

WITHIN SESSION RELIABILITY							BETWEEN SESSION RELIABILITY					
Hand		Forearm		Upper arm			Hand		Forearm		Upper arm	
ICC LONG	ICC SHORT	ICC LONG	ICC SHORT	ICC LONG	ICC SHORT		ICC LONG	ICC SHORT	ICC LONG	ICC SHORT	ICC LONG	ICC SHORT
REACH FORWARD												
Max Jerk	0.70 [0.43-0.88]	0.41 [0.24-0.64]	0.76 [0.55-0.90]	0.65 [0.49-0.80]	0.38 [0.08-0.68]	0.77 [0.64-0.88]	0.85 [0.54-0.95]	0.89 [0.67-0.97]	0.89 [0.71-0.96]	0.79 [0.44-0.92]	0.96 [0.88-0.99]	0.77 [0.36-0.92]
Max Ang Jerk	0.51 [0.19-0.88]	0.30 [0.15-0.54]	0.69 [0.44-0.86]	0.45 [0.28-0.65]	0.71 [0.47-0.87]	0.50 [0.34-0.69]	0.60 [0.00-0.87]	0.34 [-0.68-0.85]	0.71 [0.19-0.90]	0.69 [0.17-0.89]	0.98 [0.96-0.99]	0.72 [0.21-0.90]
Mean Acc	0.90 [0.78-0.96]	0.79 [0.65-0.90]	0.80 [0.61-0.92]	0.86 [0.77-0.93]	0.80 [0.60-0.92]	0.93 [0.87-0.96]	0.68 [0.05-0.90]	0.66 [0.33-0.94]	0.80 [0.45-0.93]	0.83 [0.54-0.94]	0.83 [0.53-0.94]	0.83 [0.52-0.94]
Max Acc	0.76 [0.53-0.91]	0.69 [0.53-0.84]	0.84 [0.67-0.94]	0.76 [0.63-0.87]	0.50 [0.21-0.76]	0.91 [0.85-0.96]	0.77 [0.30-0.92]	0.82 [0.44-0.94]	0.86 [0.62-0.95]	0.87 [0.64-0.95]	0.92 [0.80-0.97]	0.84 [0.57-0.94]
Mean Gyr	0.89 [0.75-0.96]	0.76 [0.62-0.88]	0.87 [0.73-0.95]	0.85 [0.75-0.92]	0.87 [0.74-0.95]	0.95 [0.92-0.98]	0.77 [0.29-0.92]	0.86 [0.53-0.96]	0.91 [0.72-0.97]	0.84 [0.59-0.94]	0.91 [0.69-0.97]	0.93 [0.81-0.98]
Max Gyr	0.80 [0.60-0.93]	0.73 [0.58-0.87]	0.88 [0.76-0.95]	0.72 [0.57-0.85]	0.77 [0.55-0.90]	0.94 [0.90-0.97]	0.74 [0.24-0.91]	0.89 [0.68-0.97]	0.70 [0.19-0.89]	0.91 [0.73-0.97]	0.95 [0.87-0.98]	0.95 [0.86-0.98]
RMS Acc	0.91 [0.80-0.97]	0.79 [0.66-0.90]	0.83 [0.67-0.93]	0.87 [0.78-0.93]	0.76 [0.54-0.90]	0.93 [0.88-0.97]	0.71 [0.13-0.91]	0.83 [0.45-0.95]	0.83 [0.52-0.94]	0.84 [0.57-0.94]	0.87 [0.64-0.95]	0.84 [0.56-0.94]
RMS Gyr	0.91 [0.78-0.97]	0.78 [0.64-0.89]	0.90 [0.80-0.96]	0.83 [0.73-0.91]	0.87 [0.74-0.95]	0.96 [0.92-0.98]	0.81 [0.42-0.94]	0.88 [0.60-0.96]	0.91 [0.74-0.97]	0.87 [0.65-0.95]	0.94 [0.80-0.97]	0.94 [0.84-0.98]
SE Acc	0.80 [0.59-0.92]	0.28 [0.14-0.49]	0.85 [0.70-0.94]	0.32 [0.17-0.53]	0.73 [0.49-0.89]	0.38 [0.23-0.59]	0.88 [0.62-0.96]	0.65 [-0.02-0.89]	0.94 [0.83-0.98]	0.78 [0.39-0.92]	0.86 [0.61-0.95]	0.79 [0.40-0.92]
SE Gyr	0.72 [0.46-0.89]	0.41 [0.24-0.62]	0.75 [0.52-0.90]	0.38 [0.22-0.59]	0.65 [0.38-0.84]	0.33 [0.18-0.54]	0.89 [0.50-0.97]	0.79 [0.37-0.93]	0.85 [0.56-0.95]	0.90 [0.73-0.96]	0.84 [0.55-0.94]	0.15 [-1.5-0.70]
