**Perceptual expectations differentially modulate neural correlates of perception and attention in children and adolescents with Autism Spectrum Disorder**

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**Supplementary information**

For each participant DDM parameters were estimated by fitting the same model using Fast-dm modelling technique and the Kolmogorov-Smirnov (KS) optimization procedure, which for each participant provided a fit-index *p* [1]. A Monte Carlo Simulation was run to obtain a reliable statistical threshold to evaluate model fit for each participant [2, 3]. 1000 random parameter sets were generated following the multivariate normal distribution based on the mean values and variance-covariance matrix of the estimated parameters using mvtnorm environment (*MASS* package; [4]). For each of those parameter-sets, one dataset was simulated using the construct-sample tool of fast-dm [1] (i.e. separately for each condition). Simulated data were subsequently fitted to the same diffusion model fitted to the empirical data of each participant. Results generated a distribution of 1000 p-values, and the 1% quantile of the distribution of p-values was selected as critical value (*pc*< 0.001) to evaluate model fit for each participant. Results for each participant showed significant model fit. In the table below descriptive information on the fit indices is provided for each group and the simulation study separately.

**Table 1**

*Mean fit indices for each group and the simulation study*

|  |  |  |  |
| --- | --- | --- | --- |
|  | ASD (*n*=23) | TD (*n*=23) | Simulation(*n*=1000) |
|  | ***M*** | ***SD*** | ***M*** | ***SD*** | ***M*** | ***SD*** |
| **K-S fit (*p*)** | 0.893 | 0.135 | 0.856 | 0.133 | 0.913 | 0.14 |

**References**

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