Reaction Time

Repeated Measures ANOVA

Within Subjects Effects

	Sum of Squares	df	Mean Square	F	p	η^2_p
Probe Type	179852	1	179852	10.461	0.005	0.368
Probe Type ✻ keyYes	9672	1	9672	0.563	0.463	0.030
Residual	309468	18	17193			
Compatibility	86722	1	86722	13.352	0.002	0.426
Compatibility ✻ keyYes	3208	1	3208	0.494	0.491	0.027
Residual	116913	18	6495			
Presentation Time	130476	5	26095	4.031	0.002	0.183
Presentation Time ✻ keyYes	19282	5	3856	0.596	0.703	0.032
Residual	582606	90	6473			
Probe Type ✻ Compatibility	139595	1	139595	18.838	< .001	0.511
Probe Type ✻ Compatibility ✻ keyYes	6385	1	6385	0.862	0.366	0.046
Residual	133387	18	7410			
Probe Type ✻ Presentation Time	96518	5	19304	5.615	< .001	0.238
Probe Type ✻ Presentation Time ✻ keyYes	9983	5	1997	0.581	0.715	0.031
Residual	309385	90	3438			
Compatibility ✻ Presentation Time	18350	5	3670	0.761	0.580	0.041
Compatibility ✻ Presentation Time ✻ keyYes	55142	5	11028	2.288	0.052	0.113
Residual	433813	90	4820			
Probe Type ✻ Compatibility ✻ Presentation Time	64898	5	12980	2.653	0.028	0.128
Probe Type ✻ Compatibility ✻ Presentation Time ✻ keyYes	14467	5	2893	0.591	0.706	0.032
Residual	440260	90	4892			

Note. Type 3 Sums of Squares

[3]

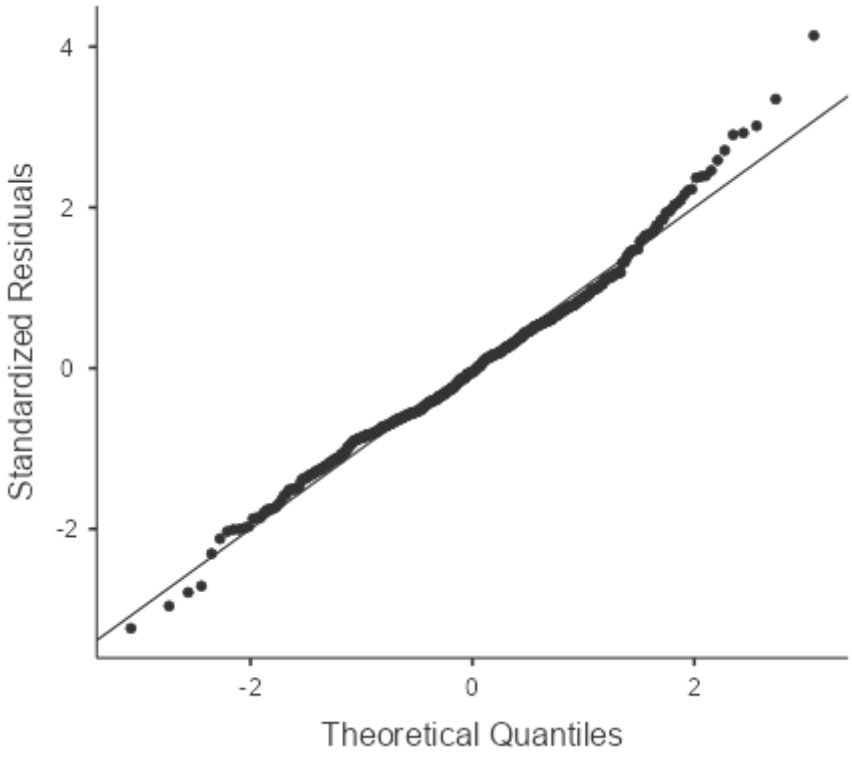
Between Subjects Effects

	Sum of Squares	df	Mean Square	F	p	η^2_p
keyYes	294149	1	294149	1.98	0.177	0.099
Residual	2.68e+6	18	148766			

