Supplementary Table S1. Comparison of 19-year-olds with and without BAP assessment.

| Variables | Non-BAP assessment (n=143)Mean (SD) | BAP assessment (n=33)Mean (SD) | p value |
| --- | --- | --- | --- |
| Objective hardship | 10.78 (4.77) | 11.06 (4.19) | 0.755 |
| Subjective distress a | 2.06 (1.13) | 1.93 (1.12) | 0.538 |
| Cognitive appraisal b | 0.62 (0.49) | 0.69 (0.47) | 0.459 |
| Timing of exposure (days) | 103. 48 (97.70) | 91.88 (99.85) | 0.546 |
| SES c | 30.43 (12.92) | 25.33 (10.51) | **0.023\*** |
| Maternal age (years) at birth | 29.66 (4.59) | 31.34 (4.68) | 0.063 |
| Smoking per day | 1.83 (5.05) | 1.55 (4.87) | 0.775 |
| Alcohol per week | 0.15 (0.41) | 0.09 (0.39) | 0.528 |
| Obstetric complications | 4.21 (2.81) | 3.94 (2.64) | 0.624 |
| Life events | 5.18 (3.12) | 6.09 (4.10) | 0.159 |
| Psychological problems | 0.26 (0.22) | 0.15 (0.16) | **0.001\*\*** |
| Gestational age (weeks) at birth | 39.49 (1.95) | 39.56 (1.37) | 0.794 |
| Birth weight (grams) | 3436.05 (575.68) | 3518.26 (498.68) | 0.457 |

BAP, Broad Autism Phenotype; SD, standard deviation; SES, socioeconomic status; GHQ, General Health Questionnaire-28 at recruitment.

a Log-transformed values of IES-R total score

b Cognitive appraisal is defined as two-level options: “negative” and “positive” (combining “neutral” and “positive”).

c Lower SES scores correspond to higher SES.

\* p < 0.05

\*\*p < 0.01

Supplementary Table S2. Comparison of variables associated with caseness.

