† = pattern of results matches primary analysis; discrepant results are indicated.

\* = statistically significant in primary analysis.

**Supplementary Table 1.** Nonparametric bootstrap 95% confidence intervals for forward stepping models. Shown to four decimal places.

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  |  |  | **95 % Confidence Interval** | |
| **Dependent Variable** | **Independent Variable** | **Estimate** | **LL** | **UL** |
| **Step Length**† | Intercept | 0.2181\* | 0.1944 | 0.2401 |
|  | Trial | 0.0000 | -0.0003 | 0.0004 |
|  | APA | 0.0016\* | 0.0004 | 0.0026 |
|  | FOG | -0.0089 | -0.0311 | 0.0127 |
|  | APA x FOG | -0.0007 | -0.0017 | 0.0006 |
|  |  |  |  |  |
| **Step Latency**† | Intercept | 0.2726\* | 0.2647 | 0.2805 |
|  | Trial | 0.0005\* | 0.0002 | 0.0008 |
|  | APA | 0.0039\* | 0.0020 | 0.0051 |
|  | FOG | -0.0043 | -0.0120 | 0.0055 |
|  | APA x FOG | -0.0017\* | -0.0030 | -0.0004 |
|  |  |  |  |  |
| **ML MOS** | Intercept | 0.0160\* | 0.0135 | 0.0185 |
|  | Trial | 0.0000 | 0.0000 | 0.0001 |
|  | APA | -0.0000 | -0.0003 | 0.0002 |
|  | FOG | -0.0012 | -0.0038 | 0.0016 |
| ***became ns*** | ***APA x FOG*** | ***0.0002\**** | ***-0.0001*** | ***0.0005*** |
|  |  |  |  |  |
| **AP MOS**† | Intercept | 0.0714\* | 0.0518 | 0.0898 |
|  | Trial | -0.0001 | -.0.0004 | 0.0001 |
|  | APA | 0.0000 | -0.0014 | 0.0012 |
|  | FOG | -0.0009 | -0.0203 | 0.0171 |
| ***became ns*** | **APA x FOG** | **-0.0011\*** | **-0.0023** | **0.0004** |
|  |  |  |  |  |
| **Step Width**† | Intercept | 0.1527\* | 0.1387 | 0.1665 |
|  | Trial | -0.0000 | -0.0002 | 0.0002 |
|  | APA | -0.0001 | -0.0010 | 0.0004 |
|  | FOG | -0.0006 | -0.0127 | 0.0140 |
|  | APA x FOG | 0.0002 | -0.0004 | 0.0010 |
|  |  |  |  |  |
| **AP COM at FO**† | Intercept | 0.1342\* | 0.1315 | 0.1370 |
|  | Trial | 0.0000 | -0.0000 | 0.0000 |
|  | APA | 0.0002\* | 0.0000 | 0.0004 |
|  | FOG | 0.0033 | 0.0006 | 0.0062 |
|  | APA x FOG | -0.0002 | -0.0003 | 0.0000 |
|  |  |  |  |  |
| **ML COM at FO**† | Intercept | 0.0001 | -0.0007 | 0.0010 |
|  | Trial | -0.0000 | -0.0000 | 0.0000 |
|  | APA | -0.0001\* | -0.0003 | -0.0000 |
|  | FOG | -0.0007 | -0.0016 | 0.0004 |
|  | APA x FOG | -0.0000 | -0.0002 | 0.0001 |
|  |  |  |  |  |
| **COM Displacement**† | Intercept | 0.2940 | 0.2092 | 0.2292 |
|  | Trial | -0.0001 | -0.0003 | 0.0002 |
|  | APA | 0.0009 | -0.0003 | 0.0022 |
|  | FOG | -0.0006 | -0.0102 | 0.0083 |
|  | APA x FOG | 0.0008 | -0.0006 | 0.0020 |

**Supplementary Table 2.** Nonparametric bootstrap 95% confidence intervals for backward stepping models. Shown to four decimal places.

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  |  |  | **95% Confidence Interval** | |
| **Dependent Variable** | **Independent Variable** | **Estimate** | **LL** | **UL** |
| **Step Length** | Intercept | 0.1748 | 0.1539 | 0.1959 |
| ***became sig*** | ***Trial*** | ***0.0003*** | ***0.0001*** | ***0.0006*** |
|  | APA | 0.0006 | -0.0010 | 0.0023 |
|  | FOG | -0.0022 | -0.0212 | 0.0223 |
|  | APA x FOG | -0.0005 | -0.0022 | 0.0010 |
|  |  |  |  |  |
| **Step Latency** | Intercept | 0.2871 | 0.2780 | 0.2953 |
|  | Trial | -0.0001 | -0.0003 | 0.0001 |
|  | APA | 0.0018\* | 0.0007 | 0.0035 |
|  | FOG | -0.0027 | -0.0117 | 0.0072 |
| ***became ns*** | ***APA x FOG*** | ***-0.0010\**** | ***-0.0027*** | ***0.0002*** |
|  |  |  |  |  |
| **ML MOS**† | Intercept | 0.0236\* | 0.0158 | 0.0316 |
|  | Trial | -0.0002\* | -0.0003 | -0.0001 |
|  | APA | 0.0002 | -0.0004 | 0.0008 |
|  | FOG | 0.0099\* | 0.0014 | 0.0178 |
|  | APA x FOG | -0.0001 | -0.0007 | 0.0005 |
|  |  |  |  |  |
| **AP MOS** | Intercept | 0.0564\* | 0.0347 | 0.0739 |
|  | Trial | 0.0004\* | 0.0002 | 0.0007 |
| ***became ns*** | ***APA*** | ***-0.0020\**** | ***-0.0044*** | ***0.0003*** |
|  | FOG | -0.0007 | -0.0234 | 0.0195 |
|  | APA x FOG | 0.0005 | -0.0018 | 0.0028 |
|  |  |  |  |  |
| **Step Width**† | Intercept | 0.1001 | 0.0834 | 0.1148 |
|  | Trial | -0.0001 | -0.0003 | 0.0001 |
|  | APA | -0.0005 | -0.0020 | 0.0007 |
|  | FOG | -0.0006 | -0.0168 | 0.0148 |
|  | APA x FOG | -0.0003 | -0.0015 | 0.0010 |
|  |  |  |  |  |
| **AP COM at FO**† | Intercept | 0.1308 | 0.1272 | 0.1340 |
|  | Trial | -0.0000 | -0.0001 | 0.0000 |
|  | APA | 0.0001 | -0.0000 | 0.0003 |
|  | FOG | 0.0039\* | 0.0011 | 0.0071 |
|  | APA x FOG | 0.0000 | -0.0002 | 0.0002 |
|  |  |  |  |  |
| **ML COM at FO**† | Intercept | -0.0003 | -0.0012 | 0.0007 |
|  | Trial | -0.0000 | -0.0000 | 0.0000 |
|  | APA | 0.0000 | -0.0000 | 0.0001 |
|  | FOG | 0.0000 | -0.0009 | 0.0010 |
|  | APA x FOG | 0.0000 | -0.0001 | 0.0001 |
|  |  |  |  |  |
| **COM Displacement**† | Intercept | 0.2940 | 0.2635 | 0.3245 |
|  | Trial | -0.0006\* | -0.0009 | -0.0002 |
|  | APA | 0.0018 | -0.0004 | 0.0037 |
|  | FOG | 0.0123 | -0.0143 | 0.0418 |
|  | APA x FOG | 0.0005 | -0.0011 | 0.0028 |