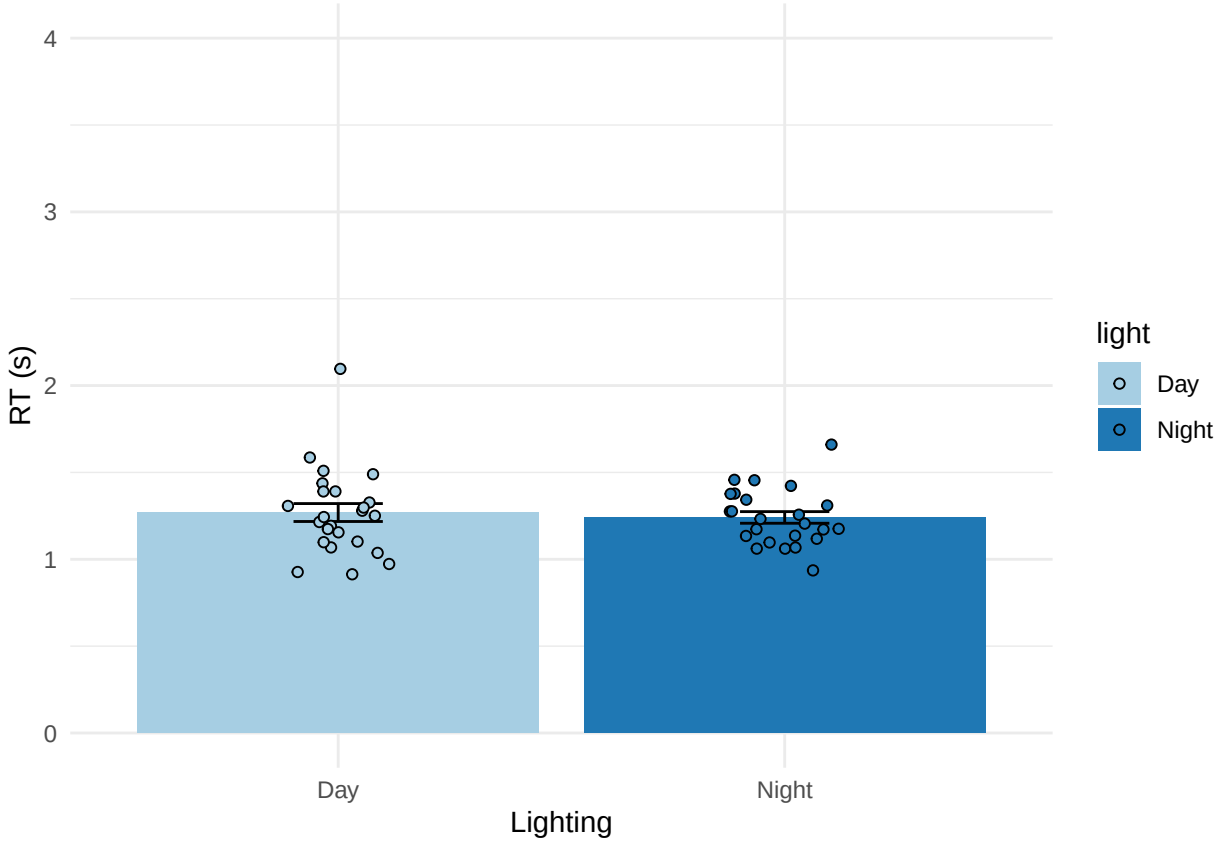
Quantitative Analysis - 48 Subjects

Audio RT independent-samples t-test

Table 1: Independent t-test table

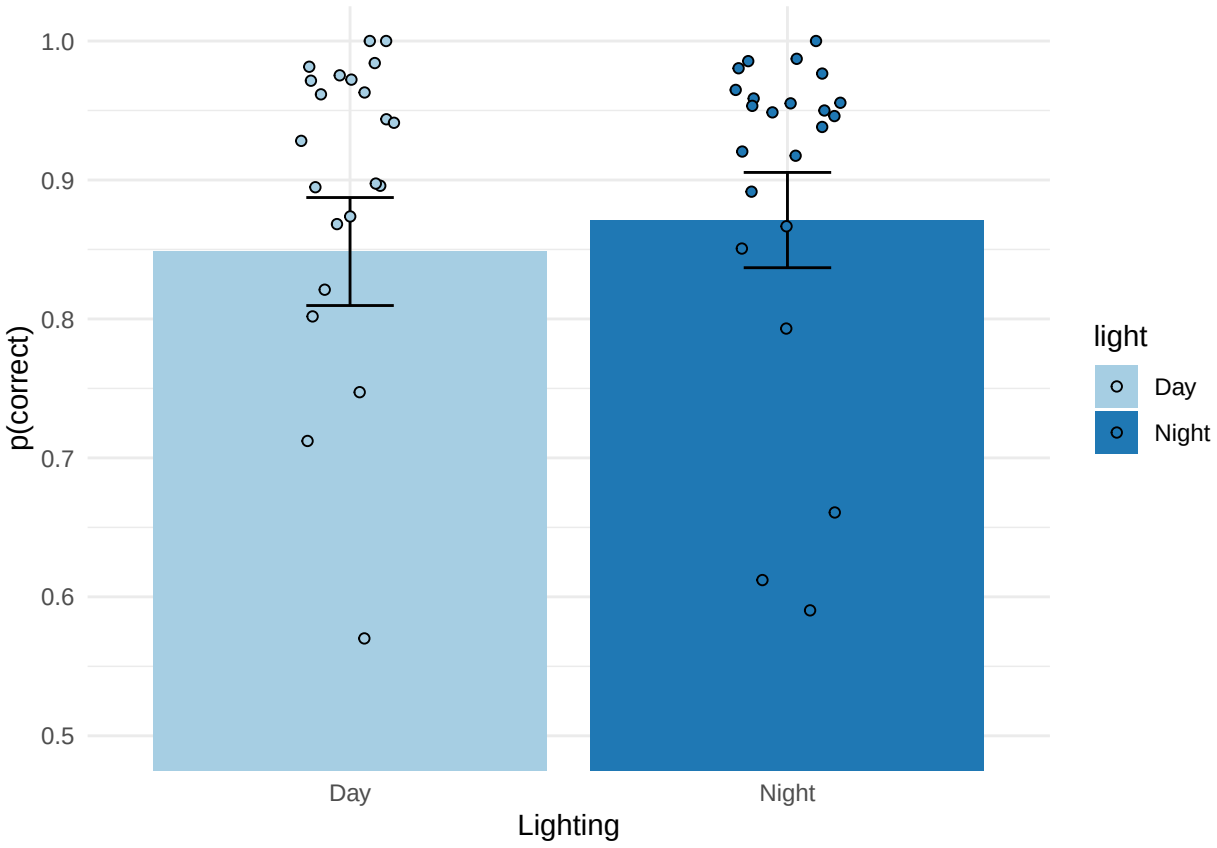
.y.	group1	group2	n1	n2	statistic	df	p	p.signif
rt_mean_per_trial	Day	Night	24	24	0.4596531	46	0.648	ns



