Statistics and stuff:

Fitts’ law development between testing:

|  |  |  |
| --- | --- | --- |
| Measure | Test | Control |
| Completion Rate | 0.9630 | 0.3793 |
| Overshoot | 0.9343 | 0.2407 |
| Path Efficiency | 0.3273 | 0.5222 |
| Stopping Distance | 0.7173 | 0.9600 |
| Throughput | 0.9852 | 0.5828 |

Comparison of Fitts’ law measures between test and control:

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Measure | Test 1 | Test 2 | Test 3 | Test 4 |
| Completion Rate | 0.7433 | 0.7723 | 0.8601 | 0.9044 |
| Overshoot | 0.8413 | 0.4206 | 0.7302 | 0.1508 |
| Path Efficiency | 0.6454 | 0.6454 | 0.7209 | 0.5054 |
| Stopping Distance | 0.2903 | 0.6454 | 0.1671 | 0.6454 |
| Throughput | 0.9591 | 0.8785 | 0.7209 | 0.7984 |

Development of targets reached in training:

|  |  |  |
| --- | --- | --- |
| Measure: | Test | Control |
| Targets Reached | 0.4169 | 0.6873 |

Comparison between targets reached in training:

|  |  |  |  |
| --- | --- | --- | --- |
| Measure: | Training 1 | Training 2 | Training 3 |
| Targets Reached | 0.2906 | 0.5546 | 0.9043 |

Development of intensities reached in training:

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Measure: | Low | Med/Low | Med/High | High |
| Test | 0.509 | 0.1310 | 0.273 | 0.786 |
| Training | **0.044** | 0.507 | 0.185 | 0.393 |

Mean low = 16.125 +/- 5.592 test 2 and 21.375 +/- 6.7810 (p = 0.332)

Comparison between intensities reached in training:

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Measure: | Low | Med/Low | Med/High | High |
| Intensities reached | 0.8 | 0.4 | 0.4 | 1 |

Development of positions reached in training:

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| Measure: | Extension | Flexion | Radial | Ulnar | Close | Open |
| Test | 0.0782 | 0.2765 | 0.648 | **0.039** | 0.104 | **0.044** |
| Control | 0.0076 (2-3) | **0.641** | 0.277 | 0.883 | 0.658 | 0.368 |

Mean extension = 16.625 +/-2.774 in test 2 and 11.00 +/- 3.162 in test 3 (p = 0.0076)  
Mean ulnar = 11.38 +/- 4.274 test 1 and 16.13 +/- 2.95 test 3 (p = 0.038)  
mean open = 11.25 +/- 3.845 test 1 and 17.88 +/- 2.475 test 3 (p = 0.042)

Comparison between positions reached in training:

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| Measure: | Extension | Flexion | Radial | Ulnar | Close | Open |
| Positions Reached | 0.9770 | 0.5911 | 0.0870 | 0.8780 | **0.0458** | 0.1870 |

Mean close test: 26.75 +/- 13.4563  
Mean close control: 38 +/-12.2007

Development in cluster distances:

|  |  |  |
| --- | --- | --- |
| Measure: | Test | Control |
| Cluster Centroid Distance | 0.1353 | 0.3247 |

Comparison between cluster distances:

|  |  |  |  |
| --- | --- | --- | --- |
| Measure: | Test 1 | Test 2 | Test 3 |
| Cluster Centroid Distance | 0.5737 | 1.000 | 0.0830 |

Development in within cluster distances:

|  |  |  |
| --- | --- | --- |
| Measure | Test | Control |
| Mean Distance Within Clusters | 0.3257 | **0.0208** |

Corrected P-values for development within cluster distances for control group:

|  |  |  |  |
| --- | --- | --- | --- |
| Measure: | Test 1-2 | Test 2-3 | Test 1-3 |
| Mean Distance Within Clusters | 0.1868 | 0.5768 | **0.0164** |

Mean distance test 1: 502.02 +/- 274.88  
Mean distance test 3: 323.43 +/-171.13

Comparison between within cluster distances:

|  |  |  |  |
| --- | --- | --- | --- |
| Measure | Test 1 | Test 2 | Test 3 |
| Mean Distance Within Clusters | 0.3823 | 0.0830 | **0.0379** |

Mean distance test: 584.34 +/- 250.02  
Mean distance control: 323.43 +/- 171.13