Note. Type 3 Sums of Squares

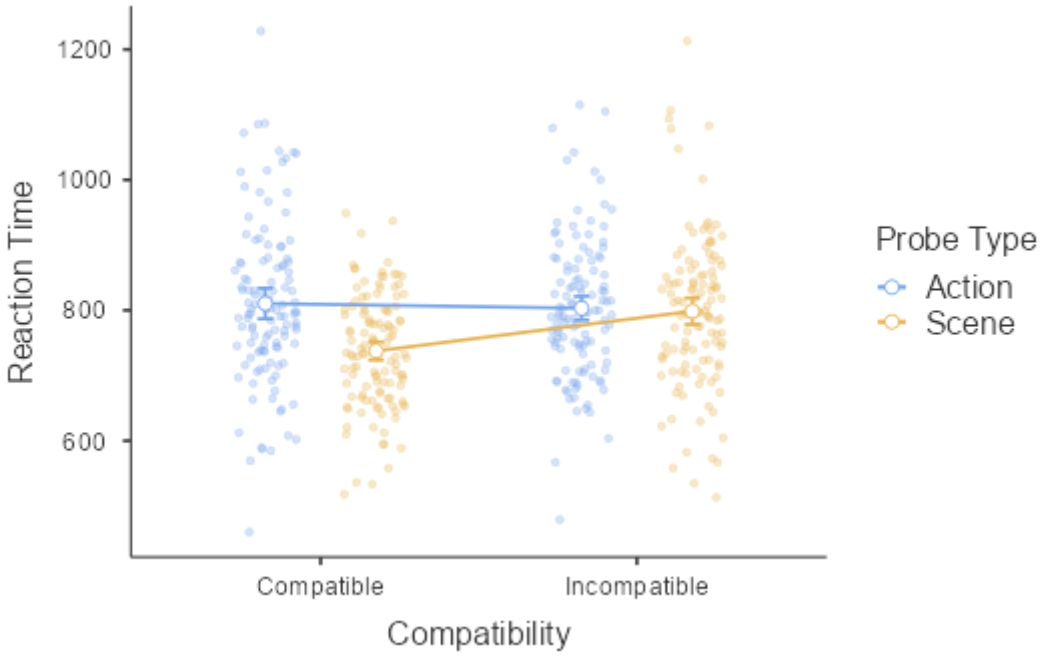
Assumptions

Q-Q Plot

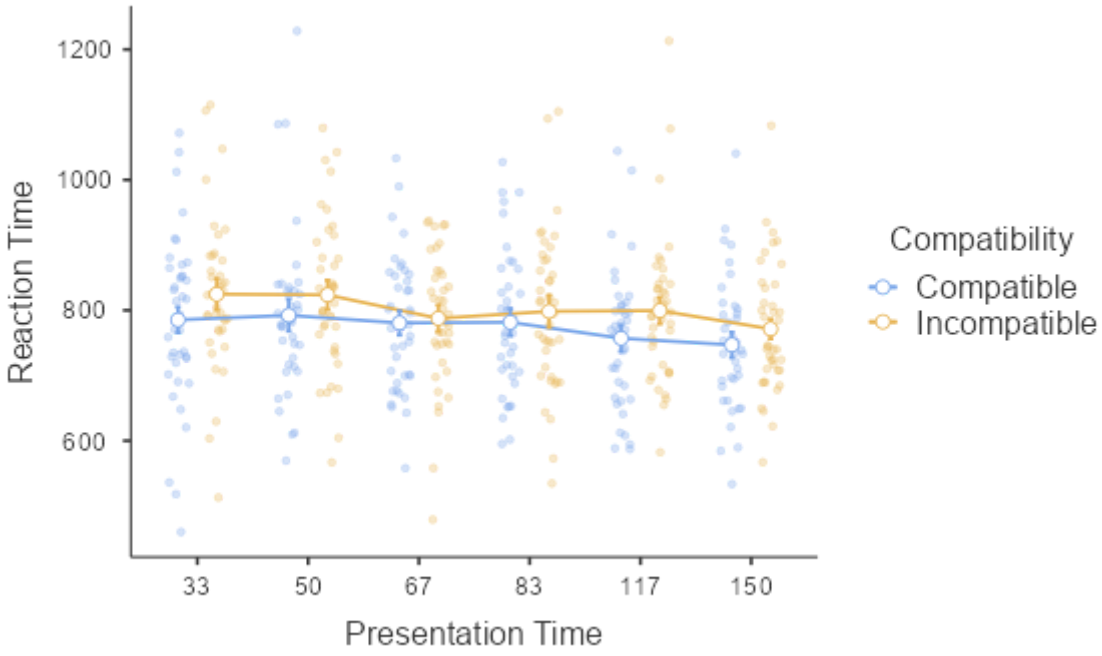


Estimated Marginal Means

Compatibility ⁎ Probe Type



Presentation Time ⁎ Compatibility



[4]