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Variables | BAP total score cut-offs | Aloof personality cut-offs | Pragmatic language impairment cut-offs | Rigid personality cut-offs | Composite BAP |
|  | AbsentMean (SD) | PresentMean (SD) | p value | AbsentMean (SD) | PresentMean (SD) | p value | AbsentMean (SD) | PresentMean (SD) | p value | AbsentMean (SD) | PresentMean (SD) | p value | AbsentMean (SD) | PresentMean (SD) | p value |
| Objective hardship | 10.357 (2.934) | 14.600 (7.733) | 0.289 | 10.684 (2.964) | 11.429 (5.445) | 0.617 | 10.577 (2.759) | 12.571 (7.480) | 0.513 | 9.706 (2.592) | 12.375 (5.045) | 0.063 | 10.381 (2.872) | 12.083 (5.728) | 0.352 |
| Subjective distress a | 1.854 (1.074) | 2.176 (1.384) | 0.558 | 1.916 (1.089) | 1.885 (1.173) | 0.938 | 1.652 (1.075) | 2.834 (0.666) | **0.010\*** | 1.692 (1.047) | 2.127 (1.159) | 0.266 | 1.838 (1.016) | 2.016 (1.292) | 0.664 |
| Cognitive appraisal | 2.214 (0.833) | 1.600 (0.894) | 0.142 | 2.263 (0.872) | 1.929 (0.829) | 0.275 | 2.231 (0.815) | 1.714 (0.951) | 0.160 | 2.412 (0.795) | 1.813 (0.834) | **0.043\*** | 2.238 (0.831) | 1.917 (0.900) | 0.308 |
| Timing of exposure (days) | 96.311 (104.117) | 55.202 (63.856) | 0.403 | 88.254 (107.072) | 92.563 (91.845) | 0.904 | 92.953 (105.861) | 79.421 (76.369) | 0.755 | 112.347 (111.470) | 66.426 (81.641) | 0.189 | 87.328 (94.902) | 113.856 (71.647) | 0.816 |
| SES b | 24.694 (9.642) | 26.800 (15.786) | 0.686 | 26.392 (10.596) | 23.143 (10.450) | 0.388 | 23.517 (9.393) | 30.571 (13.202) | 0.116 | 24.320 (10.148) | 25.750 (11.139) | 0.702 | 24.926 (9.746) | 25.167 (12.157) | 0.951 |
| Maternal age (years) at birth | 29.995 (4.764) | 34.362 (3.087) | 0.059 | 30.495 (4.362) | 30.877 (5.464) | 0.825 | 30.225 (4.968) | 32.263 (3.911) | 0.325 | 30.384 (4.211) | 30.947 (5.450) | 0.741 | 29.870 (4.452) | 32.035 (5.219) | 0.216 |
| Smoking per day | 1.411 (4.935) | 2.000 (4.472) | 0.805 | 2.079 (5.921) | 0.714 (2.673) | 0.429 | 1.346 (5.083) | 2.071 (3.878) | 0.729 | 0 (0) | 3.094 (6.634) | 0.082 | 1.667 (5.633) | 1.208 (3.056) | 0.797 |
| Alcohol per week | 0.112 (0.416) | 0.001 (0.001) | 0.559 | 0.164 (0.499) | 0.001 (0.001) | 0.169 | 0.082 (0.392) | 0.143 (0.378) | 0.714 | 0.124 (0.484) | 0.064 (0.250) | 0.658 | 0.101 (0.436) | 0.083 (0.289) | 0.902 |
| Obstetric complications | 3.750 (2.605) | 4.400 (3.130) | 0.621 | 3.160 (2.035) | 4.790 (3.142) | 0.081 | 3.730 (2.750) | 4.290 (2.360) | 0.630 | 3.000 (1.904) | 4.750 (3.066) | 0.056 | 3.100 (1.947) | 5.170 (3.243) | 0.061 |
| Life events | 6.071 (3.819) | 7.200 (6.017) | 0.581 | 5.684 (3.465) | 7.000 (4.915) | 0.373 | 6.039 (3.995) | 7.000 (4.830) | 0.592 | 5.471 (2.875) | 7.063 (5.105) | 0.285 | 5.714 (3.334) | 7.167 (5.271) | 0.338 |
| Psychological problems | 0.157 (0.171) | 0.093 (0.074) | 0.420 | 0.164 (0.185) | 0.125 (0.124) | 0.505 | 0.162 (0.173) | 0.092 (0.090) | 0.312 | 0.135 (0.176) | 0.161 (0.148) | 0.646 | 0.158 (0.179) | 0.128 (0.128) | 0.611 |
| Gestational age (weeks) at birth | 39.444 (1.443) | 40.114 (0.326) | 0.315 | 39.534 (0.808) | 39.561 (1.897) | 0.955 | 39.533 (1.482) | 39.592 (0.776) | 0.921 | 39.689 (0.869) | 39.393 (1.746) | 0.538 | 39.721 (0.835) | 39.238 (1.973) | 0.332 |
| Birth weight (grams) | 3537.862 (502.62) | 3424.200 (458.037) | 0.641 | 3602.534 (420.277) | 3409.500 (570.779) | 0.271 | 3536.775 (517.568) | 3460.714 (405.416) | 0.722 | 3664.47 (416.264) | 3367.822 (530.236) | 0.083 | 3642.150 (417.889) | 3308.000 (553.479) | 0.059 |
| Age (years) at BAP assessment | 18.751 (0.375) | 18.69 (0.355) | 0.725 | 18.772 (0.394) | 18.699 (0.337) | 0.583 | 18.747 (0.388) | 18.718 (0.303) | 0.858 | 18.803 (0.413) | 18.675 (0.312) | 0.327 | 18.730 (0.419) | 18.762 (0.270) | 0.818 |
| IQ c | 113.515 (11.518) | 112.200 (9.859) | 0.812 | 110.211 (10.581) | 117.529 (10.853) | 0.061 | 113.170 (11.241) | 113.857 (11.668) | 0.888 | 112.353 (10.494) | 114.338 (12.066) | 0.617 | 110.762 (10.927) | 117.784 (10.505) | 0.082 |

BAP, Broad Autism Phenotype; IQ, intelligence quotient; SD, standard deviation; SES, socioeconomic status.

a Log-transformed values of IES-R total score

b Lower SES scores correspond to higher SES level.

c IQ was assessed at 19 years of age using the Wechsler Adult Intelligence Scale–Third Edition short form.

