Correlation Analysis

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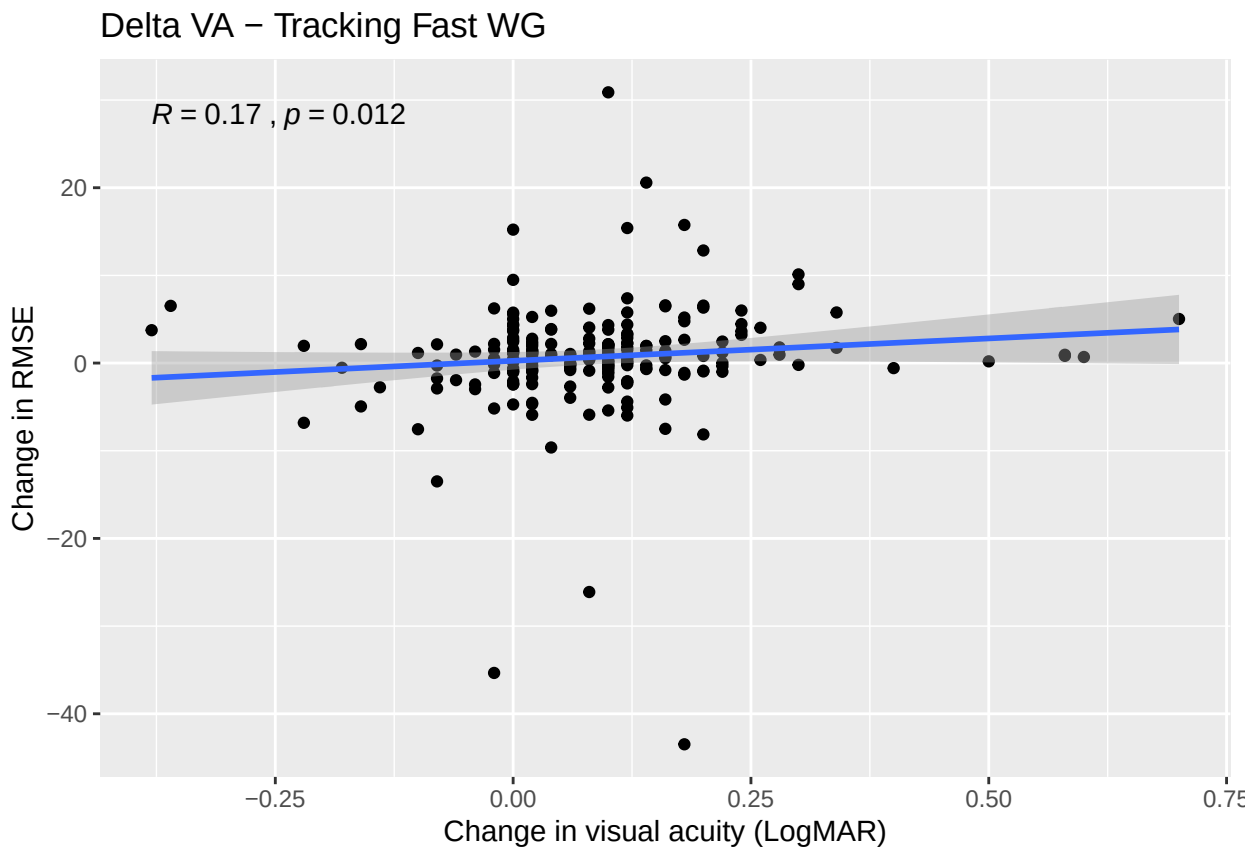
Experiment 1