Repeated Measures ANOVA : Actions ONLY

Within Subjects Effects

	Sum of Squares	df	Mean Square	F	p	η^2_p
Compatibility	3131	1	3131	0.7367	0.402	0.039
Compatibility ✻ keyYes	271	1	271	0.0637	0.804	0.004
Residual	76507	18	4250			
Presentation Time	209064	5	41813	7.8257	< .001	0.303
Presentation Time ✻ keyYes	26988	5	5398	1.0102	0.416	0.053
Residual	480872	90	5343			
Compatibility ✻ Presentation Time	32608	5	6522	1.4702	0.207	0.076
Compatibility ✻ Presentation Time ✻ keyYes	13676	5	2735	0.6166	0.687	0.033
Residual	399231	90	4436			

Note. Type 3 Sums of Squares

[3]

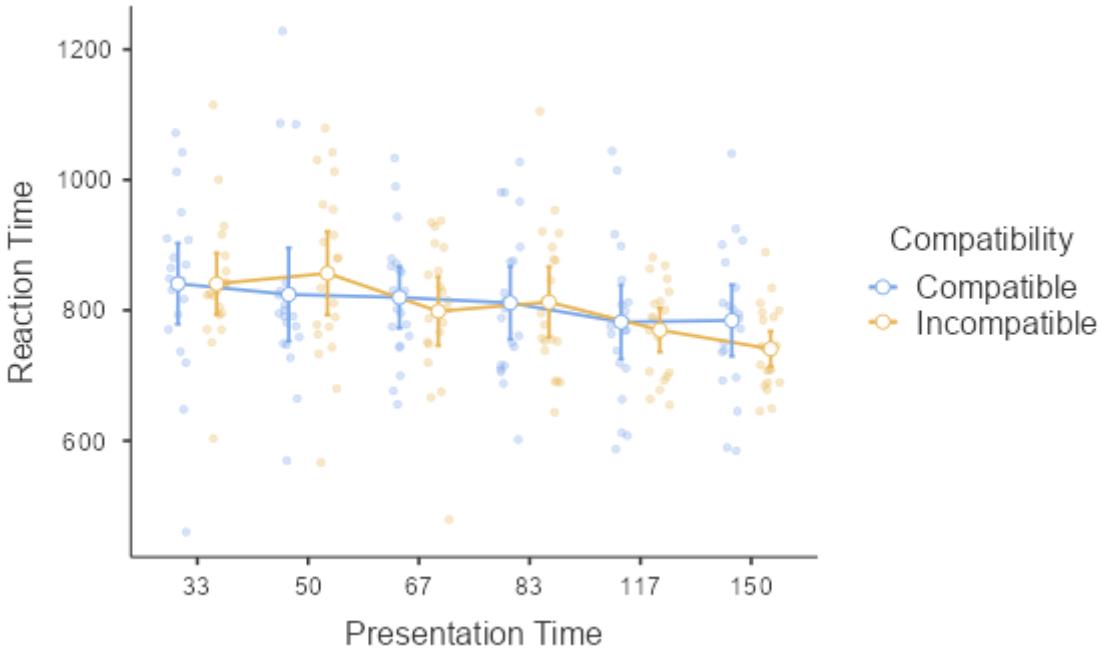
Between Subjects Effects

	Sum of Squares	df	Mean Square	F	p	η^2_p
keyYes	98572	1	98572	0.963	0.339	0.051
Residual	1.84e+6	18	102361			

Note. Type 3 Sums of Squares

Estimated Marginal Means

Presentation Time ✻ Compatibility



[4]

