

# Supplementary Materials: Phthalates, Para-Hydroxybenzoic Acids, Bisphenol-A, and Gonadal Hormones' Effects on Susceptibility to Attention-Deficit/Hyperactivity Disorder

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**Table S1.** Correlations of EDCs in boys and in girls.

	MMP	MEP	MnBP	MBzP	MEHP	MP	EP	PP	BP	BPA
MMP	–	0.146	0.025	0.020	0.053	0.008	-0.066	0.017	0.056	-0.018
MEP	0.332*	–	0.198*	0.113	0.157	0.128	-0.016	0.237**	-0.061	0.123
MnBP	0.332*	0.209	–	0.211*	0.278**	0.008	-0.006	0.087	-0.076	0.060
MBzP	0.222	0.305*	0.133	–	0.563**	-0.042	-0.068	-0.082	-0.079	-0.003
MEHP	0.448**	0.152	0.373**	0.473**	–	-0.054	-0.045	0.070	-0.072	-0.022
MP	0.341**	0.016	-0.034	-0.023	0.233	–	0.027	0.207*	-0.026	-0.024
EP	0.094	-0.018	0.164	-0.048	-0.013	0.023	–	0.199*	0.235**	0.036
PP	-0.036	0.121	0.186	0.004	0.033	0.021	0.325*	–	-0.005	0.054
BP	0.136	0.050	0.376**	0.010	0.281*	0.037	-0.057	0.074	–	-0.034
BPA	0.018	-0.015	-0.102	0.157	0.124	-0.038	-0.036	-0.159	0.190	–

Data presented in the Table are correlation coefficient evaluated using partial correlation (age as the covariate). The upper part of the correlation matrix are data in boys (shown in blue); the lower part of the correlation matrix are data in girls (shown in red). \* $p < 0.05$ ; \*\* $p < 0.01$  for significance level.

**Table S2.** Correlations of gonadal hormone in boys and in girls.

	LH	FSH	Testosterone	Free testosterone	SHBG	Estradiol-E2	Progesterone	Prolactin
LH	–	0.455**	0.241**	0.482**	0.011	-0.037	0.225**	-0.015
FSH	0.373**	–	0.052	0.086	0.021	-0.141	0.115	0.053
Testosterone	0.600**	-0.116	–	0.599**	-0.110	0.075	-0.039	0.089
Free testosterone	0.318	0.010	0.439**	–	-0.192*	0.050	-0.062	-0.007
SHBG	0.011	-0.091	0.174	-0.672**	–	-0.043	-0.045	0.007
Estradiol-E2	0.611**	-0.106	0.925**	0.359**	0.175	–	0.342**	0.020
Progesterone	0.573**	-0.136	0.979**	0.380**	0.194	0.934†	–	0.033
Prolactin	0.092	0.124	-0.014	0.136	-0.179	-0.055	-0.031	–

Data presented in the Table are correlation coefficient evaluated using partial correlation (age as the covariate). The upper part of the correlation matrix are data in boys (shown in blue); the lower part of the correlation matrix are data in girls (shown in red). \* $p < 0.05$ ; \*\* $p < 0.01$  for significance level.

**Table S3.** Correlations of EDCs and levels of gonadal hormone for boys.

	MMP	MEP	MnBP	MBzP	MEHP	MP	EP	PP	BP	BPA
<b>LH</b>	-0.098	-0.004	0.055	-0.128	-0.056	0.082	-0.022	-0.022	-0.085	-0.001
<b>FSH</b>	-0.178	0.099	0.155	-0.019	-0.013	0.179	-0.021	-0.043	0.092	-0.022
<b>Testosterone</b>	0.106	0.030	0.065	0.572**	0.406**	-0.032	-0.037	-0.070	-0.072	0.018
<b>Free testosterone</b>	0.004	-0.020	0.060	-0.057	-0.008	0.028	-0.040	-0.057	-0.130	0.034
<b>SHBG</b>	-0.068	-0.065	-0.064	0.020	0.060	-0.083	0.044	0.042	0.047	-0.031
<b>Estradiol-E2</b>	0.043	-0.048	0.039	0.151	-0.123	-0.186	-0.064	-0.152	-0.004	0.005
<b>Progesterone</b>	-0.074	-0.093	-0.061	-0.185	-0.286**	0.148	-0.033	0.195	-0.007	-0.041
<b>Prolactin</b>	0.137	-0.060	-0.026	0.190	0.350**	-0.026	-0.132	-0.071	-0.039	-0.157

Data presented in the Table are correlation coefficient evaluated using partial correlation (age as the covariate). \*\* $p < 0.01$  for significance level.