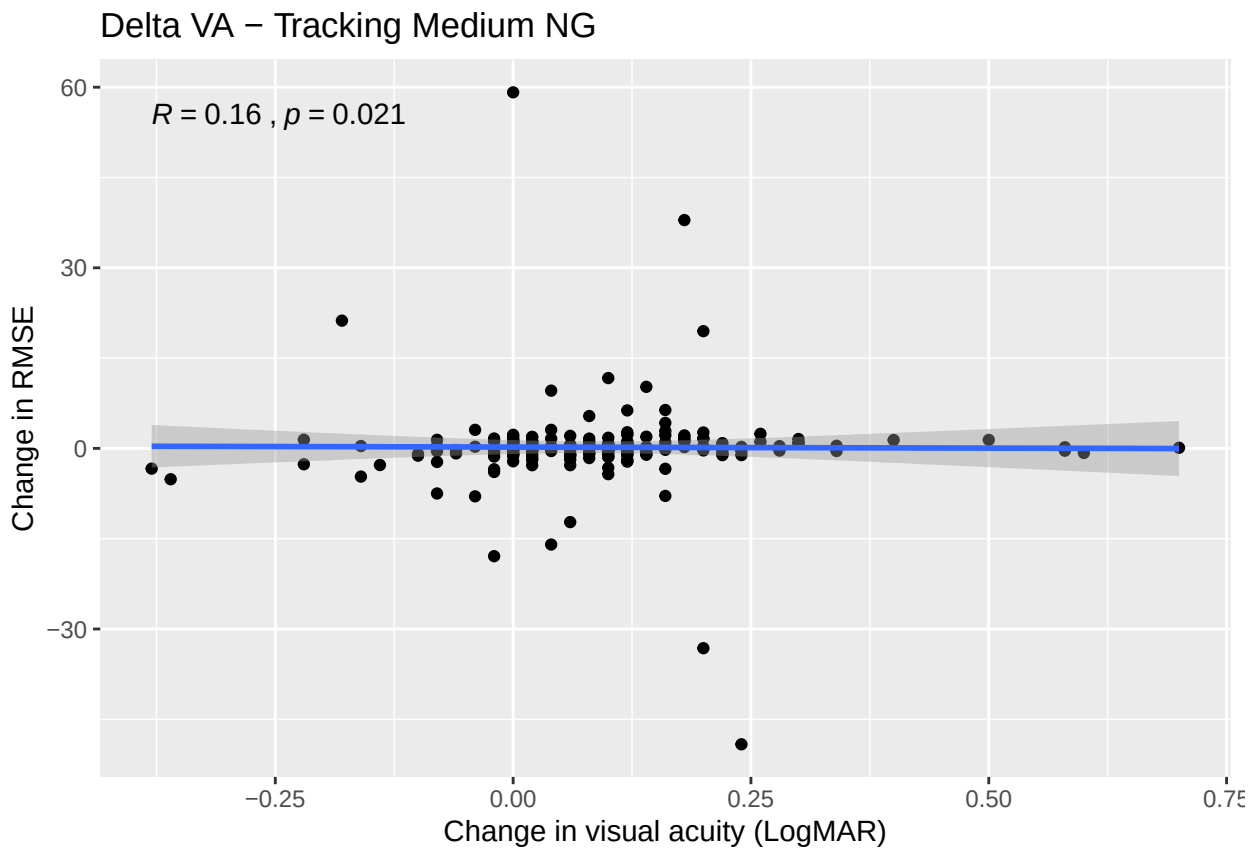
Change in all visual and task outcomes were calculated between visual conditions i.e. both vs worse, both versus better, better versus worse. All variables were subject to a Spearman's rank correlation, results are displayed below in *Fig X*. No variables showed marginal significance. Intercorrelations between motor measures are not reported here. Spearman's correlation was choosen as these data were not normally distributed.

A higher LogMAR value is indicative that the change to visual condition has made VA worse. Results of the Spearman correlation indicated that there was a significant positive association between increasing LogMAR scores and increased Tracking RMSE with no guide at fast speed ($rs(211) = .17$, $p = .012$), and with a guide at medium speed ($rs(211) = .16$, $p = .021$).

