## Supplementary

Table 1. A Summary of Statistical Analysis of Ipv2 For the Circular Tracking Movement.

| Item | Variable | Test | Statistic | Confidence |
| :---: | :---: | :---: | :---: | :---: |
| A | IPV2 between the dominant and non-dominant hands at each target speed | Two-way repeated measures ANOVA | hand: <br> Mauchly's Test $\chi$ ${ }^{2}(0)=0,$ $p=\text { Nothing }, \varepsilon=1 ;$ | hand: $p=0.540$, partial $\eta^{2}=0.014$, power $=0.092$, corrected by Huynh-Feldt; |
|  |  |  | $F(1,28)=0.386 ;$ |  |
|  |  |  | speed: <br> Mauchly's Test $\chi$ $\begin{gathered} { }^{2}(5)=10.496 \\ p=0.063, \varepsilon= \\ 0.808 \\ F(3,84)=32.983 \end{gathered}$ | speed: $p=0$, partial $\eta^{2}=0.541$, power = 1.0, corrected by Sphericity Assumed; |
|  |  |  | interaction: <br> Mauchly's Test $\chi$ $\begin{gathered} { }^{2}(5)=21.667, p= \\ 0.001, \varepsilon=0.715 \\ \\ F(2.146,60.084)= \\ 2.933 \end{gathered}$ | interaction: $p=$ 0.057 , partial $\eta^{2}=$ 0.095, power = 0.571, corrected by GreenhouseGeisser |
| B | IPV2 under the conditions of S1, S2, S3, S4 between $D H$ and NDH | Bonferronicorrected pairwise comparisons | S1 between $D H$ and NDH: $t(28)=1.704 ;$ | $\begin{gathered} \hline \text { S1 between } D H \\ \text { and } N D H: p= \\ 0.099 \\ C I=-43.241 \sim \\ 3.964, r=0.307 \end{gathered}$ |
|  |  |  | S2 between $D H$ and NDH: $t(28)=1.037 ;$ | $\begin{gathered} S 2 \text { between } D H \\ \text { and } N D H: p= \\ 0.308, \\ C I=-33.826 \sim \end{gathered}$ |
|  |  |  | $S 3$ between $D H$ and NDH: $t(28)=1.433 ;$ <br> S4 between $D H$ and NDH: $t(28)=1.369$ | $\begin{gathered} \text { 11.085, } r=0.192 ; \\ \text { S3 between } D H \\ \text { and } N D H: p= \\ 0.163, \\ C I=-5.144 \sim \\ 29.075, r=0.261 \text {; } \end{gathered}$ |
|  |  |  |  | $\begin{gathered} S 4 \text { between } D H \\ \text { and } N D H: p= \\ 0.182, \\ \hline \end{gathered}$ |


