

Additional File1 – Full Results of the statistical analyses of the Effect of the Wrist Position variation

Each option for removing one or more wrist positions is identified with a group number. The case of including all wrist positions in the training data set is identified as "group 1". Figures 1 - 4 indicate the pairwise comparison of the different options for training data set. The figures can indicate the overlapping options. We can not establish any statistically significant difference between the options that have an overlapping interval. Table 1 indicates the removed wrist positions and their group id.

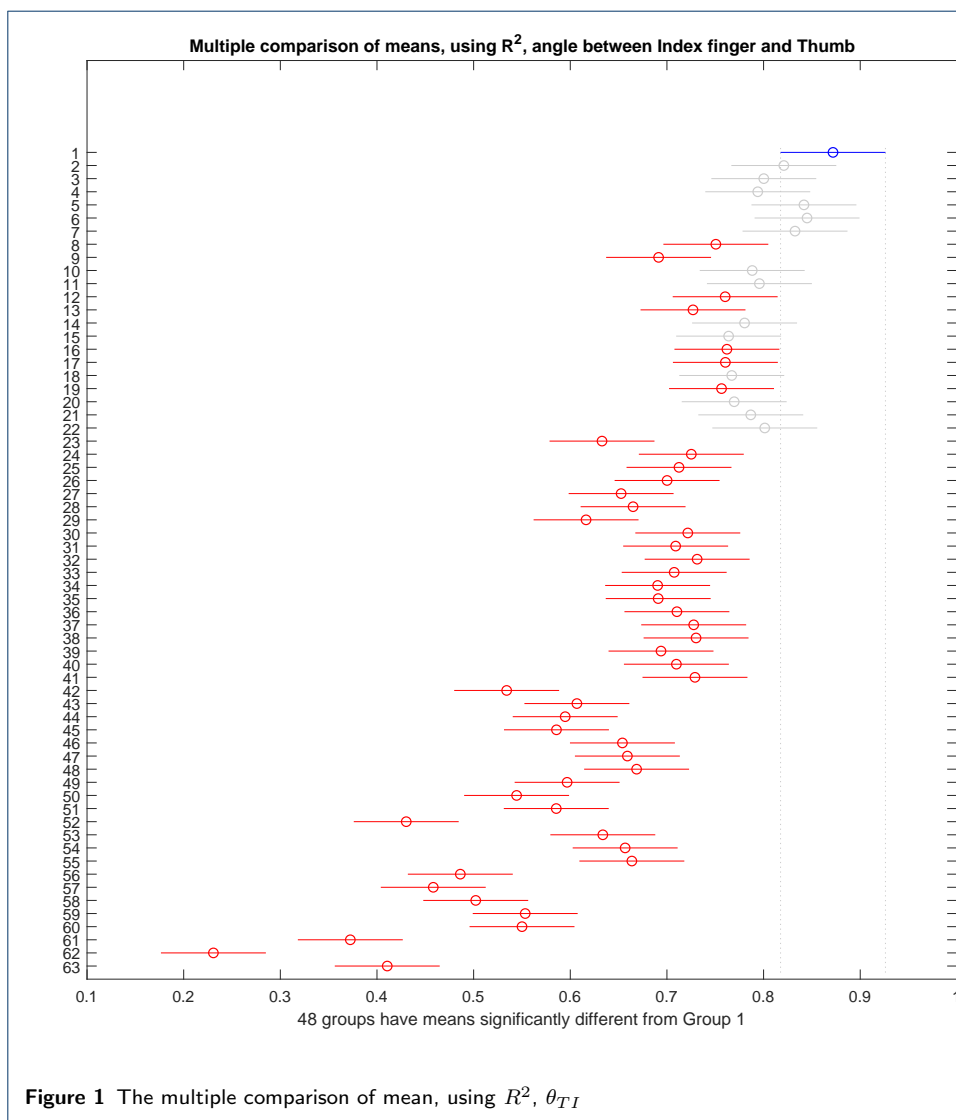
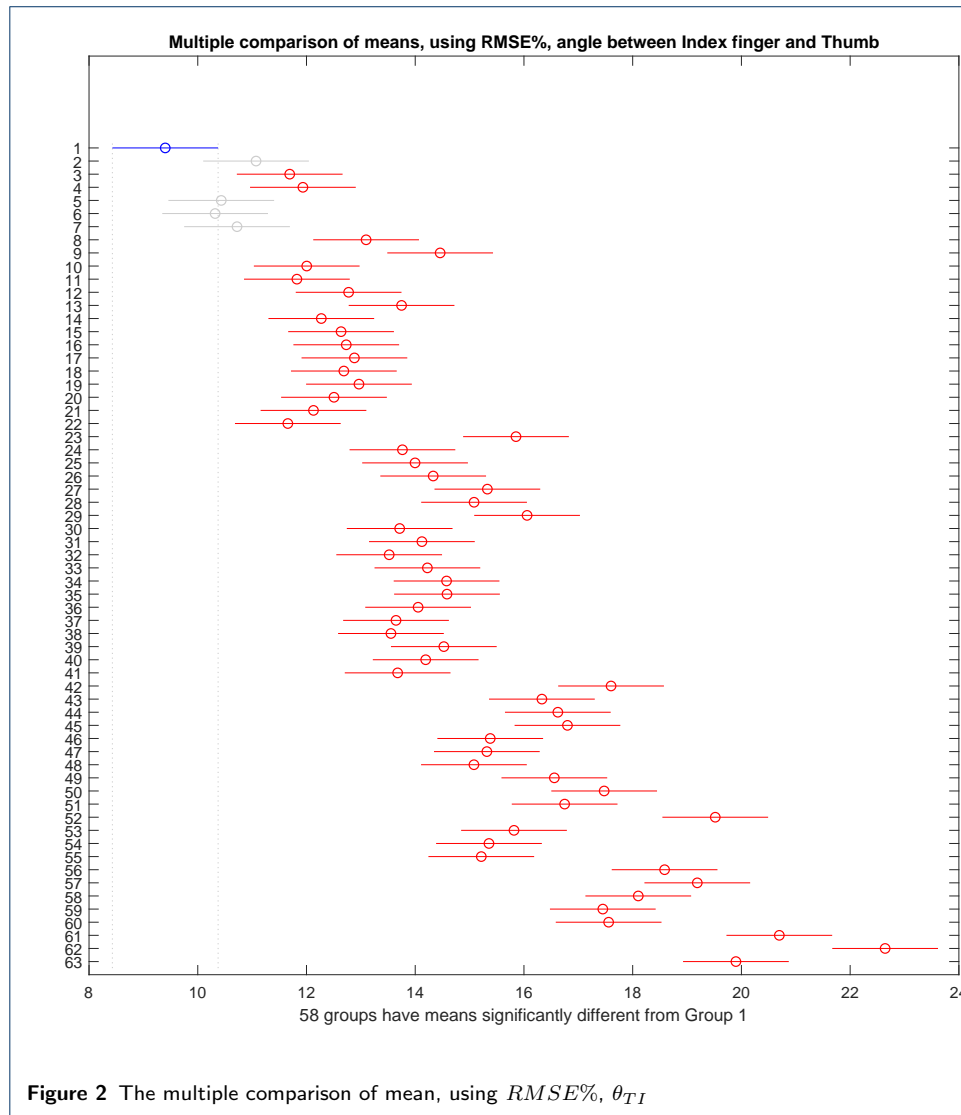
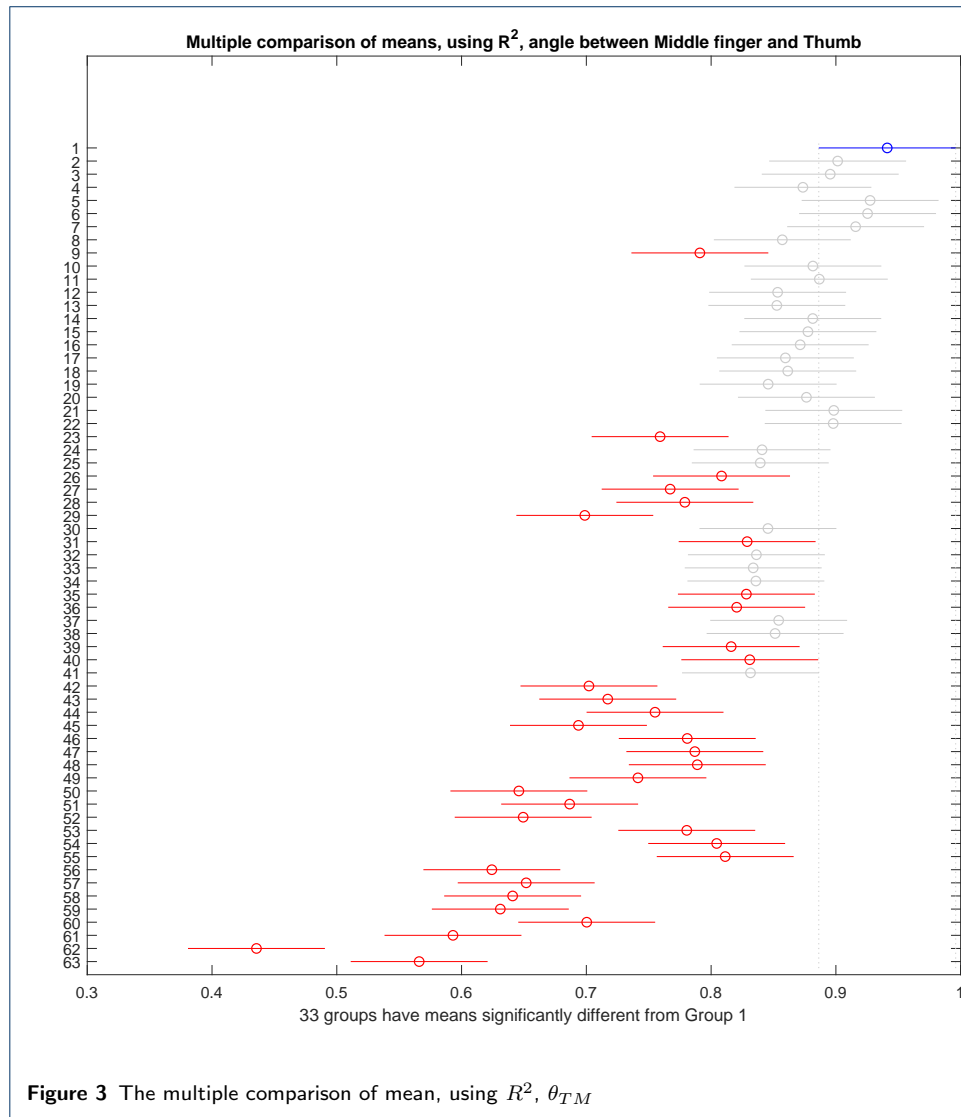


