

Additional file 4: Overview of ANCOVA of bimanual parameters between MACS levels in children with uCP

Tasks	Bimanual parameters	Mean (CI)			MACS					Age	
		Level 1	Level 2	Level 3	F	P-value* (η^2_p)	I vs. II	I vs. III	II vs. III	F	P-value* (η^2_p)
Ball-on-bar task	Level 1	0.04 (0.02-0.06)	0.06 (0.03-0.12)	0.18 (0.07-0.50)	3.80	0.06 (0.14)				0.79	0.51 (0.02)
		0.10 (0.08-0.13)	0.14 (0.10-0.19)	0.24 (0.15-0.41)	5.15	0.02 (0.18)	0.30	0.01	0.21	3.41	0.13 (0.07)
		3.32 (2.84-3.85)	4.17 (3.48-4.93)	5.31 (4.12-6.66)	5.35	0.02 (0.19)	0.17	0.01	0.34	0.01	0.96 (0.00)
		42.85 (39.81-46.13)	51.40 (46.77-56.49)	61.66 (53.33-71.29)	11.26	<0.001 (0.33)	0.01	<0.001	0.12	6.54	0.03 (0.12)
		0.03 (0.00-0.05)	0.07 (0.03-0.10)	0.06 (0.01-0.11)	2.06	0.23 (0.08)				0.10	0.87 (0.00)
	Level 2	0.05 (0.04-0.06)	0.09 (0.07-0.10)	0.11 (0.08-0.15)	15.26	<0.001 (0.40)	<0.001	<0.001	0.62	23.22	<0.001 (0.34)
		0.03 (0.02-0.05)	0.04 (0.02-0.06)	0.03 (0.01-0.06)	0.24	0.87 (0.01)				0.00	0.96 (0.00)
		0.06 (0.06-0.07)	0.08 (0.07-0.09)	0.12 (0.09-0.16)	20.62	<0.001 (0.36)	0.03	<0.001	0.003	4.26	0.07 (0.09)
		2.88 (2.40-3.44)	3.73 (2.98-4.68)	4.71 (3.31-6.70)	3.60	0.07 (0.14)				0.19	0.81 (0.00)
		41.90 (38.53-45.28)	54.24 (50.00-58.47)	65.46 (58.84-72.07)	23.30	<0.001 (0.51)	<0.001	<0.001	0.02	11.33	<0.001 (0.20)
		0.02 (-0.01-0.05)	0.04 (0.01-0.07)	0.02 (-0.04-0.07)	0.53	0.74 (0.02)				0.01	0.97 (0.00)
Object hit task	<i>Hand transition</i>	-0.04 (-0.05-(-0.02))	-0.03 (-0.05-0.00)	-0.02 (-0.06-0.02)	0.73	0.83 (0.01)				0.05	0.90 (0.00)
	<i>Hand selection overlap</i>	0.12 (0.10-0.14)	0.13 (0.10-0.14)	0.12 (0.10-0.14)	0.32	0.85 (0.01)				1.75	0.30 (0.04)
	<i>Hand bias hits</i>	0.15 (0.11-0.21)	0.20 (0.11-0.21)	0.31 (0.11-0.21)	2.57	0.15 (0.10)				0.37	0.70 (0.01)
	<i>Hand speed bias</i>	0.14 (0.09-0.19)	0.22 (0.09-0.19)	0.31 (0.09-0.19)	4.21	0.20 (0.08)				0.01	0.95 (0.00)
Circuit task	Bimanual coordination factor	0.27 (0.26-0.29)	0.26 (0.24-0.28)	0.25 (0.21-0.28)	1.58	0.32 (0.07)				30.54	<0.001 (0.42)

uCP = unilateral cerebral palsy, SD = standard deviation, MACS = manual ability level, P-value* = adjusted P-value with false discovery rate of 0.05 for multiple comparison, η^2_p = partial eta square, bold = significance ≤ 0.05