|  |  |  |  | $\begin{gathered} C I=-2.707 \sim \\ 13.610, r=0.250 \end{gathered}$ |
| :---: | :---: | :---: | :---: | :---: |
| C | IPV2 of target speeds under the conditions of $S 1: S 2, S 1$ : S3, S1 : S4, S2 : S3, S2 : S4, S3 : $S 4$ on the $D H$ phase | Bonferronicorrected pairwise comparisons | $\begin{gathered} \text { S1: S2: } t(28)= \\ \text { 1.814; } \\ \text { S1: S3: } t(28)= \\ 2.233 ; \\ \text { S1: S4: } t(28)= \\ 4.661 ; \end{gathered}$ | $\begin{gathered} \text { S1: } S 2 ; p=0.482, \\ C I=-6.482 \sim \\ 29.444, r=0.324 ; \\ S 1: S 3: p=0.202, \\ C I=-6.360 \sim \\ 53.258, r=0.389 ; \\ S 1: S 4: p=0, C I= \\ 14.740 \sim 60.663, r= \\ 0.661 ; \end{gathered}$ |
|  |  |  | $\begin{gathered} \text { S2: S3: } t(28)= \\ \text { 1.429; } \\ \text { S2: S4: } t(28)= \\ 4.060 ; \\ \\ \text { S3: } S 4: t(28)= \\ 2.225 \end{gathered}$ | $\begin{gathered} S 2: S 3: p=0.985, \\ C I=-11.811 \sim \\ 35.748, r=0.261 ; \\ S 2: S 4: p=0.002, \\ C I=7.887 \sim \\ 44.555, r=0.609 ; \\ \\ \text { S3: S4: } p=206, C I \\ =-3.934 \sim 32.439, r \\ =0.388 \end{gathered}$ |
|  | IPV2 of target speeds under the conditions of $S 1: S 2, S 1$ : S3, S1 : S4, S2 : S3, S2 : S4, S3 <br> : $S 4$ on the NDH phase | Bonferroni- <br> corrected <br> pairwise comparisons | $\begin{gathered} \text { S1: S2: } t(28)= \\ \text { 1.719; } \\ \text { S1: S3: } t(28)= \\ 5.452 ; \\ \text { S1: S4: } t(28)= \\ 7.213 ; \end{gathered}$ | $\begin{gathered} \text { S1: S2: } p=0.580, \\ C I=-12.873 \sim \\ 52.370, r=0.309 ; \\ S 1: S 3: p=0, C I= \\ 26.386 \sim 83.721, r= \\ 0.718 ; \\ S 1: S 4: p=0, C I= \\ 38.077 \sim 87.507, r= \\ 0.806 ; \end{gathered}$ |
| D |  |  | $\begin{gathered} \text { S2: S3: } t(28)= \\ 5.021 ; \\ \text { S2: S4: } t(28)= \\ 5.561 ; \\ \\ \text { S3: S4: } t(28)= \\ 1.548 \end{gathered}$ | $\begin{gathered} \text { S2: S3: } p=0, C I= \\ 15.343 \sim 55.267, r= \\ 0.688 ; \\ S 2: S 4: p=0, C I= \\ 21.070 \sim 65.016, r= \\ 0.724 ; \\ S 3: S 4: p=0.798, \\ C I=-6.456 \sim \\ 21.933, r=0.281 \end{gathered}$ |
| E | IPV2 of target speeds under the conditions of $S 1: S 2, S 1$ : S3, S1 : S4, S2 : S3, S2 : S4, S3 <br> : $S 4$ on both the $D H$ and NDH phases | Bonferronicorrected pairwise comparisons | $\begin{gathered} \text { S1: S2: } t(28)= \\ \text { 2.396; } \\ \text { S1: S3: } t(28)= \\ \text { 6.074; } \\ \text { S1: S4: } t(28)= \\ 7.995 ; \end{gathered}$ | $\begin{gathered} \text { S1: } S 2: p=0.141, \\ C I=-2.886 \sim \\ 34.115, r=0.412 ; \\ S 1: S 3: p=0, C I= \\ 20.907 \sim 57.596, r= \\ 0.754 ; \end{gathered}$ |


|  | S1: $S 4: p=0, C I=$ |
| :---: | :---: |
| S2: S3: $t(28)=$ | $32.405 \sim 68.089, r=$ |
| 4.524; | $0.834 ;$ |
| S2: S4: $t(28)=$ |  |
| $7.455 ;$ | $S 2: S 3: p=0.001$, |
|  | $C I=8.806 \sim$ |
| S3: S4: $t(28)=$ | $38.468, r=0.650 ;$ |
| 2.837 | $S 2: S 4: p=0, C I=$ |
|  | $21.445 \sim 47.820, r=$ |
|  | $0.815 ;$ |

$$
\begin{gathered}
S 3: S 4: p=0.050, \\
C I=-0.008 \sim \\
21.999, r=0.472
\end{gathered}
$$

## Supplementary

Table 2. A Summary of Statistical Analysis of IPT2 for the Circular Tracking Movement.