\*p < 0.05

Supplementary Table 3. Logistic regression results for PNMS predicting caseness meeting the criterion for BAP cut-offs.

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
|  |  | OR [95%CI] | p value | q value | Hosmer-Lemeshow test |
| **(1) Total score caseness** |  |  |  |  |  |
| Model 1 |  |  |  |  | 𝜒2 = 8.538, p = 0.383 |
|  | Objective hardship | 1.265 [0.987, 1.623] | 0.064 | 0.304 |  |
| Model 2 |  |  |  |  | 𝜒2 = 9.675, p = 0.289 |
|  | Objective hardship | **1.294 [1.007, 1.663]** | **0.044\*** | 0.220 |  |
|  | Child sex (female) | 3.944 [0.235, 66.155] | 0.340 | 0.563 |  |
| Model 1 |  |  |  |  | 𝜒2 = 10.619, p = 0.224 |
|  | Subjective distress | 1.321 [0.535, 3.262] | 0.546 | 0.683 |  |
| Model 2 |  |  |  |  | 𝜒2 = 5.016, p = 0.756 |
|  | Subjective distress | 1.376 [0.551, 3.434] | 0.494 | 0.645 |  |
|  | Child sex (female) | 2.430 [0.232, 25.516] | 0.459 | 0.626 |  |
| Model 1 |  |  |  |  | 𝜒2 = 0.093, p = 0.760 |
|  | Cognitive appraisal | 0.406 [0.117, 1.409] | 0.156 | 0.401 |  |
| Model 2 |  |  |  |  | 𝜒2 = 2.129, p = 0.712 |
|  | Cognitive appraisal | 0.426 [0.118, 1.532] | 0.191 | 0.358 |  |
|  | Child sex (female) | 1.518 [0.133, 17.351] | 0.737 | 0.790 |  |
| **(2) Aloof personality caseness** |
| Model 1 |  |  |  |  | 𝜒2 = 4.025, p = 0.855 |
|  | Objective hardship | 1.046 [0.882, 1.240] | 0.606 | 0.699 |  |
| Model 2 |  |  |  |  | 𝜒2 = 4.394, p = 0.820 |
|  | Objective hardship | 1.052 [0.887, 1.249] | 0.559 | 0.645 |  |
|  | Child sex (female) | 1.547 [0.342, 7.006] | 0.571 | 0.714 |  |
|  |  |  |  |  |  |
| Model 1 |  |  |  |  | 𝜒2 = 3.510, p = 0.898 |
|  | Subjective distress | 0.974 [0.517, 1.835] | 0.974 | 0.974 |  |
| Model 2 |  |  |  |  | 𝜒2 = 2.731, p = 0.950 |
|  | Subjective distress | 0.993 [0.524, 1.881] | 0.982 | 0.982 |  |
|  | Child sex (female) | 1.455 [0.325, 6.508] | 0.623 | 0.719 |  |
| Model 1 |  |  |  |  | 𝜒2 = 0.739, p = 0.390 |
|  | Cognitive appraisal | 0.622 [0.269, 1.435] | 0.265 | 0.401 |  |
| Model 2 |  |  |  |  | 𝜒2 = 4.139, p = 0.387 |
|  | Cognitive appraisal | 0.637 [0.267, 1.516] | 0.637 | 0.683 |  |
|  | Child sex (female) | 1.172 [0.245, 5.616] | 0.843 | 0.843 |  |
| **(3) Pragmatic language impairment caseness**  |
| Model 1 |  |  |  |  | 𝜒2 = 12.041, p = 0.149 |
|  | Objective hardship | 1.119 [0.918, 1.364] | 0.267 | 0.401 |  |
| Model 2 |  |  |  |  | 𝜒2 = 9.941, p = 0.269 |
|  | Objective hardship | 1.149 [0.935, 1.413] | 0.187 | 0.358 |  |
|  | Child sex (female) | 4.854 [0.439, 53.661] | 0.198 | 0.371 |  |
| Model 1 |  |  |  |  | 𝜒2 = 2.855, p = 0.943 |
|  | Subjective distress | **3.866 [1.172, 12.755]** | **0.026\*** | 0.304 |  |