Audio Accuracy independent-samples t-test

Table 2: Independent t-test table

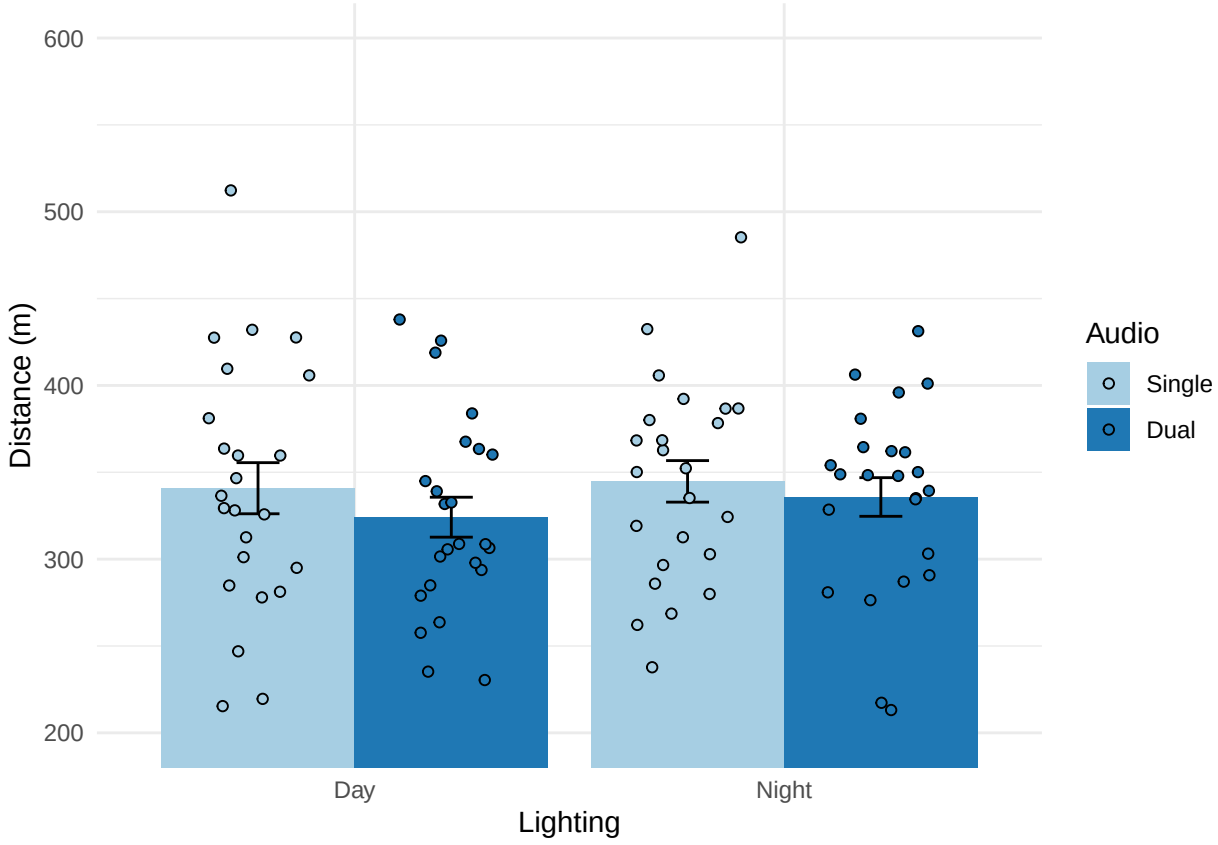
.y.	group1	group2	n1	n2	statistic	df	p	p.signif
audioAccuracy	Day	Night	24	24	-0.4368872	46	0.664	ns



Distance Traveled 2x2 ANOVA

Table 3: ANOVA Table

Effect	DFn	DFd	F	p	p<.05	ges
light	1	46	0.235	0.630		0.004
audio	1	46	3.342	0.074		0.012
light:audio	1	46	0.300	0.587		0.001