| B | IPT2 under the conditions of S1, S2, S3, S4 between DH and NDH | Bonferronicorrected pairwise comparisons | S1 between $D H$ and NDH: $t(28)=1.947 ;$ <br> S2 between DH and NDH: $t(28)=0.677$; <br> S3 between $D H$ and NDH: $t(28)=0.514 ;$ <br> S4 between DH and NDH: $t(28)=2.019$ | $\begin{gathered} \hline S 1 \text { between } D H \\ \text { and } N D H: p= \\ 0.062, \\ C I=-0.137 \sim 0.003, \\ r=0.345 ; \\ S 2 \text { between } D H \\ \text { and } N D H: p= \\ 0.504, \\ C I=-0.071 \sim 0.036, \\ r=0.127 ; \\ S 3 \text { between } D H \\ \text { and } N D H: p= \\ 0.611, \\ C I=-0.065 \sim 0.039, \\ r=0.097 ; \\ S 4 \text { between } D H \\ \text { and } N D H: p= \\ 0.053, \\ C I=-0.145 \sim 0.001, \\ r=0.356 \end{gathered}$ |
| :---: | :---: | :---: | :---: | :---: |
|  |  |  | $\begin{gathered} \text { S1: S2: } t(28)= \\ 1.652 ; \\ \text { S1: S3: } t(28)= \\ 2.371 ; \\ \text { S1: S4: } t(28)= \\ 0.777 ; \end{gathered}$ | $\begin{gathered} \hline S 1: S 2 ; p=0.658, \\ C I=-0.133 \sim 0.035, \\ r=0.298 ; \\ S 1: S 3: p=0.149, \\ C I=-0.144 \sim 0.013, \\ r=0.409 ; \\ S 1: S 4: p=1, C I=- \\ 0.112 \sim 0.064, r= \\ 0.145 ; \end{gathered}$ |
| C | S4, S2 : S3, S2 : S4, S3 : S4 on the DH phase | corrected pairwise comparisons | $\begin{gathered} \text { S2: S3: } t(28)= \\ 0.638 ; \\ \text { S2: S4: } t(28)= \\ 1.327 ; \\ \\ \text { S3: S4: } t(28)= \\ 1.812 \end{gathered}$ | $\begin{gathered} \text { S2: S3: } p=1, C I=- \\ 0.090 \sim 0.057, r= \\ 0.120 ; \\ S 2: S 4: p=1, C I=- \\ 0.028 \sim 0.078, r= \\ 0.243 ; \\ \\ S 3: S 4: p=0.485, \\ C I=-0.023 \sim 0.106, \\ r=0.324 \end{gathered}$ |
| D | IPT2 of target speeds under the conditions of S1:S2, S1:S3, S1 : S4, S2 : S3, S2 : S4, S3 : S4 on the NDH phase | Bonferronicorrected pairwise comparisons | $\begin{gathered} \text { S1: S2: } t(28)= \\ 0 ; \\ \text { S1: S3: } t(28)= \\ 0.406 ; \\ \text { S1: S4: } t(28)= \\ 0.694 ; \end{gathered}$ | $\begin{gathered} \text { S1: S2: } p=1, C I=- \\ 0.090 \sim 0.090, r= \\ 0.000 ; \\ \text { S1: S3: } p=1, C I=- \\ 0.095 \sim 0.071, r= \\ 0.077 ; \end{gathered}$ |


|  |  |  | $\begin{gathered} \text { S2: S3: } t(28)= \\ 0.629 ; \\ \text { S2: } S 4: t(28)= \\ 0.755 ; \\ \\ \text { S3: S4: } t(28)= \\ 0.485 \end{gathered}$ | $\begin{gathered} \text { S1: S4: } p=1, C I=- \\ 0.150 \sim 0.091, r= \\ 0.130 ; \\ \\ \text { S2: S3: } p=1, C I=- \\ 0.065 \sim 0.042, r= \\ 0.118 ; \\ S 2: S 4: p=1, C I=- \\ 0.140 \sim 0.081, r= \\ 0.141 ; \\ \text { S3: } S 4: p=1, C I=- \\ 0.121 \sim 0.086, r= \\ 0.091 \end{gathered}$ |
| :---: | :---: | :---: | :---: | :---: |
| E | IPT2 of target speeds under the conditions of S1:S2, S1:S3, S1 : S4, S2 : S3, S2 : S4, S3 : S4 on both the DH and NDH phases | Bonferronicorrected pairwise comparisons | $\begin{gathered} \text { S1: S2: } t(28)= \\ 1.060 ; \\ \text { S1: S3: } t(28)= \\ 1.683 ; \\ \text { S1: S4: } t(28)= \\ 0.976 ; \end{gathered}$ | $\begin{gathered} \text { S1: } S 2: p=1, C I=- \\ 0.090 \sim 0.041, r= \\ 0.196 ; \\ S 1: S 3: p=0.620, \\ C I=-0.104 \sim 0.027, \\ r=0.303 ; \\ S 1: S 4: p=1, C I=- \\ 0.105 \sim 0.051, r= \\ 0.181 ; \end{gathered}$ |
|  |  |  | $\begin{gathered} \text { S2: S3: } t(28)= \\ 0.857 ; \\ \text { S2: } S 4: t(28)= \\ 0.112 ; \end{gathered}$ $\text { S3: S4: } t(28)=$ <br> 0.604 | $\begin{gathered} \text { S2: S3: } p=1, C I=- \\ 0.061 \sim 0.033, r= \\ 0.160 ; \\ S 2: S 4: p=1, C I=- \\ 0.059 \sim 0.055, r= \\ 0.022 ; \end{gathered}$ |
|  |  |  |  | $\begin{gathered} \text { S3: S4: } p=1, C I=- \\ 0.044 \sim 0.068, r= \\ 0.113 \end{gathered}$ |

## Supplementary

Table 3. A Summary of Statistical Analysis of TD2 for the Circular Tracking Movement.