| Model 2 |  |  |  |  | 𝜒2 = 3.462, p = 0.902 |
|  | Subjective distress | **4.826 [1.252, 18.599]** | **0.022\*** | 0.218 |  |
|  | Child sex (female) | 7.632 [0.562, 103.687] | 0.127 | 0.318 |  |
| Model 1 |  |  |  |  | 𝜒2 = 0.740, p = 0.390 |
|  | Cognitive appraisal | 0.476 [0.168, 1.354] | 0.164 | 0.401 |  |
| Model 2 |  |  |  |  | 𝜒2 = 3.423, p = 0.490  |
|  | Cognitive appraisal | 0.533 [0.180, 1.575] | 0.255 | 0.425 |  |
|  | Child sex (female) | 2.864 [0.280, 29.311] | 0.375 | 0.563 |  |
| **(4) Rigid personality caseness** |
| Model 1 |  |  |  |  | 𝜒2 = 7.023, p = 0.534 |
|  | Objective hardship | 1.210 [0.977, 1.498] | 0.081 | 0.304 |  |
| Model 2 |  |  |  |  | 𝜒2 = 5.814, p = 0.668 |
|  | Objective hardship | **1.290 [1.026, 1.622]** | **0.029\*** | 0.218 |  |
|  | Child sex (female) | **15.365 [1.777, 132.841]** | **0.013\*** | 0.113 |  |
| Model 1 |  |  |  |  | 𝜒2 = 6.300, p = 0.614 |
|  | Subjective distress | 1.456 [0.759, 2.790] | 0.258 | 0.401 |  |
| Model 2 |  |  |  |  | 𝜒2 = 11.120, p = 0.195 |
|  | Subjective distress | 1.798 [0.851, 3.797] | 0.124 | 0.358 |  |
|  | Child sex (female) | **10.892 [1.601, 74.089]** | **0.015\*** | 0.113 |  |
| Model 1 |  |  |  |  | 𝜒2 = 0.101, p = 0.750 |
|  | Cognitive appraisal | **0.408 [0.168, 0.995]** | **0.049\*** | 0.304 |  |
| Model 2 |  |  |  |  | 𝜒2 = 3.423, p = 0.952 |
|  | Cognitive appraisal | 0.478 [0.184, 1.246] | 0.131 | 0.358 |  |
|  | Child sex (female) | **6.359 [1.026, 39.423]** | **0.047\*** | 0.235 |  |
| **(5) Composite diagnosis of BAP caseness** |
| Model 1 |  |  |  |  | 𝜒2 = 3.969, p = 0.860 |
|  | Objective hardship | 1.109 [0.925, 1.330] | 0.264 | 0.401 |  |
| Model 2  |  |  |  |  | 𝜒2 = 2.862, p = 0.943 |
|  | Objective hardship | 1.138 [0.947, 1.368] | 0.169 | 0.358 |  |
|  | Child sex (female) | 4.692 [0.732, 30.074] | 0.103 | 0.318 |  |
| Model 1 |  |  |  |  | 𝜒2 = 6.271, p = 0.617 |
|  | Subjective distress | 1.163 [0.603, 2.241] | 0.653 | 0.700 |  |
| Model 2 |  |  |  |  | 𝜒2 = 7.984, p = 0.435 |
|  | Subjective distress | 1.254 [0.634, 2.482] | 0.516 | 0.645 |  |
|  | Child sex (female) | 4.043 [0.685, 23.867] | 0.123 | 0.318 |  |
| Model 1 |  |  |  |  | 𝜒2 = 0.080, p = 0.777 |
|  | Cognitive appraisal | 0.635 [0.270, 1.492] | 0.297 | 0.405 |  |
| Model 2 |  |  |  |  | 𝜒2 = 0.139, p = 0.987 |
|  | Cognitive appraisal | 0.736 [0.299, 1.811] | 0.504 | 0.645 |  |
|  | Child sex (female) | 3.267 [0.544, 19.629] | 0.196 | 0.371 |  |

BAP, Broad Autism Phenotype; PNMS, prenatal maternal stress; OR, odds ratio; CI, confidence interval

Model 1 (crude model) was conducted with PNMS variables alone.

