|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Supplementary Table 1. The estimation results of the univariate model for epigenetic aging among young adult twin pairs (MZ *n* = 163, DZ *n* = 122) | | | | | | | | | | | | | | | | | |
|  | Model fit | | | | | | | | | Parameter estimates and their 95% confidence intervals | | | | | | | |
|  | Χ2 | df | SC | *P* | CFI | TLI | RMSEA | SRMR | BIC | a2 / total | | c2 or d2 / total | | e2 / total | | total | |
| DNAm Age acceleration | | | | | | | | | | | | | | | | | |
| ACE | 38.9 | 27 | 0.90 | 0.064 | 0.93 | 0.92 | 0.056 | 0.044 | 7528 | 0.40 | 0.07, 0.74 | 0.28 | -0.02, 0.58 | 0.32 | 0.23, 0.41 | 10.94 | 9.42, 12.46 |
| ADE | 40.6 | 27 | 0.94 | 0.045 | 0.92 | 0.91 | 0.059 | 0.045 | 7531 | 0.69 | 0.61, 0.77 | 0.00 | 0.00, 0.00 | 0.31 | 0.23, 0.39 | 10.74 | 9.32, 12.16 |
| **AE** | **42.1** | **28** | **0.91** | **0.043** | **0.91** | **0.91** | **0.059** | **0.045** | **7525** | **0.69** | **0.61, 0.77** | **-** |  | **0.31** | **0.23, 0.39** | **10.74** | **9.32, 12.16** |
| CE | 48.1 | 28 | 0.91 | 0.011 | 0.88 | 0.87 | 0.071 | 0.046 | 7531 | - |  | 0.61 | 0.52, 0.69 | 0.40 | 0.31, 0.48 | 11.02 | 9.51, 12.54 |
| E | 198 | 29 | 0.87 | <0.001 | 0.03 | 0.00 | 0.202 | 0.091 | 7653 | - |  |  |  | 1.00 |  | 10.99 | 9.49, 12.49 |
| DNAm PhenoAge acceleration | | | | | | | | | | | | | | | | | |
| ACE | 29.7 | 27 | 0.93 | 0.328 | 0.97 | 0.97 | 0.027 | 0.041 | 7943 | 0.64 | 0.55, 0.74 | 0.00 | 0.00, 0.00 | 0.36 | 0.27, 0.45 | 21.35 | 18.74, 23.96 |
| ADE | 26.7 | 27 | 0.89 | 0.478 | 1.00 | 1.00 | 0.000 | 0.039 | 7939 | 0.01 | -0.67, 0.69 | 0.65 | -0.04, 1.34 | 0.34 | 0.26, 0.43 | 21.04 | 18.51, 23.58 |
| **AE** | **30.8** | **28** | **0.90** | **0.326** | **0.97** | **0.97** | **0.027** | **0.041** | **7938** | **0.64** | **0.55, 0.74** | **-** |  | **0.36** | **0.27, 0.45** | **21.35** | **18.73, 23.96** |
| CE | 63.3 | 28 | 0.88 | <0.001 | 0.70 | 0.68 | 0.094 | 0.050 | 7966 | - |  | 0.45 | 0.34, 0.55 | 0.56 | 0.45, 0.66 | 21.01 | 18.52, 23.51 |
| E | 136 | 29 | 0.87 | <0.001 | 0.11 | 0.08 | 0.161 | 0.077 | 8022 | - |  | - |  | 1.00 |  | 20.99 | 18.5, 23.48 |
| DNAm GrimAge acceleration | | | | | | | | | | | | | | | | | |
| ACE | 44.1 | 27 | 1.02 | 0.020 | 0.94 | 0.93 | 0.067 | 0.057 | 7281 | 0.62 | 0.52, 0.72 | 0.00 | 0.00, 0.00 | 0.38 | 0.28, 0.48 | 6.57 | 5.46, 7.68 |
| ADE | 46.5 | 27 | 0.97 | 0.011 | 0.93 | 0.92 | 0.071 | 0.057 | 7281 | 0.50 | -0.26, 1.26 | 0.12 | -0.64, 0.88 | 0.38 | 0.28, 0.48 | 6.56 | 5.44, 7.67 |
| **AE** | **45.7** | **28** | **0.98** | **0.019** | **0.94** | **0.93** | **0.067** | **0.057** | **7276** | **0.62** | **0.52, 0.72** | **-** |  | **0.38** | **0.28, 0.48** | **6.57** | **5.46, 7.68** |
| CE | 63.8 | 28 | 0.96 | <0.001 | 0.88 | 0.87 | 0.095 | 0.058 | 7292 | - |  | 0.46 | 0.34, 0.57 | 0.54 | 0.43, 0.66 | 6.49 | 5.42, 7.57 |
| E | 136 | 29 | 0.94 | <0.001 | 0.64 | 0.63 | 0.161 | 0.078 | 7353 | - |  | - |  | 1.00 |  | 6.48 | 5.41, 7.55 |
| Note. The model was adjusted for sex, body mass index and smoking status; SC, scaling correction | | | | | | | | | | | | | | | | | |