Table 1: Spearman's Correlation Matrix

			r~s~	*p*
4	VA_LogMAR	Tracking_NG_Fast_RMSE	0.171	0.012
11	VA_LogMAR	Tracking_WG_Medi_RMSE	0.158	0.021
22	VA_LogMAR	Aiming_MT	0.146	0.034

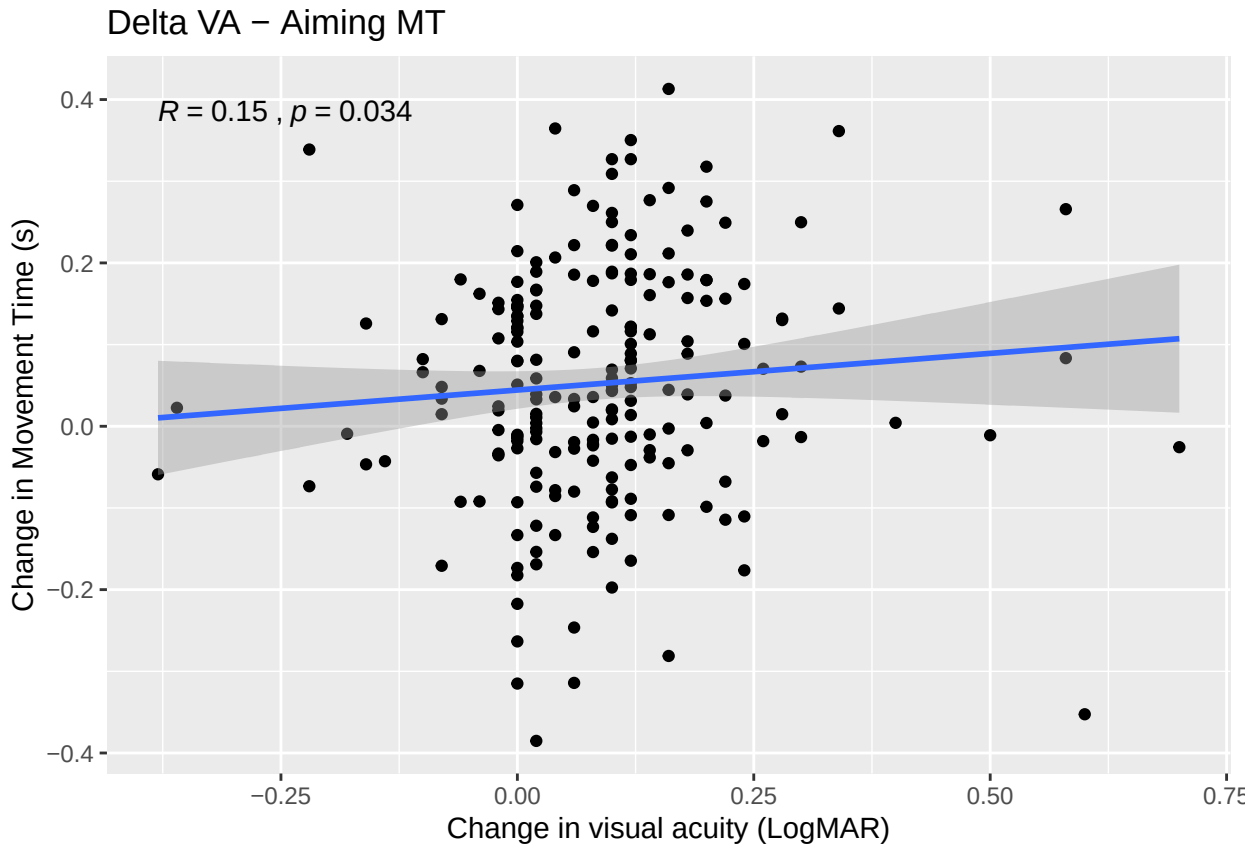

Delta VA − Tracking Fast WG
R = 0.17 , p = 0.012
20
0
−20
−40
Change in RMSE
−0.25
0.00
0.25
0.50
0.75
Change in visual acuity (LogMAR)



The Spearman's correlation also indicated that there was a significant positive association between increasing LogMAR scores and movememnt time (s) in the aiming task ($rs(211) = .15$, $p = .034$).