|  |  |  |  | $\begin{gathered} \text { S4 between } D H \\ \text { and } N D H: p= \\ 0.089, \\ C I=-0.069 \sim- \\ 0.005, r=0.316 \end{gathered}$ |
| :---: | :---: | :---: | :---: | :---: |
| C | TD2 of target speeds under the conditions of S1:S2,S1:S3,S1 : $S 4, S 2$ : S3, S2 : S4, S3 : S4 on the DH phase | Bonferronicorrected pairwise comparisons | $\begin{gathered} \text { S1: S2: } t(28)= \\ 3.393 ; \\ \text { S1: S3: } t(28)= \\ 2.615 ; \\ \text { S1: S4: } t(28)= \\ 3.371 ; \end{gathered}$ | $\begin{gathered} \hline S 1: S 2 ; p=0.014, \\ C I=0.006 \sim 0.075 \\ r=0.540 \\ S 1: S 3: p=0.085 \\ C I=-0.003 \sim 0.078, \\ r=0.443 ; \\ S 1: S 4: p=0.014 \\ C I=0.009 \sim 0.105 \\ r=0.537 \end{gathered}$ |
|  |  |  | $\begin{gathered} \text { S2: S3: } t(28)= \\ 0.205 ; \\ \text { S2: } S 4: t(28)= \\ 0.916 ; \\ \\ \text { S3: } S 4: t(28)= \\ 1.173 \end{gathered}$ | $\begin{gathered} \text { S2: S3: } p=1, C I=- \\ 0.051 \sim 0.044, r= \\ 0.039 ; \\ \text { S2: } S 4: p=1, C I=- \\ 0.034 \sim 0.066, r= \\ 0.171 ; \\ \\ \text { S3: S4: } p=1, C I=- \\ 0.028 \sim 0.067, r= \\ 0.216 \end{gathered}$ |
| D | TD2 of target speeds under the conditions of S1:S2, S1:S3, S1 : S4, S2 : S3, S2 : S4, S3 : S4 on the NDH phase | Bonferronicorrected pairwise comparisons | $\begin{gathered} \text { S1: S2: } t(28)= \\ 1.704 ; \\ \text { S1: S3: } t(28)= \\ 5.750 ; \\ \text { S1: S4: } t(28)= \\ 5.255 ; \end{gathered}$ | $\begin{gathered} \text { S1: S2: } p=0.597, \\ C I=-0.013 \sim 0.051, \\ r=0.306 ; \\ S 1: S 3: p=0, C I= \\ 0.036 \sim 0.107, r= \\ 0.736 ; \\ S 1: S 4: p=0, C I= \\ 0.034 \sim 0.114, r= \\ 0.705 ; \end{gathered}$ |
|  |  |  | $\begin{gathered} \text { S2: S3: } t(28)= \\ 5.070 ; \\ \text { S2: S4: } t(28)= \\ 4.108 ; \\ \\ \text { S3: S4: } t(28)= \\ 0.239 \end{gathered}$ | $\begin{gathered} S 2: S 3: p=0, C I= \\ 0.023 \sim 0.082, r= \\ 0.692 ; \\ S 2: S 4: p=0.002, \\ C I=0.017 \sim 0.093, \\ r=0.613 ; \\ \\ S 3: S 4: p=1, C I=- \\ 0.029 \sim 0.034, r= \\ 0.045 \end{gathered}$ |
| E | TD2 of target speeds under the conditions of S1:S2, S1:S3, S1 : | Bonferronicorrected pairwise comparisons | $\begin{gathered} \text { S1: S2: } t(28)= \\ 3.487 ; \end{gathered}$ | $\begin{gathered} \text { S1: S2: } p=0.010, \\ C I=0.005 \sim 0.051, \\ r=0.550 \end{gathered}$ |


| S1: S3: $t(28)=$ | $S 1: S 3: p=0, C I=$ |
| :---: | :---: |
| 4.861; | $0.023 \sim 0.086, r=$ |
| S1: S4: $t(28)=$ | $0.677 ;$ |
| 5.406; | $S 1: S 4: p=0, C I=$ |
|  | $0.031 \sim 0.100, r=$ |
| S2: S3: $t(28)=$ | $0.715 ;$ |
| 2.515; |  |
| S2: S4: $t(28)=$ | $S 2: S 3: p=0.108$, |
| 3.382; | $C I=-0.003 \sim 0.052$, |
|  | $r=0.429 ;$ |
| S3: S4: $t(28)=$ | $S 2: S 4: p=0.014$, |
| 1.090 | $C I=0.005 \sim 0.066$, |
|  | $r=0.539 ;$ |

S3: S4: $p=1, C I=-$ $0.018 \sim 0.040, r=$