Repeated Measures ANOVA : Scenes ONLY

Within Subjects Effects

	Sum of Squares	df	Mean Square	F	p	η^2_p
Compatibility	223185	1	223185	23.1156	< .001	0.562
Compatibility ✻ keyYes	9322	1	9322	0.9655	0.339	0.051
Residual	173793	18	9655			
Presentation Time	17931	5	3586	0.7851	0.563	0.042
Presentation Time ✻ keyYes	2276	5	455	0.0997	0.992	0.006
Residual	411119	90	4568			
Compatibility ✻ Presentation Time	50640	5	10128	1.9196	0.099	0.096
Compatibility ✻ Presentation Time ✻ keyYes	55934	5	11187	2.1203	0.070	0.105
Residual	474843	90	5276			

Note. Type 3 Sums of Squares

[3]

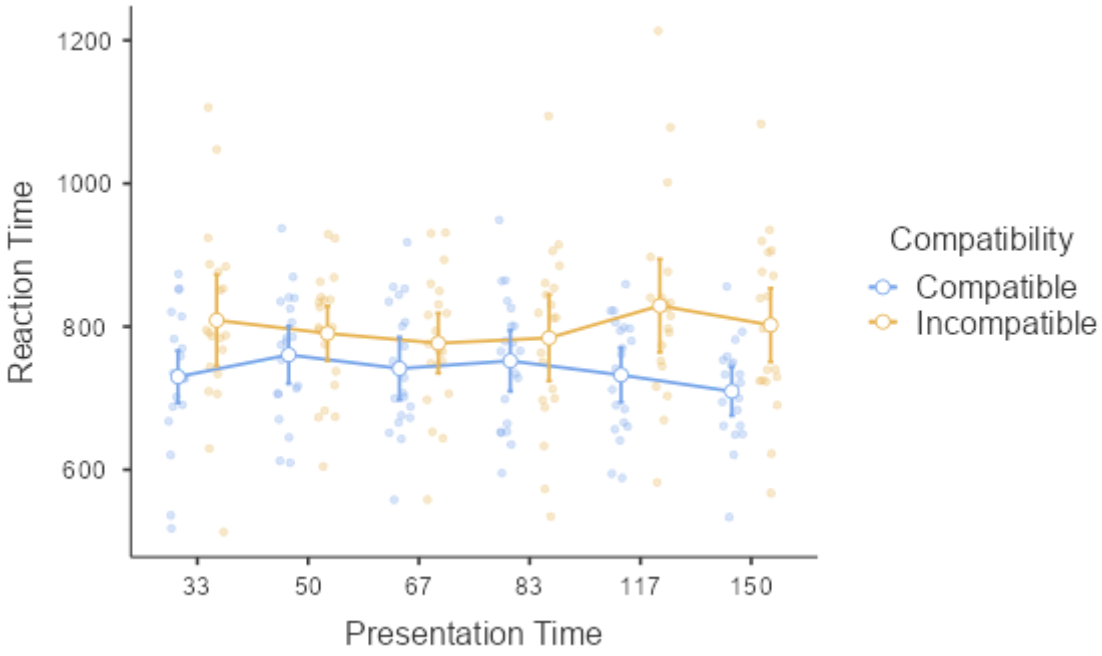
Between Subjects Effects

	Sum of Squares	df	Mean Square	F	p	η^2_p
keyYes	205250	1	205250	3.23	0.089	0.152
Residual	1.14e+6	18	63598			

Note. Type 3 Sums of Squares

Estimated Marginal Means

Presentation Time ✻ Compatibility



[4]

References

[1] The jamovi project (2022). *jamovi*. (Version 2.3) [Computer Software]. Retrieved from https://www.jamovi.org.

[2] R Core Team (2021). *R: A Language and environment for statistical computing*. (Version 4.1) [Computer software]. Retrieved from https://cran.r-project.org. (R packages retrieved from MRAN snapshot 2022-01-01).

[3] Singmann, H. (2018). *afex: Analysis of Factorial Experiments*. [R package]. Retrieved from https://cran.r-project.org/package=afex.

[4] Lenth, R. (2020). *emmeans: Estimated Marginal Means, aka Least-Squares Means*. [R package]. Retrieved from https://cran.r-project.org/package=emmeans.