

Results

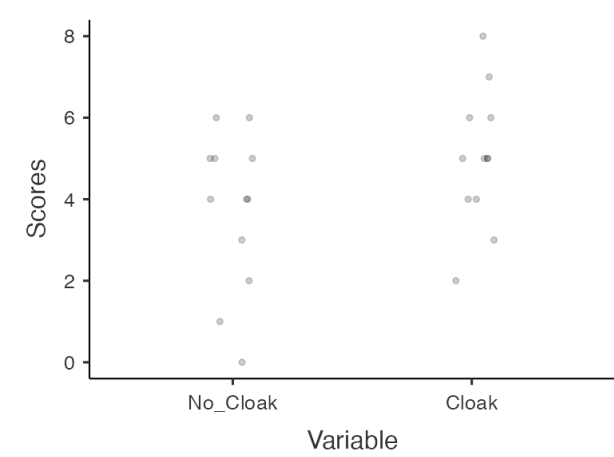
Repeated Measurements

You have entered two related numeric variables. Hence, the [paired sample t test](#) seems to be a good option for you! In order to run this test in jamovi, go to: T-Tests > Paired Samples T-Test

- Drop the two paired variables in the box below Paired Variables, one on the left side of the vertical line and one on the right side of the vertical line
- Under Hypothesis, select your alternative hypothesis

If the normality assumption is violated, you could use the non-parametric [Wilcoxon signed rank test](#). Click on the links to learn more about these tests!

Scatter Plot



Paired Samples T-Test

Paired Samples T-Test													
			Statistic	±%	df	p	Mean difference	SE difference	95% Confidence Interval			95% Confidence Interval	
									Lower	Upper	Effect Size	Lower	Upper
No_Cloak	Cloak	Student's t	-3.80		11.0	0.003	-1.25	0.329	-1.97	-0.527	Cohen's d	-1.10	-1.81
		Bayes factor <sub>10</sub>	16.3	4.03e-8									
		Wilcoxon W	2.50 <sup>a</sup>			0.011	-1.50	0.329	-2.00	-0.500		Rank biserial correlation	-0.909

Note. H<sub>a</sub> μ Measure 1 - Measure 2 ≠ 0

<sup>a</sup> 2 pair(s) of values were tied

[3] [4] [5]

Normality Test (Shapiro-Wilk)

			W	p
No_Cloak	-	Cloak	0.912	0.228

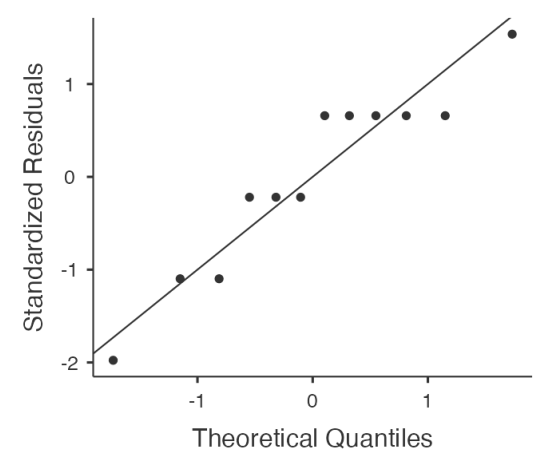
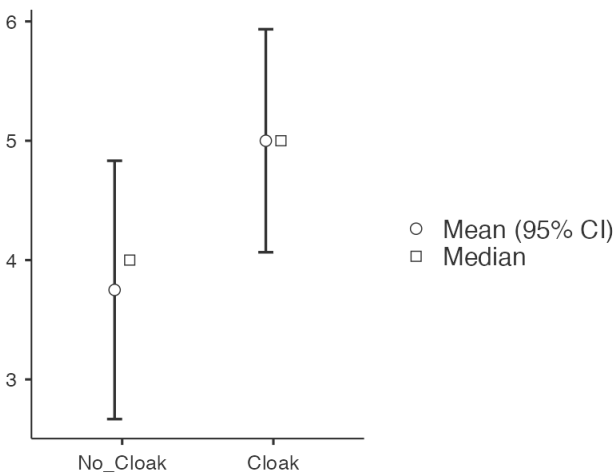
Note. A low p-value suggests a violation of the assumption of normality

Descriptives

	N	Mean	Median	SD	SE
No_Cloak	12	3.75	4.00	1.91	0.552
Cloak	12	5.00	5.00	1.65	0.477

Plots

No\_Cloak - Cloak



Robust Paired Samples T-Test

Robust Paired Samples T-Test									
		t	df	p	Mean difference	SE	95% Confidence Interval		Cohen's d
							Lower	Upper	
No_Cloak	Cloak	-2.70	7.00	0.031	-1.00	0.370	-1.87	-0.125	0.398

Robust Paired Samples T-Test

Robust Paired Samples T-Test									
		t	df	p	Mean difference	SE	95% Confidence Interval		Cohen's d
							Lower	Upper	
No_Cloak	Cloak	-2.70	7.00	0.031	-1.00	0.370	-1.87	-0.125	0.398

