | (0.0)  |
| Ice hockey            | 4           | (0.5)  | 4           | (0.9)  | 0             | (0.0)  |
| Karate                | 4           | (0.5)  | 4           | (0.9)  | 0             | (0.0)  |
| Handball              | 4           | (0.5)  | 4           | (0.9)  | 0             | (0.0)  |
| Rowing                | 4           | (0.5)  | 3           | (0.7)  | 1             | (0.2)  |
| Wrestling             | 4           | (0.5)  | 4           | (0.9)  | 0             | (0.0)  |
| Golf                  | 3           | (0.4)  | 2           | (0.5)  | 1             | (0.2)  |
| Equestrian art        | 2           | (0.2)  | 2           | (0.5)  | 0             | (0.0)  |
| American football     | 1           | (0.1)  | 1           | (0.2)  | 0             | (0.0)  |
| Aviation              | 1           | (0.1)  | 1           | (0.2)  | 0             | (0.0)  |
| Weightlifting         | 1           | (0.1)  | 1           | (0.2)  | 0             | (0.0)  |
| Sailing               | 1           | (0.1)  | 1           | (0.2)  | 0             | (0.0)  |