Figure 1 The multiple comparison of mean, using R^2 , θ_{TI}





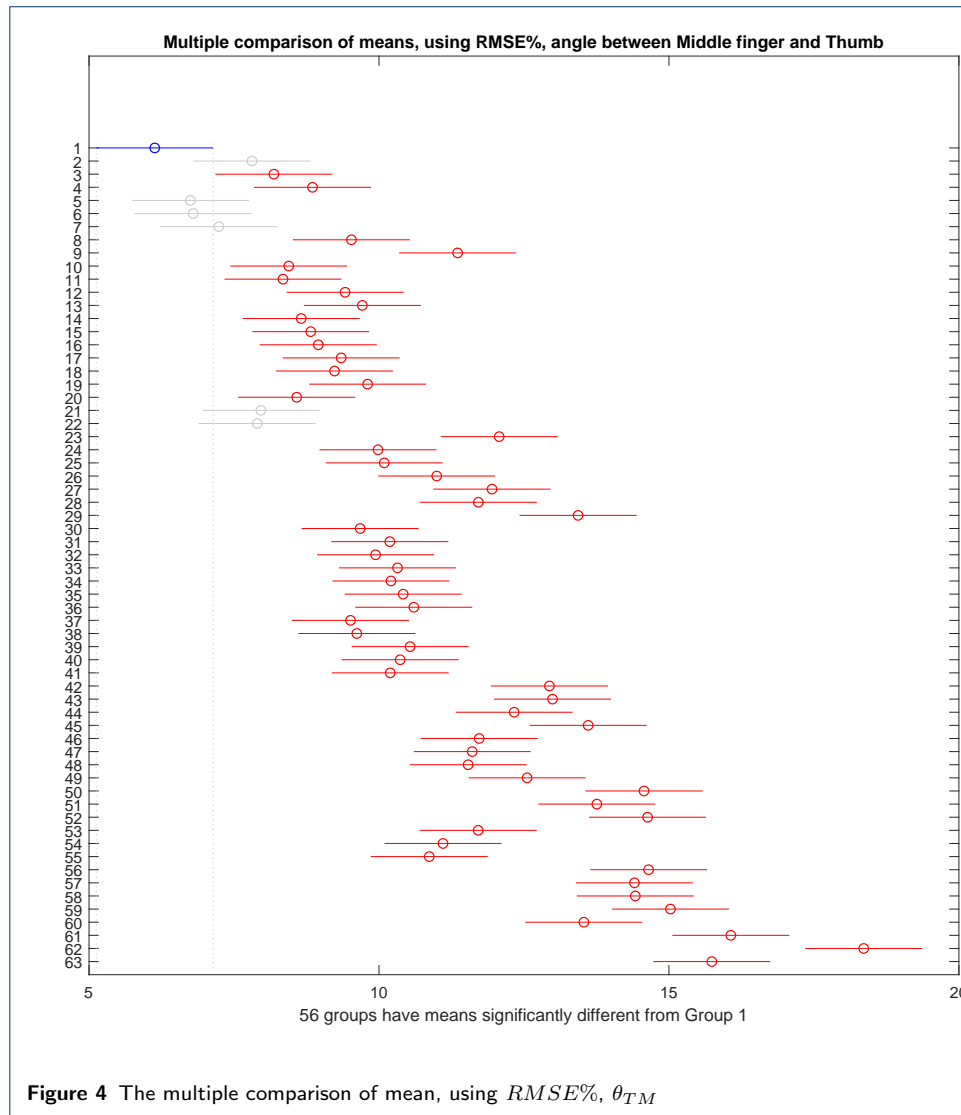


Table 1 Removed wrist positions and their group id

group id	removed wrist positions	group id	removed wrist positions	group id	removed wrist positions
1	None	22	Radial, Ulnar	43	Extension, Flexion, Neutral, Pronation
2	Extension	23	Extension, Flexion, Neutral	44	Extension, Flexion, Neutral, Radial
3	Flexion	24	Extension, Flexion, Pronation	45	Extension, Flexion, Neutral, Ulnar
4	Neutral	25	Extension, Flexion, Radial	46	Extension, Flexion, Pronation, Radial
5	Pronation	26	Extension, Flexion, Ulnar	47	Extension, Flexion, Pronation, Ulnar
6	Radial	27	Extension, Neutral, Pronation	48	Extension, Flexion, Radial, Ulnar
7	Ulnar	28	Extension, Neutral, Radial	49	Extension, Neutral, Pronation, Radial
8	Extension, Flexion	29	Extension, Neutral, Ulnar	50	Extension, Neutral, Pronation, Ulnar
9	Extension, Neutral	30	Extension, Pronation, Radial	51	Extension, Neutral, Radial, Ulnar
10	Extension, Pronation	31	Extension, Pronation, Ulnar	52	Extension, Pronation, Radial, Ulnar
11	Extension, Radial	32	Extension, Radial, Ulnar	53	Flexion, Neutral, Pronation, Radial
12	Extension, Ulnar	33	Flexion, Neutral, Pronation	54	Flexion, Neutral, Pronation, Ulnar
13	Flexion, Neutral	34	Flexion, Neutral, Radial	55	Flexion, Neutral, Radial, Ulnar
14	Flexion, Pronation	35	Flexion, Neutral, Ulnar	56	Flexion, Pronation, Radial, Ulnar
15	Flexion, Radial	36	Flexion, Pronation, Radial	57	Neutral, Pronation, Radial, Ulnar
16	Flexion, Ulnar	37	Flexion, Pronation, Ulnar	58	Extension, Flexion, Neutral, Pronation
17	Neutral, Pronation	38	Flexion, Radial, Ulnar	59	Extension, Flexion, Neutral, Pronation
18	Neutral, Radial	39	Neutral, Pronation, Radial	60	Extension, Flexion, Neutral, Radial, Ulnar
19	Neutral, Ulnar	40	Neutral, Pronation, Ulnar	61	Extension, Flexion, Pronation, Radial, Ulnar
20	Pronation, Radial	41	Neutral, Radial, Ulnar	62	Extension, Neutral, Pronation, Radial, Ulnar
21	Pronation, Ulnar	42	Pronation, Radial, Ulnar	63	Flexion, Neutral, Pronation, Radial, Ulnar