Table 2: Spearman's Correlation Matrix

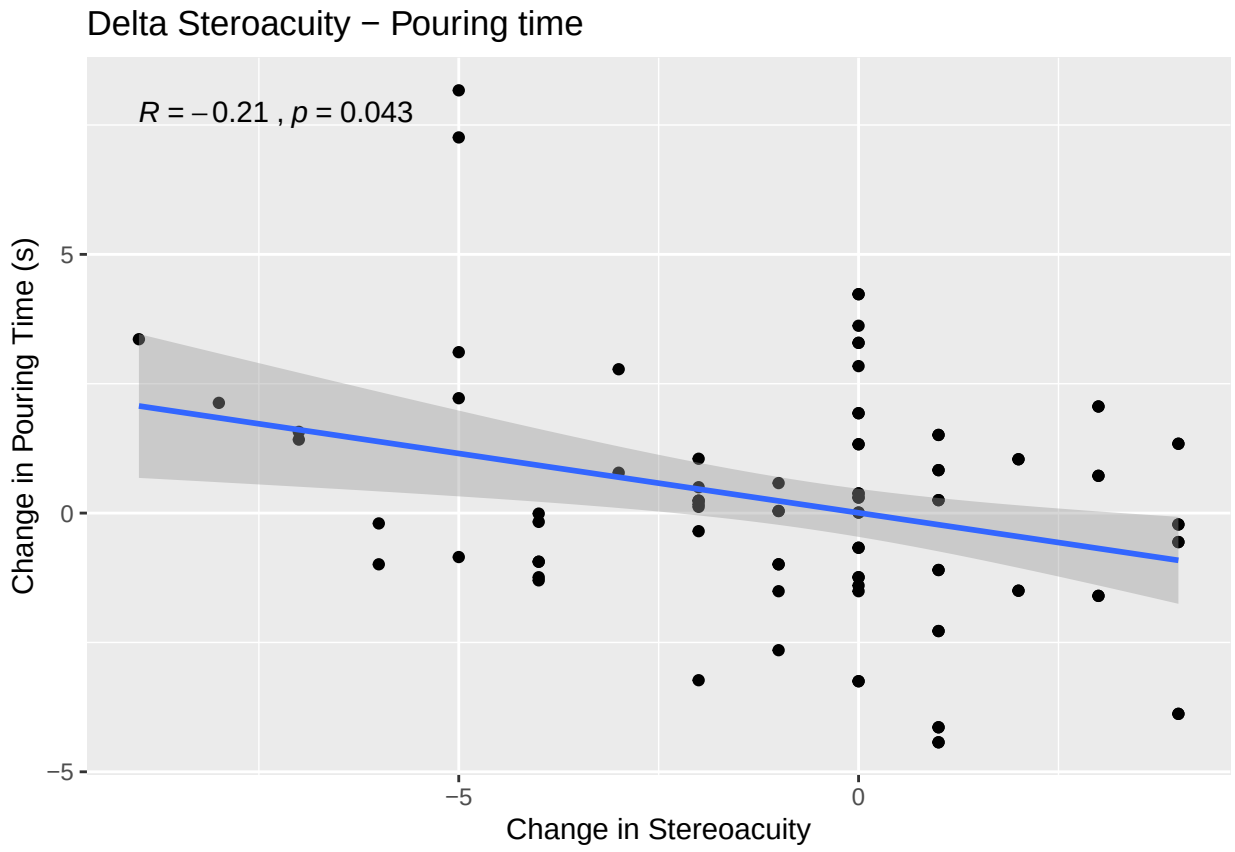
			r~s~	*p*
5	CS	AimingMT	-0.186	0.080
9	Stereo	Pegboard	-0.176	0.097
16	VA	PouringTime	-0.185	0.081
18	Stereo	PouringTime	-0.214	0.043



Experiment 2

All significant, or marginally significant results of a Spearman's correlation are displayed below in *Fig X*. Intercorrelations between motor measures are not reported here.

A negative value for stereoacuity indicates that the manipulation has made stereoacuity worse, where as a higher value for change to pouring time is indicative of worse performance i.e. the particiapnt has taken longer to complete the task. The Spearman's correlation also indicated that there was a significant negative association between change in stereoacuity scores and pouring time (s) in the aiming task ($rs(88) = $ -.21, $p = .043$)


Delta Steroacuity − Pouring time
R = −0.21 , p = 0.043
Change in Pouring Time (s)
5
0
−5
−5
0
Change in Stereoacuity