**Online supplementary material**

 Tables 3; Figures 1.

**A longitudinal twin study of Borderline and Antisocial personality disorder traits in early to middle adulthood.**

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**Table S1. Complete and incomplete twin pairs by zygosity group**

|  |  |  |
| --- | --- | --- |
|  Zygosity group | Wave 1 | Wave 2 |
|  | Complete pairs | Incomplete pairs | Complete pairs | Incomplete pairs |
| MZ Male | 220 | 5 | 154 | 49 |
| DZ Male | 117 | 3 | 76 | 36 |
| MZ Female | 449 | 4 | 357 | 63 |
| DZ Female | 259 | 8 | 179 | 59 |
| DZ Unlike sex | 340 | 3 | 219 | 104 |

MZ, Monozygotic; DZ Dizygotic

**Table S2. Within pair twin correlation with 95% Confidence intervals**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|   | T1 ASPD W1 | T1 BPD W1 | T1 ASPD W2 | T1 BPD W2 |
| T2 ASPD W1 | 0.41 (0.32,0.50) /0.11 (0.03, 0.15) | 0.27 (0.22,0.33) | 0.37 (0.32, 0.40) | 0.21 (0.18, 0.30) |
| T2 BPD W1 | 0.12 (0.07, 0.17) | 0.33 (0.26, 0.42) / 0.18 (0.12, 0.23) | 0.22 (0.15, 0.31) | 0.24 (0.23, 0.31) |
| T2 ASPD W2 | 0.23 (0.16, 0.33) | 0.19 (0.11, 0.26) | 0.40 (0.35, 0.52) /0.23 (0.14, 0.38) | 0.25 (0.17, 0.35) |
| T2 BPD W2 | 0.15 (0.07, 0.24) | 0.19 (0.14, 0.26) | 0.18 (0.15, 0.30) | 0.26 (0.16, 0.35) /0.20 (0.16, 0.34) |

 Monozygotic twins above the diagonal, dizygotic below the diagonal ASPD, Antisocial personality disorder traits; BPD, Borderline personality disorder traits; T1, Twin 1; T2, Twin 2; W1, Wave 1; W2, Wave 2

**Table S3. Frequencies of the ordinal levels**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Ordinal levels  | W1 ASPDN (%) | W1 BPD W1N (%) | W2 ASPD W2N (%) | W2 BPDN (%)  |
| 0 | 2060 (74.0) | 1450 (52.0) | 1901 (83.4) | 1473 (64.6) |
| 1 | 426 (15.3) | 646 (23.1) | 255 (11.2) | 417 (18.3) |
| 2 | 297 (10.7) | 695 (24.9) | 124 (5.4) | 390 (17.1) |

ASPD, Antisocial personality disorder traits; BPD, Borderline personality disorder traits; W1, Wave 1; W2, Wave 2

**Figure legend**

**Figure S1. Full longitudinal model with parameter estimates and 95% confidence intervals**

Abbreviations: ASPD-Antisocial personality disorder, BPD–Borderline personality disorder, A–additive genetic effects, E-individual environmental effects, C-shared environmental effects, subscript c-common, subscript s-specific, L1-latent factor time 1, L2-latent factor time 2, W1-wave 1, W2-wave 2, subscrip1-time 1, subscript 2-time 2