Box & Violin Plots

Robust Descriptives

Robust Descriptives	
	SE

Robust Independent Samples T-Test

Robust Independent Samples T-Test		
t	df	p

Robust ANOVA

Robust ANOVA

F		p

Robust Paired Samples T-Test

Robust Paired Samples T-Test

							95% Confidence Interval		
							Lower	Upper	Cohen's d
No_Cloak	Cloak	-2.70	7.00	0.031	-1.00	0.370	-1.87	-0.125	0.398

Bayesian Paired Samples T-Test

Bayesian Paired Samples T-Test

			BF <sub>10</sub>	error %
No_Cloak	-	Cloak	16.3	4.03e-6

[6] [3] [4]

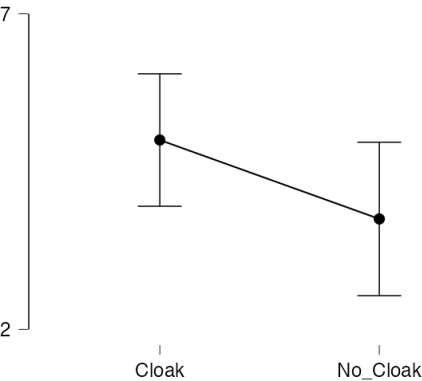
Descriptives

Descriptives

					95% Credible Interval	
	N	Mean	SD	SE	Lower	Upper
No_Cloak	12	3.75	1.91	0.552	2.53	4.97
Cloak	12	5.00	1.65	0.477	3.95	6.05

Descriptives Plot

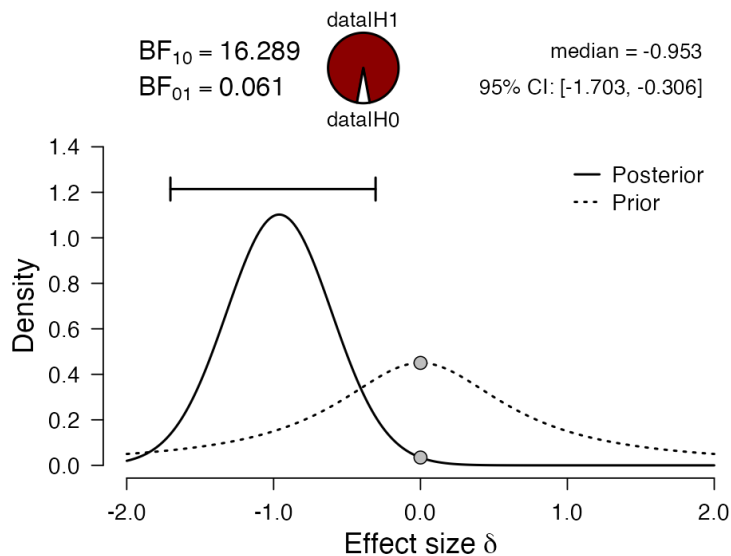
No\_Cloak - Cloak



Inferential Plots

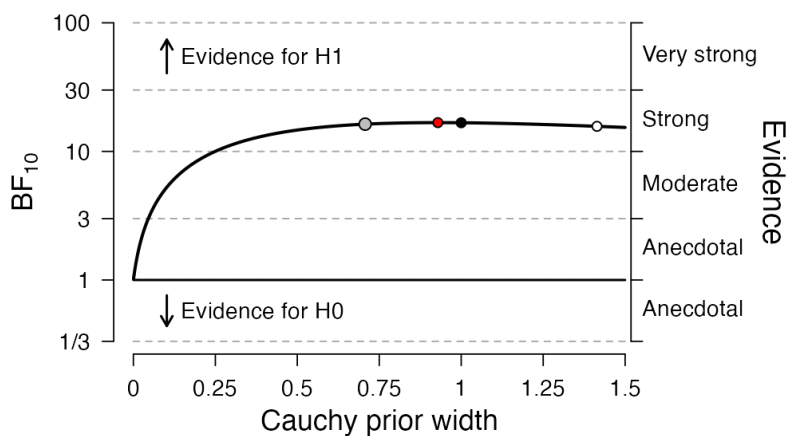
No\_Cloak - Cloak

Prior and Posterior



#### Bayes Factor Robustness Check

- max  $BF_{10}$ : 16.738 at  $r = 0.9288$
- wide prior:  $BF_{10} = 16.705$
- user prior:  $BF_{10} = 16.289$
- ultrawide prior:  $BF_{10} = 15.664$



[6]

## Robust Paired Samples T-Test

Robust Paired Samples T-Test

						95% Confidence Interval		Cohen's d
	t	df	p	Mean difference	SE	Lower	Upper	
Cloak No_Cloak	2.70	7.00	0.031	1.00	0.370	0.125	1.87	0.398

## Scatterplot

## 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] Morey, R. D., & Rouder, J. N. (2018). *BayesFactor: Computation of Bayes Factors for Common Designs*. [R package]. Retrieved from <https://cran.r-project.org/package=BayesFactor>.
- [4] Rouder, J. N., Speckman, P. L., Sun, D., Morey, R. D., & Iverson, G. (2009). Bayesian t tests for accepting and rejecting the null hypothesis. *Psychonomic Bulletin & Review*, 16, 225-237.

[5] Kerby, D. S. (2014). The simple difference formula: An approach to teaching nonparametric correlation. *Comprehensive Psychology*, 3, 2165–2228.

[6] JASP Team (2018). *JASP*. [Computer software]. Retrieved from <https://jasp-stats.org>.