Supplementary material to

*Autistic Traits affect Reward Anticipation but not Reception*

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Note:

CI = Confidence Intervals

$\sigma^2$ = within group variance

$\tau_{00}$ = between group variance

ICC = Interclass Correlation (the ratio of the between-cluster variance to the total variance)

AIC$_{\text{null model}}$ = Akaike Information Criterion of the model in discussion or the null model (containing only intercept as a predictor)

P-values were computed via Wald-statistics approximation (treating $t$ as Wald $z$), uncorrected.
**Supplementary material - table 1** Regression results for the CNV in response to cues

| Predictors          | Estimates | SE  | CI (0.95)  | t     | p   | Estimates | SE  | CI (0.95)  | t     | p   |
|---------------------|-----------|-----|------------|-------|-----|-----------|-----|------------|-------|-----|
| Intercept           | -0.98     | 0.18| -1.33 – -0.62 | -5.36 | <0.001 | -0.22     | 0.18| -0.58 – 0.14 | -1.21 | 0.225 |
| LSAS-SR             | 0.01      | 0.01| -0.01 – 0.02 | 0.76  | 0.446 | 0.01      | 0.01| -0.01 – 0.02 | 0.76  | 0.446 |
| AQ                  | -0.06     | 0.03| -0.11 – -0.00 | -2.15 | 0.032 | -0.05     | 0.03| -0.10 – -0.00 | -1.98 | 0.048 |
| SM - M              | 0.75      | 0.19| 0.39 – 1.12  | 4.08  | <0.001 |          |     |             |       |     |
| SM - S              | 0.38      | 0.19| 0.01 – 0.74  | 2.03  | 0.042 |          |     |             |       |     |
| M - S               | -0.38     | 0.19| -0.74 – -0.02 | 2.05  | 0.040 |          |     |             |       |     |
| AQ : SM - M         | 0.00      | 0.03| -0.05 – 0.05 | 0.17  | 0.864 |          |     |             |       |     |
| AQ : SM - S         | 0.02      | 0.03| -0.03 – 0.07 | 0.84  | 0.402 |          |     |             |       |     |
| AQ : M - S          | 0.02      | 0.03| -0.03 – 0.07 | 0.67  | 0.505 |          |     |             |       |     |

**Random Effects**

| σ²                  | 0.87  |
|---------------------|-------|
| τ^00 code           | 0.82  |
| ICC code            | 0.48  |

**Model Information**

- Observations: 153
- Marginal $R^2$: 0.108
- Conditional $R^2$: 0.540
- AIC model: 499.513
- AIC null model: 535.919
**Supplementary material - table 2 Regression results for the CNV in the pre-feedback phase**

| Predictors     | Estimates | SE   | CI (0.95) | t   | p      | Estimates | SE   | CI (0.95) | t   | p      |
|----------------|-----------|------|-----------|-----|--------|-----------|------|-----------|-----|--------|
| Intercept      | -1.91     | 0.31 | -2.52 -1.30 | -6.15 | <0.001 | -2.03     | 0.31 | -2.64 -1.42 | -6.55 | <0.001 |
| LSAS-SR        | 0.03      | 0.01 | 0.00 -0.06 | 2.24 | 0.025  | 0.03      | 0.01 | 0.00 -0.06 | 2.24 | 0.025  |
| AQ             | -0.01     | 0.05 | -0.10 -0.08 | -0.21 | 0.831  | -0.03     | 0.05 | -0.12 -0.06 | -0.75 | 0.455  |
| SM - M         | -0.12     | 0.19 | -0.50 -0.26 | -0.62 | 0.532  |           |      |           |      |        |
| SM - S         | 0.00      | 0.19 | -0.38 -0.39 | 0.03  | 0.980  |           |      |           |      |        |
| M - S          |           |      |           | 0.13  | 0.19   | -0.25 -0.51 | 0.65 | 0.516  |      |        |
| AQ : SM - M    | -0.02     | 0.03 | -0.08 -0.03 | -0.91 | 0.361  |           |      |           |      |        |
| AQ : SM - S    | 0.01      | 0.03 | -0.05 -0.06 | 0.20  | 0.841  |           |      |           |      |        |
| AQ : M - S     |           | 0.03 | -0.02 -0.08 | 1.11  | 0.265  |           |      |           |      |        |

**Random Effects**

|          |          |          |          |          |          |          |
|----------|----------|----------|----------|----------|----------|----------|
| σ²       | 0.96     |          |          |          |          |          |
| τ₀₀ code | 3.95     |          |          |          |          |          |
| ICC code | 0.80     |          |          |          |          |          |

**Model Information**

|          | Observations | Marginal R² / Conditional R² | AIC model / AIC null model |
|----------|--------------|-----------------------------|----------------------------|
|          | 153          | 0.085 / 0.821               | 587.013 / 695.147          |
**Supplementary material - table 3** Regression results for the CNV in two phases – cue and pre-feedback