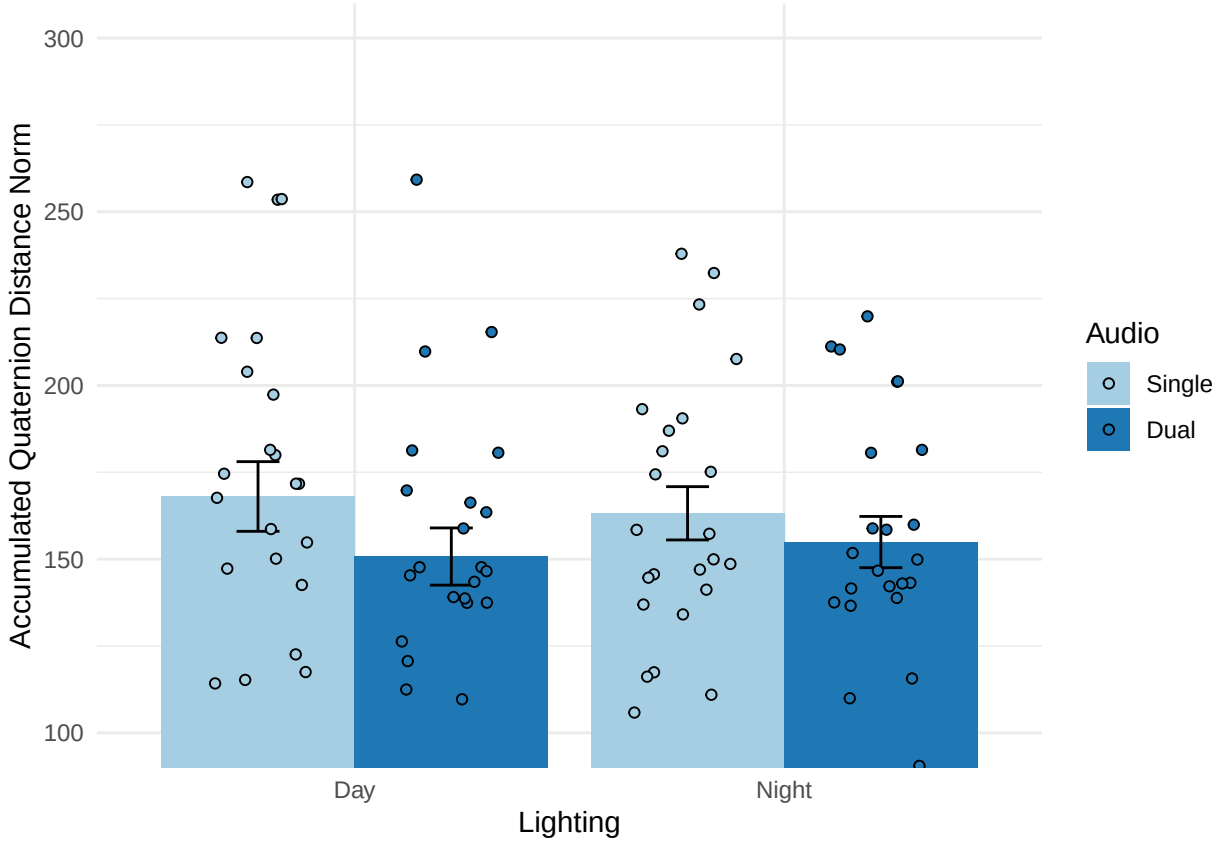
Head Rotation 2x2 ANOVA

Table 4: ANOVA Table

Effect	DFn	DFd	F	p	p<.05	ges
light	1	46	0.000971	0.975		1.79e-05
audio	1	46	7.733000	0.008	*	2.50e-02
light:audio	1	46	0.959000	0.333		3.00e-03