REACH & GRASP VERTICAL												
Max Jerk	0.87 [0.74-0.94]	0.42 [0.25-0.65]	0.71 [0.49-0.86]	0.32 [0.17-0.54]	0.68 [0.45-0.85]	0.49 [0.33-0.69]	0.55 [-0.55-0.86]	0.74 [0.19-0.92]	0.66 [0.00-0.88]	0.87 [0.65-0.95]	0.60 [-0.2-0.86]	0.39 [-0.83-0.79]
Max Ang Jerk	0.84 [0.69-0.93]	0.25 [0.10-0.48]	0.72 [0.51-0.87]	0.27 [0.13-0.49]	0.66 [0.43-0.84]	0.39 [0.24-0.60]	0.69 [-0.02-0.91]	0.72 [0.12-0.92]	0.83 [0.50-0.94]	0.80 [0.50-0.92]	0.75 [0.27-0.92]	0.47 [-0.53-0.81]
Mean Acc	0.89 [0.79-0.95]	0.77 [0.63-0.89]	0.82 [0.66-0.92]	0.73 [0.59-0.85]	0.73 [0.52-0.87]	0.78 [0.66-0.89]	0.58 [-0.26-0.88]	0.67 [-0.15-0.90]	0.69 [-0.02-0.90]	0.90 [0.74-0.96]	0.67 [0.04-0.88]	0.47 [-0.36-0.81]
Max Acc	0.87 [0.75-0.94]	0.49 [0.32-0.71]	0.81 [0.65-0.92]	0.40 [0.24-0.61]	0.69 [0.47-0.86]	0.63 [0.47-0.79]	0.50 [-0.70-0.85]	0.60 [-0.13-0.88]	0.61 [-0.14-0.87]	0.92 [0.79-0.97]	0.79 [0.38-0.93]	0.43 [-0.60-0.80]
Mean Gyr	0.90 [0.80-0.96]	0.80 [0.68-0.91]	0.85 [0.72-0.93]	0.76 [0.62-0.87]	0.76 [0.57-0.89]	0.85 [0.75-0.92]	0.81 [0.16-0.95]	0.76 [0.24-0.93]	0.90 [0.36-0.97]	0.49 [-0.38-0.81]	0.77 [0.18-0.93]	0.77 [0.36-0.92]
Max Gyr	0.92 [0.84-0.97]	0.63 [0.44-0.80]	0.93 [0.85-0.97]	0.52 [0.35-0.71]	0.73 [0.52-0.87]	0.66 [0.51-0.81]	0.84 [0.49-0.95]	0.91 [0.69-0.97]	0.88 [0.66-0.96]	0.84 [0.58-0.94]	0.92 [0.78-0.97]	0.74 [0.25-0.91]
RMS Acc	0.91 [0.82-0.96]	0.75 [0.61-0.88]	0.81 [0.65-0.92]	0.71 [0.56-0.84]	0.77 [0.59-0.90]	0.77 [0.64-0.88]	0.57 [-0.19-0.86]	0.70 [0.00-0.91]	0.70 [0.13-0.90]	0.91 [0.78-0.97]	0.73 [0.23-0.91]	0.45 [-0.43-0.80]
RMS Gyr	0.95 [0.89-0.98]	0.80 [0.67-0.90]	0.89 [0.79-0.95]	0.71 [0.56-0.84]	0.81 [0.65-0.92]	0.84 [0.74-0.92]	0.85 [0.52-0.95]	0.83 [0.45-0.95]	0.92 [0.64-0.97]	0.64 [0.03-0.96]	0.81 [0.40-0.94]	0.80 [0.44-0.93]
SE Acc	0.82 [0.66-0.92]	0.29 [0.06-0.42]	0.42 [0.13-0.69]	0.18 [0.06-0.38]	0.33 [0.04-0.63]	0.32 [0.18-0.54]	0.35 [-0.63-0.78]	0.57 [-0.31-0.87]	0.60 [-0.07-0.86]	0.74 [0.20-0.91]	0.41 [-0.6-0.79]	0.04 [-1.23-0.64]
SE Gyr	0.77 [0.58-0.89]	0.26 [0.11-0.50]	0.42 [0.13-0.69]	0.36 [0.20-0.57]	0.42 [0.13-0.69]	0.40 [0.24-0.60]	0.42 [-0.32-0.80]	0.47 [-0.45-0.83]	0.76 [0.14-0.92]	0.87 [0.65-0.95]	0.62 [-0.04-0.86]	0.26 [-1.33-0.75]
REACH SIDEWAYS												