Model 2 (adjusted model) was conducted with PNMS variables and child sex, no control variables were included.

q value represents corrected p values.

\* p < 0.05

Supplementary Table S4. Hierarchical linear regression results (omitting preconception group) for the association between PNMS and the severity of BAP traits in young adults controlling for child sex.

|  |  |  |  |
| --- | --- | --- | --- |
|  | Values in final model |  | Values after entry of each variable |
|  | B | SE of B | β |  | R2 | ∆R2 | F | ∆F |
| **(1) Total score** |  |  |  |  |  |  |  |  |
| Constant | 1.588 | 0.570 |  |  |  |  |  |  |
| Child sex | 0.114 | 0.260 | 0.079 |  | 0.001 |  | 0.029 |  |
| Objective hardship | 0.088\*\* | 0.029 | 0.548\*\* |  | 0.300 | 0.299 | 4.718 | 9.397 |
| Constant | 2.397 | 0.615 |  |  |  |  |  |  |
| Child sex | 0.100 | 0.309 | 0.069 |  | 0.001 |  | 0.029 |  |
| Subjective distress | 0.111 | 0.125 | 0.189 |  | 0.036 | 0.035 | 0.408 | 0.787 |
| Constant | 3.589 | 0.697 |  |  |  |  |  |  |
| Child sex | -0.103 | 0.300 | -0.071 |  | 0.001 |  | 0.029 |  |
| Cognitive appraisal | -0.305 | 0.167 | -0.378 |  | 0.133 | 0.131 | 1.684 | 3.336 |
| **(2) Aloof personality** |  |  |  |  |  |  |  |  |
| Constant | 1.712 | 0.782 |  |  |  |  |  |  |
| Child sex | -0.004 | 0.356 | -0.002 |  | 0.002 |  | 0.041 |  |
| Objective hardship | 0.109\* | 0.039 | 0.507\* |  | 0.258 | 0.256 | 3.818 | 7.583 |
| Constant | 2.884 | 0.831 |  |  |  |  |  |  |
| Child sex | -0.051 | 0.417 | -0.026 |  | 0.002 |  | 0.041 |  |
| Subjective distress | 0.071 | 0.169 | 0.090 |  | 0.010 | 0.008 | 0.108 | 0.176 |
| Constant | 3.920 | 0.962 |  |  |  |  |  |  |
| Child sex | -0.228 | 0.415 | -0.118 |  | 0.002 |  | 0.041 |  |
| Cognitive appraisal | -0.288 | 0.231 | -0.268 |  | 0.068 | 0.066 | 0.800 | 1.558 |
| **(3) Pragmatic language impairment** |
| Constant | 1.505 | 0.622 |  |  |  |  |  |  |
| Child sex | -0.002 | 0.283 | -0.001 |  | 0.001 |  | 0.027 |  |
| Objective hardship | 0.068\* | 0.031 | 0.421\* |  | 0.177 | 0.176 | 2.368 | 4.704 |
| Constant | 1.694 | 0.573 |  |  |  |  |  |  |
| Child sex | 0.061 | 0.288 | 0.042 |  | 0.001 |  | 0.027 |  |
| Subjective distress | 0.251\* | 0.116 | 0.424\* |  | 0.175 | 0.174 | 2.340 | 4.648 |
| Constant | 3.038 | 0.724 |  |  |  |  |  |  |
| Child sex | -0.168 | 0.312 | -0.115 |  | 0.001 |  | 0.027 |  |
| Cognitive appraisal | -0.231 | 0.174 | -0.285 |  | 0.076 | 0.075 | 0.902 | 1.775 |
| **(4) Rigid personality** |  |  |  |  |  |  |  |  |
| Constant | 1.539 | 0.663 |  |  |  |  |  |  |
| Child sex | 0.342 | 0.302 | 0.208 |  | 0.028 |  | 0.674 |  |
| Objective hardship | 0.089\* | 0.033 | 0.490\* |  | 0.267 | 0.238 | 4.000 | 7.146 |
| Constant | 2.625 | 0.702 |  |  |  |  |  |  |
| Child sex | 0.284 | 0.352 | 0.172 |  | 0.028 |  | 0.674 |  |
| Subjective distress | 0.012 | 0.143 | 0.018 |  | 0.029 | 0.001 | 0.326 | 0.007 |
| Constant | 3.837 | 0.759 |  |  |  |  |  |  |
| Child sex | 0.076 | 0.327 | 0.046 |  | 0.028 |  | 0.674 |  |
| Cognitive appraisal | -0.400\* | 0.182 | -0.436\* |  | 0.203 | 0.175 | 2.809 | 4.831 |