Table 5: Pairwise t-test for main effect of audio w. bonferroni correction

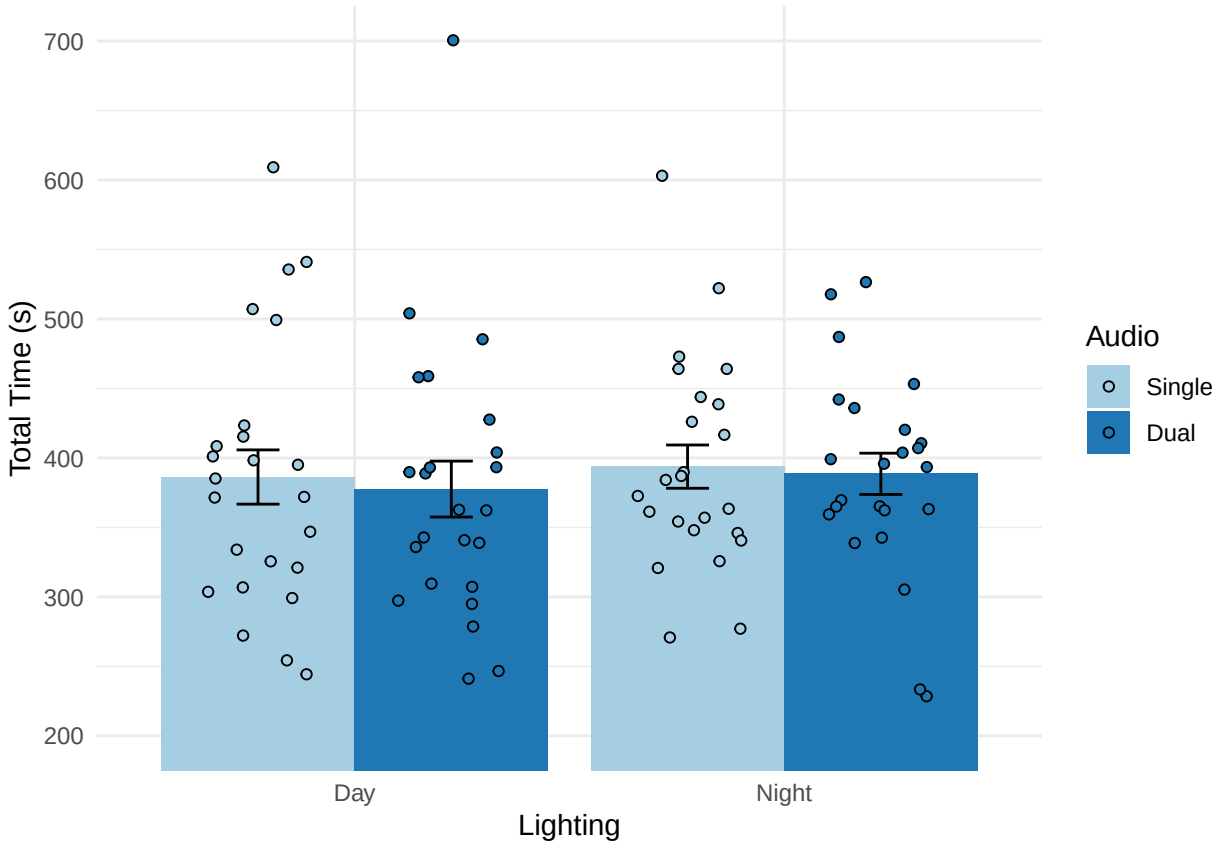
.y.	group1	group2	n1	n2	statistic	df	p	p.adj	p.adj.signif
totalRotation	dual	single	48	48	-2.782069	47	0.008	0.008	**