| Predictors            | Estimates | SE  | CI (0.95)   | t    | p     | Estimates | SE  | CI (0.95)   | t    | p     |
|-----------------------|-----------|-----|-------------|------|-------|-----------|-----|-------------|------|-------|
| CUE and PRE-FEEDBACK: CNV |           |     |             |      |       |           |     |             |      |       |
| Intercept             | -0.98     | 0.26| -1.48 – -0.48 | -3.81| <0.001| -0.23     | 0.26| -0.73 – -0.28 | -0.88| 0.380 |
| LSAS-SR               | 0.02      | 0.01| 0.00 – 0.04  | 2.11 | 0.035 | 0.02      | 0.01| 0.00 – 0.04  | 2.11 | 0.035 |
| AQ                    | -0.07     | 0.04| -0.14 – 0.00 | -1.95| 0.052 | -0.07     | 0.04| -0.14 – 0.00 | -1.83| 0.067 |
| SM - M                | 0.75      | 0.28| 0.20 – 1.31  | 2.66 | 0.008 |
| SM - S                | 0.38      | 0.28| -0.18 – 0.93 | 1.32 | 0.186 |
| M - S                 |           |     |             |      |       | -0.38     | 0.28| -0.94 – 0.18 | -1.33| 0.182 |
| cue - prefeedback     | -0.93     | 0.28| -1.48 – -0.37| -3.26| 0.001 | -1.80     | 0.28| -2.36 – -1.25| -6.34| <0.001 |
| AQ: SM - M            | 0.00      | 0.04| -0.07 – 0.08 | 0.11 | 0.911 |
| AQ : SM - S           | 0.02      | 0.04| -0.06 – 0.10 | 0.55 | 0.585 |
| AQ : M - S            |           |     |             |      |       | 0.02      | 0.04| -0.06 – 0.09 | 0.43 | 0.664 |
| AQ : cue - prefeedback| 0.08      | 0.04| 0.00 – 0.15  | 1.97 | 0.049 | 0.05      | 0.04| -0.03 – 0.13 | 1.23 | 0.217 |
| SM - M : cue - prefeedback | -0.88 | 0.40| -1.66 – -0.09| -2.18| 0.029 |
| SM - S : cue - prefeedback | -0.37 | 0.40| -1.16 – 0.42 | -0.92| 0.356 |
| M – S : cue – prefeedback |           |     |             |      |       | 0.51      | 0.40| -0.28 – 1.29 | 1.26 | 0.208 |
| AQ : SM - M : cue - prefeedback | -0.03 | 0.06| -0.14 – 0.08 | -0.52| 0.603 |
| AQ : SM - S : cue - prefeedback | -0.02 | 0.06| -0.12 – 0.09 | -0.29| 0.773 |
| AQ : M - S : cue - prefeedback |           |     |             |      |       | 0.01      | 0.06| -0.10 – 0.12 | 0.23 | 0.817 |

**Random Effects**

- $\sigma^2$: 2.05
- $\tau_{00}$ code: 1.32
- ICC code: 0.39

**Model Information**

- Observations: 306
- Marginal $R^2$ / Conditional $R^2$: 0.176 / 0.498
- AIC_model / AIC_null model: 1199.097 / 1303.481
### Supplementary material - table 4 Regression results for the P3 in response to outcomes

**FEEDBACK: P3**

| Predictors          | Estimates | SE  | CI (0.95)   | t     | p      | Estimates | SE  | CI (0.95)   | t     | p      |
|---------------------|-----------|-----|-------------|-------|--------|-----------|-----|-------------|-------|--------|
| Intercept           | 4.08      | 0.31| 3.47 – 4.68 | 13.26 | <0.001 | 4.03      | 0.31| 3.42 – 4.63 | 13.10 | <0.001 |
| LSAS-SR             | -0.01     | 0.01| -0.04 – 0.01| -0.88 | 0.378  | -0.01     | 0.01| -0.04 – 0.01| -0.88 | 0.378  |
| AQ                  | 0.09      | 0.05| 0.00 – 0.18 | 2.00  | 0.046  | 0.07      | 0.05| -0.01 – 0.16| 1.66  | 0.097  |
| SM - M              | -0.05     | 0.22| -0.49 – 0.39| -0.22 | 0.823  |           |     |             |       |        |
| SM - S              | -1.30     | 0.22| -1.74 – -0.86| -5.79 | <0.001 |           |     |             |       |        |
| M - S               | -1.25     | 0.22| -1.69 – -0.81| -5.56 | <0.001 |           |     |             |       |        |
| no-reward – reward  | 0.43      | 0.22| -0.01 – 0.87 | 1.93  | 0.054  | 0.42      | 0.22| -0.02 – 0.86| 1.87  | 0.062  |
| AQ: SM - M          | -0.02     | 0.03| -0.08 – 0.05 | -0.49 | 0.622  |           |     |             |       |        |
| AQ : SM - S         | -0.03     | 0.03| -0.09 – 0.03 | -1.09 | 0.276  |           |     |             |       |        |
| AQ : M - S          | -0.02     | 0.03| -0.08 – 0.04 | -0.60 | 0.551  |           |     |             |       |        |
| AQ : no-reward – reward | -0.01     | 0.03| -0.07 – 0.05 | -0.38 | 0.701  | -0.02     | 0.03| -0.08 – 0.04| -0.60 | 0.548  |
| SM - M : no-reward – reward | -0.01     | 0.32| -0.63 – 0.61 | -0.04 | 0.968  |           |     |             |       |        |
| SM - S : no-reward – reward | -0.04     | 0.32| -0.66 – 0.58 | -0.13 | 0.894  |           |     |             |       |        |
| M – S : no-reward – reward | -0.03     | 0.32| -0.65 – 0.59 | -0.09 | 0.927  |           |     |             |       |        |
| AQ : SM - M : no-reward – reward | -0.01     | 0.04| -0.09 – 0.08 | -0.15 | 0.878  |           |     |             |       |        |
| AQ : SM - S : no-reward – reward | 0.02      | 0.04| -0.07 – 0.10 | 0.40  | 0.688  |           |     |             |       |        |

#### Random Effects

|       |       |
|-------|-------|
| σ²    | 1.28  |
| τ₀₀   | 3.53  |
| ICC   | 0.73  |

#### Model Information

|                          |       |
|--------------------------|-------|
| Observations             | 306   |
| Marginal R² / Conditional R² | 0.118 / 0.766 |
| AIC model / AIC null model | 1119.680 / 1391.224 |