BAP, Broad Autism Phenotype; PNMS, prenatal maternal stress; SE, standard error.

\* p < 0.05

\*\* p < 0.01

Supplementary Table S5. Logistic regression results (omitting preconception group) for PNMS predicting caseness meeting the criterion for BAP cut-offs.

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  |  | OR [95%CI] | p value | Hosmer-Lemeshow test |
| **(1) Total score caseness** |  |  |  |  |
| Model 1 |  |  |  | 𝜒2 = 6.888, p = 0.331 |
|  | Objective hardship | 1.708 [0.982, 2.971] | 0.058 |  |
| Model 2 |  |  |  | 𝜒2 = 6.070, p = 0.532 |
|  | Objective hardship | **1.708 [1.005, 2.900]** | **0.048\*** |  |
|  | Child sex (female) | 3.470 [0.015, 806.666] | 0.654 |  |
| Model 1 |  |  |  | 𝜒2 = 11.522, p = 0.074 |
|  | Subjective distress | 1.215 [0.426, 3.466] | 0.716 |  |
| Model 2 |  |  |  | 𝜒2 = 7.238, p = 0.404 |
|  | Subjective distress | 1.234 [0.426, 3.571] | 0.698 |  |
|  | Child sex (female) | 1.249 [0.093, 16.755] | 0.866 |  |
| Model 1 |  |  |  | 𝜒2 = 2.34E-8, p = 1.000 |
|  | Cognitive appraisal | 6.51E-9  | 0.998 |  |
| Model 2 |  |  |  | 𝜒2 = 2.36E-8, p = 1.000 |
|  | Cognitive appraisal | 6.74E-9 | 0.998 |  |
|  | Child sex (female) | 0.500 [0.019, 12.898] | 0.676 |  |
| **(2) Aloof personality caseness** |  |  |  |  |
| Model 1 |  |  |  | 𝜒2 = 4.761, p = 0.575 |
|  | Objective hardship | 1.082 [0.895, 1.307] | 0.416 |  |
| Model 2 |  |  |  | 𝜒2 = 3.664, p = 0.722 |
|  | Objective hardship | 1.086 [0.900, 1.311] | 0.388 |  |
|  | Child sex (female) | 1.670 [0.293, 9.511] | 0.564 |  |
| Model 1 |  |  |  | 𝜒2 = 5.210, p = 0.517 |
|  | Subjective distress | 0.994 [0.507, 1.952] | 0.987 |  |
| Model 2 |  |  |  | 𝜒2 = 6.841, p = 0.336 |
|  | Subjective distress | 1.027 [0.516, 2.044] | 0.939 |  |
|  | Child sex (female) | 1.574 [0.279, 8.878] | 0.607 |  |
| Model 1 |  |  |  | 𝜒2 = 0.268, p = 0.605 |
|  | Cognitive appraisal | 0.608 [0.236, 1.569] | 0.304 |  |
| Model 2 |  |  |  | 𝜒2 = 2.222, p = 0.695 |
|  | Cognitive appraisal | 0.627 [0.235, 1.677] | 0.353 |  |
|  | Child sex (female) | 1.243 [0.207, 7.461] | 0.812 |  |
| **(3) Pragmatic language impairment caseness** |
| Model 1 |  |  |  | 𝜒2 = 8.795, p = 0.185 |
|  | Objective hardship | 1.196 [0.949, 1.509] | 0.130 |  |
| Model 2 |  |  |  | 𝜒2 = 7.130, p = 0.309 |
|  | Objective hardship | 1.218 [0.963, 1.541] | 0.099 |  |
|  | Child sex (female) | 3.823 [0.260, 56.261] | 0.328 |  |
| Model 1 |  |  |  | 𝜒2 = 6.833, p = 0.337 |
|  | Subjective distress | 6.176 [0.953, 40.038] | 0.056 |  |