Total Session Time 2x2 ANOVA

Table 6: ANOVA Table

Effect	DFn	DFd	F	p	p<.05	ges
light	1	46	0.208	0.651		0.003000
audio	1	46	0.223	0.639		0.002000
light:audio	1	46	0.014	0.905		0.000107



Gem type analysis

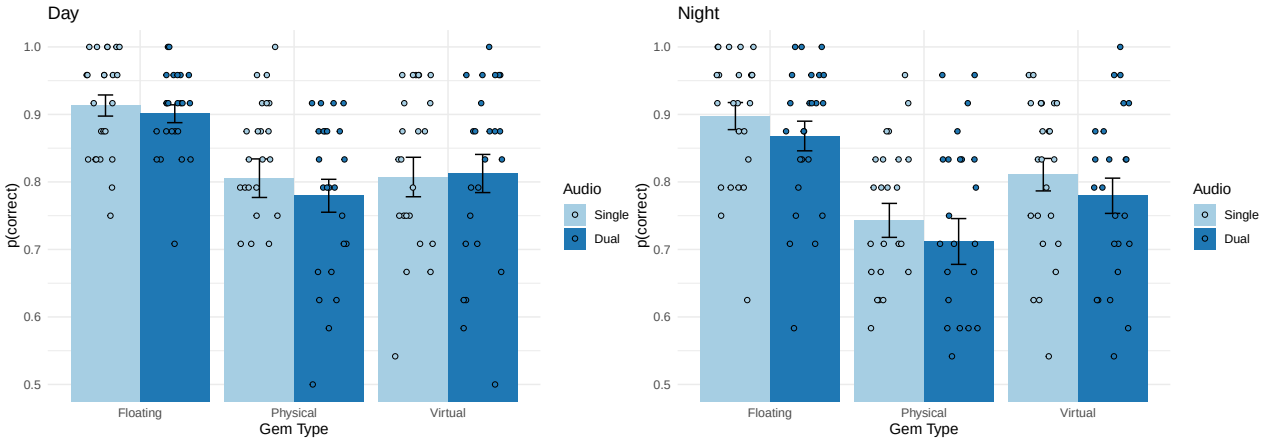
Accuracy 2x2x3 ANOVA (light, audio, gemtype)

Table 7: ANOVA Table

Effect	DFn	DFd	F	p	p<.05	ges
light	1	46	1.948	0.169		0.021000
audio	1	46	2.706	0.107		0.008000
gemType	2	92	43.459	0.000	*	0.183000
light:audio	1	46	0.603	0.441		0.002000
light:gemType	2	92	1.631	0.201		0.008000
audio:gemType	2	92	0.248	0.781		0.000716
light:audio:gemType	2	92	0.252	0.777		0.000727