Max Jerk	0.86 [0.70-0.94]	0.47 [0.29-0.69]	0.79 [0.56-0.92]	0.48 [0.32-0.68]	0.50 [0.18-0.77]	0.68 [0.53-0.83]	0.89 [0.31-0.97]	0.82 [0.41-0.94]	0.72 [0.10-0.91]	0.79 [0.44-0.92]	0.83 [0.46-0.94]	0.71 [0.21-0.90]
Max Ang Jerk	0.80 [0.60-0.92]	0.35 [0.18-0.59]	0.75 [0.53-0.90]	0.37 [0.21-0.58]	0.42 [0.10-0.72]	0.46 [0.29-0.66]	0.86 [0.51-0.96]	0.64 [-0.18-0.89]	0.85 [0.52-0.95]	0.69 [0.17-0.89]	0.79 [0.33-0.93]	0.73 [0.25-0.90]
Mean Acc	0.94 [0.87-0.98]	0.83 [0.72-0.91]	0.90 [0.78-0.96]	0.78 [0.65-0.88]	0.87 [0.72-0.95]	0.73 [0.59-0.86]	0.58 [-0.25-0.88]	0.74 [-0.10-0.93]	0.59 [-1.5-0.87]	0.83 [0.54-0.87]	0.69 [0.09-0.90]	0.67 [0.15-0.88]
Max Acc	0.90 [0.79-0.96]	0.69 [0.53-0.84]	0.83 [0.63-0.93]	0.67 [0.51-0.82]	0.71 [0.46-0.88]	0.65 [0.49-0.80]	0.85 [0.31-0.96]	0.65 [-0.03-0.89]	0.70 [0.01-0.91]	0.87 [0.64-0.95]	0.84 [0.51-0.95]	0.60 [-0.05-0.85]
Mean Gyr	0.95 [0.89-0.98]	0.81 [0.69-0.91]	0.86 [0.71-0.95]	0.78 [0.65-0.88]	0.86 [0.71-0.95]	0.80 [0.69-0.90]	0.67 [-0.12-0.91]	0.68 [-0.13-0.90]	0.72 [0.19-0.91]	0.84 [0.59-0.94]	0.74 [0.22-0.91]	0.67 [0.12-0.88]
Max Gyr	0.89 [0.77-0.96]	0.69 [0.53-0.84]	0.83 [0.66-0.93]	0.68 [0.53-0.82]	0.63 [0.35-0.84]	0.72 [0.57-0.85]	0.77 [0.21-0.94]	0.77 [0.15-0.93]	0.87 [0.61-0.96]	0.91 [0.73-0.97]	0.90 [0.70-0.97]	0.82 [0.51-0.93]
RMS Acc	0.94 [0.87-0.98]	0.82 [0.71-0.92]	0.89 [0.77-0.96]	0.77 [0.65-0.88]	0.86 [0.71-0.95]	0.74 [0.60-0.84]	0.62 [-0.21-0.90]	0.77 [-0.06-0.94]	0.55 [-0.35-0.85]	0.84 [0.57-0.94]	0.71 [0.14-0.91]	0.66 [0.11-0.87]
RMS Gyr	0.96 [0.91-0.99]	0.83 [0.72-0.92]	0.89 [0.76-0.96]	0.77 [0.65-0.88]	0.89 [0.75-0.96]	0.82 [0.71-0.91]	0.75 [0.00-0.93]	0.73 [-0.06-0.92]	0.75 [0.26-0.92]	0.87 [0.65-0.95]	0.79 [0.38-0.93]	0.70 [0.21-0.89]
SE Acc	0.92 [0.83-0.97]	0.29 [0.13-0.52]	0.78 [0.57-0.91]	0.47 [0.30-0.67]	0.73 [0.49-0.89]	0.40 [0.24-0.61]	0.93 [0.72-0.98]	0.26 [-1.27-0.76]	0.90 [0.68-0.97]	0.78 [0.39-0.92]	0.83 [0.44-0.95]	0.69 [0.12-0.89]
SE Gyr	0.89 [0.76-0.96]	0.39 [0.22-0.62]	0.69 [0.43-0.87]	0.50 [0.34-0.70]	0.71 [0.45-0.88]	0.59 [0.43-0.76]	0.79 [0.29-0.94]	0.55 [-0.26-0.85]	0.88 [0.60-0.96]	0.90 [0.73-0.96]	0.86 [0.55-0.95]	0.75 [0.30-0.91]

Table S2. Within-and between -session intra-class correlation coefficients (ICC) and confidence intervals. Acc= acceleration; ang vel = angular velocity; SE = sample entropy.