| Model 2 |  |  |  | 𝜒2 = 7.332, p = 0.395 |
|  | Subjective distress | 9.636 [0.965, 96.232] | 0.054 |  |
|  | Child sex (female) | 8.623 [0.414, 179.506] | 0.164 |  |
| Model 1 |  |  |  | 𝜒2 = 1.785, p = 0.182 |
|  | Cognitive appraisal | 0.249 [0.058, 1.082] | 0.064 |  |
| Model 2 |  |  |  | 𝜒2 = 3.719, p = 0.445 |
|  | Cognitive appraisal | 0.259 [0.058, 1.162] | 0.078 |  |
|  | Child sex (female) | 1.694 [0.127, 22.633] | 0.690 |  |
| **(4) Rigid personality caseness** |  |  |  |  |
| Model 1 |  |  |  | 𝜒2 = 3.451, p = 0.750 |
|  | Objective hardship | 1.275 [0.984, 1.651] | 0.066 |  |
| Model 2 |  |  |  | 𝜒2 = 5.608, p = 0.586 |
|  | Objective hardship | **1.317 [1.013, 1.714]** | **0.040\*** |  |
|  | Child sex (female) | **10.478 [1.046, 104.981]** | **0.046\*** |  |
| Model 1 |  |  |  | 𝜒2 = 5.588, p = 0.471 |
|  | Subjective distress | 1.181 [0.606, 2.301] | 0.626 |  |
| Model 2 |  |  |  | 𝜒2 = 4.253, p = 0.642 |
|  | Subjective distress | 1.414 [0.668, 2.993] | 0.366 |  |
|  | Child sex (female) | 7.222 [0.991, 52.614] | 0.051 |  |
| Model 1 |  |  |  | 𝜒2 = 0.004, p = 0.952 |
|  | Cognitive appraisal | **0.355 [0.126, 0.996]** | **0.049\*** |  |
| Model 2 |  |  |  | 𝜒2 = 0.490, p = 0.974 |
|  | Cognitive appraisal | 0.403 [0.136, 1.191] | 0.100 |  |
|  | Child sex (female) | 4.571 [0.624, 33.489] | 0.135 |  |
| **(5) Composite diagnosis of BAP caseness** |
| Model 1 |  |  |  | 𝜒2 = 1.922, p = 0.927 |
|  | Objective hardship | 1.149 [0.935, 1.412] | 0.187 |  |
| Model 2 |  |  |  | 𝜒2 = 4.460, p = 0.615 |
|  | Objective hardship | 1.168 [0.953, 1.431] | 0.135 |  |
|  | Child sex (female) | 4.413 [0.591, 32.965] | 0.148 |  |
| Model 1 |  |  |  | 𝜒2 = 7.843, p = 0.250 |
|  | Subjective distress | 1.080 [0.549, 2.124] | 0.824 |  |
| Model 2 |  |  |  | 𝜒2 = 7.968, p = 0.240 |
|  | Subjective distress | 1.194 [0.584, 2.441] | 0.626 |  |
|  | Child sex (female) | 3.825 [0.571, 25.610] | 0.167 |  |
| Model 1 |  |  |  | 𝜒2 = 0.212, p = 0.645 |
|  | Cognitive appraisal | 0.477 [0.179, 1.273] | 0.140 |  |
| Model 2 |  |  |  | 𝜒2 = 0.704, p = 0.951 |
|  | Cognitive appraisal | 0.535 [0.191, 1.484] | 0.230 |  |
|  | Child sex (female) | 2.738 [0.397, 18.861] | 0.306 |  |

BAP, Broad Autism Phenotype; PNMS, prenatal maternal stress; OR, odds ratio; CI, confidence interval

Model 1 (crude model) was conducted with PNMS variables alone.

Model 2 (adjusted model) was conducted with PNMS variables and child sex, no control variables were included.

\* p < 0.05