Table 8: Pairwise Comparisons - main effect of gem type

.y.	group1	group2	n1	n2	statistic	df	p	p.adj	p.adj.signif
accuracy	Floating	Physical	96	96	10.577407	95	0.000	0.00	****
accuracy	Floating	Virtual	96	96	7.624000	95	0.000	0.00	****
accuracy	Physical	Virtual	96	96	-3.005751	95	0.003	0.01	*



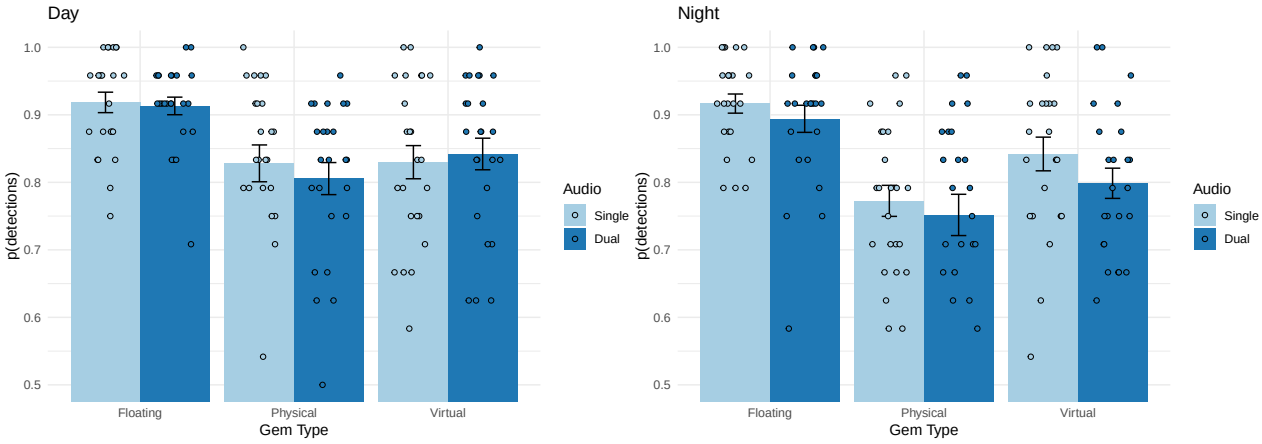
Detections 2x2x3 ANOVA (light, audio, gemtype)

Table 9: ANOVA Table

Effect	DFn	DFd	F	p	p<.05	ges
light	1	46	1.605	0.212		0.015000
audio	1	46	2.347	0.132		0.006000
gemType	2	92	33.290	0.000	*	0.180000
light:audio	1	46	1.133	0.293		0.003000
light:gemType	2	92	1.274	0.285		0.008000
audio:gemType	2	92	0.089	0.915		0.000242
light:audio:gemType	2	92	1.126	0.329		0.003000

Table 10: Pairwise Comparisons - main effect of gem type

.y.	group1	group2	n1	n2	statistic	df	p	p.adj	p.adj.signif
detectionAccuracy	Floating	Physical	96	96	10.053294	95	0.000	0.000	****
detectionAccuracy	Floating	Virtual	96	96	6.957671	95	0.000	0.000	****
detectionAccuracy	Physical	Virtual	96	96	-2.742081	95	0.007	0.022	*



Discriminations 2x2x3 ANOVA (light, audio, gemtype)

Table 11: ANOVA Table

Effect	DFn	DFd	F	p	p<.05	ges
light	1	46	1.178	0.284		0.011000
audio	1	46	0.677	0.415		0.003000
gemType	2	92	6.866	0.002	*	0.031000
light:audio	1	46	0.050	0.824		0.000195
light:gemType	2	92	2.179	0.119		0.010000
audio:gemType	2	92	0.755	0.473		0.003000
light:audio:gemType	2	92	0.273	0.762		0.001000

Table 12: Pairwise Comparisons - main effect of gem type

.y.	group1	group2	n1	n2	statistic	df	p	p.adj	p.adj.signif
discriminationAccuracy	Floating	Physical	96	96	3.6896216	95	0.000374	0.001	**
discriminationAccuracy	Floating	Virtual	96	96	3.2189582	95	0.002000	0.005	**
discriminationAccuracy	Physical	Virtual	96	96	-0.7934177	95	0.430000	1.000	ns