**Table S4.** Correlations of EDCs and levels of gonadal hormone for girls.

	MMP	MEP	MnBP	MBzP	MEHP	MP	EP	PP	BP	BPA
<b>LH</b>	0.032	0.646**	0.283	-0.192	0.151	0.108	0.083	0.089	0.490**	0.159
<b>FSH</b>	-0.174	0.176	0.221	-0.284	-0.041	-0.007	-0.137	-0.035	0.149	0.138
<b>Testosterone</b>	-0.149	0.780**	-0.128	-0.131	-0.132	0.037	0.092	0.131	-0.082	-0.085
<b>Free testosterone</b>	-0.219	0.407*	0.038	-0.274	-0.203	0.226	0.152	0.164	0.176	0.262
<b>SHBG</b>	0.140	-0.114	-0.166	0.184	0.129	-0.265	-0.181	-0.135	-0.214	-0.223
<b>Estradiol-E2</b>	0.257	-0.063	-0.115	0.245	0.270	0.345	-0.060	-0.119	0.007	0.370*
<b>Progesterone</b>	0.234	-0.135	-0.034	-0.073	-0.203	-0.136	-0.052	-0.122	-0.094	-0.198
<b>Prolactin</b>	-0.004	0.083	-0.064	-0.084	-0.191	-0.162	-0.139	-0.152	0.023	-0.114

Data presented in the Table are correlation coefficient evaluated using partial correlation (age as the covariate). \* $p < 0.05$ ; \*\* $p < 0.01$  for significance level.

**Table S5.** Correlations of levels of gonadal hormone and symptoms of ADHD for boys.

	LH	FSH	Testosterone	Free testosterone	SHBG	Estradiol-E2	Progesterone	Prolactin
<b>Inattention (parent)</b>	0.035	0.111	0.029	-0.031	-0.039	0.062	0.082	-0.064
<b>Hyperactivity/Impulsivity (parent)</b>	0.025	-0.015	0.036	-0.046	0.028	0.033	0.117	-0.140
<b>Opposition (parent)</b>	-0.170	-0.117	-0.048	-0.072	-0.048	0.029	-0.065	-0.266*
<b>Inattention (teacher)</b>	-0.004	0.079	-0.057	0.054	-0.091	0.231*	-0.020	-0.189
<b>Hyperactivity/Impulsivity (teacher)</b>	-0.052	0.057	-0.042	-0.040	0.075	0.162	-0.079	-0.279**
<b>Opposition (teacher)</b>	0.005	-0.001	-0.058	0.137	-0.154	0.137	-0.117	-0.328**

Data presented in the Table are correlation coefficient evaluated using partial correlation (age as the covariate). \* $p < 0.05$ ; \*\* $p < 0.01$  for significance level.

**Table S6.** Correlations of levels of gonadal hormone and symptoms of ADHD for girls.

	LH	FSH	Testosterone	Free testosterone	SHBG	Estradiol-E2	Progesterone	Prolactin
<b>Inattention (parent)</b>	0.010	0.296	-0.088	-0.116	0.185	-0.277	0.321	0.172
<b>Hyperactivity/Impulsivity (parent)</b>	0.083	0.385*	0.053	0.098	0.029	-0.283	0.135	0.086
<b>Opposition (parent)</b>	0.198	0.295	0.128	0.020	0.130	-0.219	0.049	0.000
<b>Inattention (teacher)</b>	-0.209	-0.430*	-0.097	-0.158	0.259	0.164	0.157	-0.305
<b>Hyperactivity/Impulsivity (teacher)</b>	0.129	0.222	0.304	0.042	0.146	0.215	-0.119	-0.192
<b>Opposition (teacher)</b>	0.459*	0.143	0.267	0.261	-0.082	0.208	-0.245	-0.220

Data presented in the Table are correlation coefficient evaluated using partial correlation (age as the covariate). \* $p < 0.05$ ; \*\* $p < 0.01$  for significance level