**Supplemental Table 2**. Hypothalamic-Pituitary-Adrenal Axis Activity, Inflammation Markers, Brain-Derived Neurotrophic Factor (*Bdnf*) mRNA Levels,and Behavioral Evaluations in F1 Rats.

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| Measured variables | Effect of | The results of the statistical analyses |
| Resting serum corticosterone levels (fig. 5A) | Paternal treatment | F(3,46) = 1.04, *P* = .386 |
| F1 Sex | F(1,46) = 30.99, *P* < .001 |
| Patern. treatment × F1 sex interaction | F(3,46) = .38, *P* = .772 |
| Stress serum corticosterone levels 30 min after prepulse inhibition of startle test (fig. 5B) | Paternal treatment | F(3,47) = 10.53, *P* < .001 |
| F1 Sex | F(1,47) = 48.45, *P* < .001 |
| Patern. treatment × F1 sex interaction | F(3,47) = 9.14, *P* < .001 |
| Hypothalamic *Crh* mRNA (fig. 5C) | Paternal treatment | F(3,39) = .20, *P* = .894 |
| F1 Sex | F(1,39) = .35, *P* = .559 |
| Patern. treatment × F1 sex interaction | F(3,39) = .23, *P* = .872 |
| Hippocampal *Crh* mRNA (fig. 5D) | Paternal treatment | F(3,40) = .65, *P* = .585 |
| F1 Sex | F(1,40) = .02, *P* = .891 |
| Patern. treatment × F1 sex interaction | F(3,40) = .46, *P* = .710 |
| Hypothalamic *Nr3c1* mRNA (fig. 5E) | Paternal treatment | F(3,39) = 1.12, *P* = .355 |
| F1 Sex | F(1,39) = 20.54, *P* < .001 |
| Patern. treatment × F1 sex interaction | F(3,39) = 3.12, *P* = .037 |
| Hippocampal *Nr3c1* mRNA (fig. 5F) | Paternal treatment | F(3,40) = 4.58, *P* = .008 |
| F1 Sex | F(1,40) = 34.30, *P* < .001 |
| Patern. treatment × F1 sex interaction | F(3,40) = 4.93, *P* = .005 |
| Hypothalamic *Nr3c2* mRNA (fig. 5G) | Paternal treatment | F(3,37) = .54, *P* = .660 |
| F1 Sex | F(1,37) = 5.67, *P* = .023 |
| Patern. treatment × F1 sex interaction | F(3,37) = 2.23, *P* = .102 |
| Hippocampal *Nr3c2* mRNA (fig. 5H) | Paternal treatment | F(3,40) = 5.11, *P* = .004 |
| F1 Sex | F(1,40) = 1.20, *P* = .280 |
| Patern. treatment × F1 sex interaction | F(3,40) = .21, *P* = .890 |
| Serum interleukin-1β (fig. 5I) | Paternal treatment | F(3,56) = 14.63, *P* < .001 |
| F1 Sex | F(1,56) = 4.26, *P* = .044 |
| Patern. treatment × F1 sex interaction | F(3,56) = 6.10, *P* = .001 |
| Serum interleukin-6 (fig. 5J) | Paternal treatment | F(3,56) = 17.63, *P* < .001 |
| F1 Sex | F(1,56) = 40.35, *P* < .001 |
| Patern. treatment × F1 sex interaction | F(3,56) = 6.94, *P* < .001 |
| Hypothalamic *Bdnf* mRNA (fig. 5K) | Paternal treatment | F(3,39) = 6.73, *P* < .001 |
| F1 Sex | F(1,39) = 30.07, *P* < .001 |
| Patern. treatment × F1 sex interaction | F(3,39) = 3.85, *P* = .017 |
| Hippocampal *Bdnf* mRNA (fig. 5L) | Paternal treatment | F(3,40) = 4.79, *P* = .006 |
| F1 Sex | F(1,40) = 19.93, *P* < .001 |
| Patern. treatment × F1 sex interaction | F(3,40) = 3.94, *P* = .015 |
| Time spent in open arms of elevated plus maze (fig. 6A) | Paternal treatment | F(3,136) = 3.92, *P* = .010 |
| F1 Sex | F(1,136) = 21.62, *P* < .001 |
| Patern. treatment × F1 sex interaction | F(3,136) = 1.24, *P* = .298 |
| Entries to open arms of elevated plus maze (fig. 6B) | Paternal treatment | F(3,136) = 4.77, *P* = .003 |
| F1 Sex | F(1,136) = 1.16, *P* = .282 |
| Patern. treatment × F1 sex interaction | F(3,136) = .49, *P* = .688 |
| Total distance during elevated plus maze (fig. 6C) | Paternal treatment | F(3,136) = 3.59, *P* = .015 |
| F1 Sex | F(1,136) = 4.97, *P* = .027 |
| Patern. treatment × F1 sex interaction | F(3,136) = .27, *P* = .846 |
| Prepulse inhibition of acoustic startle response (fig. 6D) | Paternal treatment | F(3,408) = 12.08, *P* < .001 |
| Prepulse intensity | F(2,408) = 51.53, *P* < .001 |
| F1 Sex | F(1,408) = 5.81, *P* = .016 |
| Patern. treatment × prepulse intensity × F1 sex interaction | F(6,408) = .61, *P* = .719 |
| Escape latency of Morris water maze (fig. 6E) | Paternal treatment | F(3,520) = 2.41, *P* = .066 |
| Day of training | F(4,520) = 100.06, *P* < .001 |
| F1 Sex | F(1,520) = 0.12, *P* = .734 |
| Patern. treatment × day of training × F1 sex interaction | F(12,520) = .95, *P* = .500 |
| Crossing times over the platform of Morris water maze (fig. 6F) | Paternal treatment | F(3,104) = 3.50, *P* = .018 |
| F1 Sex | F(1,104) = 1.74, *P* = .190 |
| Patern. treatment × F1 sex interaction | F(3,104) = .73, *P* = .535 |
| Time spent in each quadrant of Morris water maze (fig. 6G,H) | Paternal treatment | F(3,416) = .02, *P* = .997 |
| Quadrant | F(3,416) = 28.80, *P* < .001 |
| F1 Sex | F(3,416) = .02, *P* = .899 |
| Paternal treatment × quadrant × F1 sex interaction | F(9,416) = 1.74, *P* = .079 |

mRNA: messenger RNA; *Crh:* Corticotropin-releasing hormone; *Nr3c1:* glucocorticoid receptor; *Nr3c2:* Mineralocorticoid receptor; *Bdnf*: Brain-derived neurotrophic factor.