Results

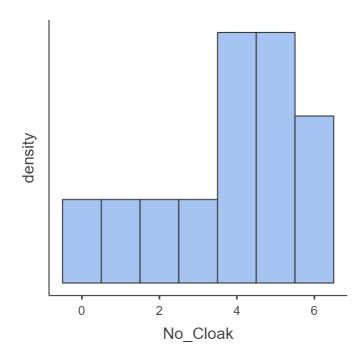
Descriptives

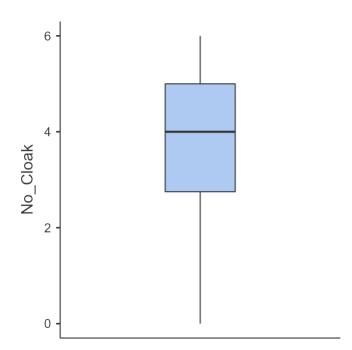
Descriptives

	No_Cloak	Cloak
N	12	12
Missing	0	0
Mean	3.75	5.00
Median	4.00	5.00
Standard deviation	1.91	1.65
Minimum	0.00	2.00
Maximum	6.00	8.00
Skewness	-0.789	0.00
Std. error skewness	0.637	0.637
Kurtosis	-0.229	0.161
Std. error kurtosis	1.23	1.23
Shapiro-Wilk W	0.913	0.973
Shapiro-Wilk p	0.231	0.936

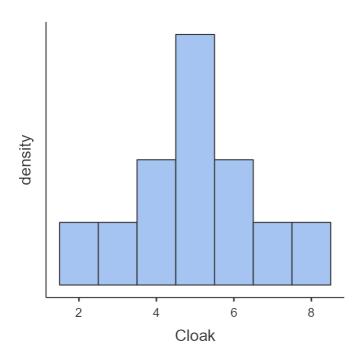
Plots

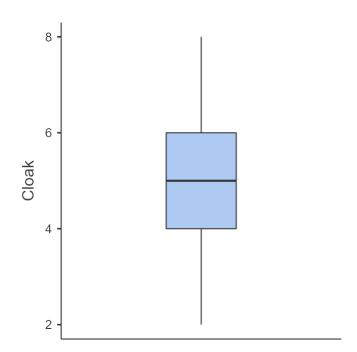
No_Cloak





Cloak





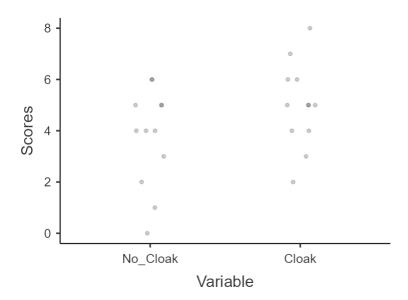
Repeated Measurements

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

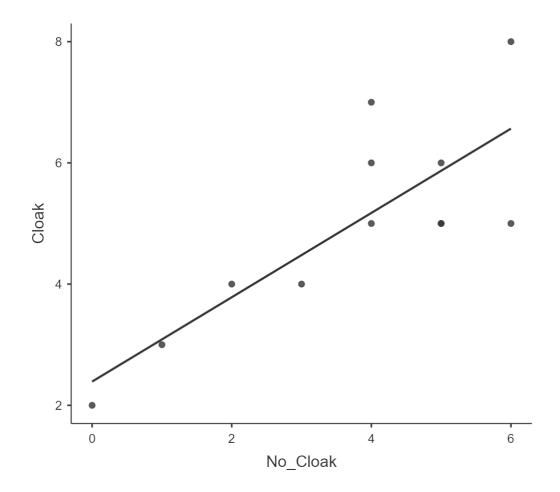
- Drop the two paired variables in the box below Paired Variables, one on the left side of the vertical line and one on the right side of the vertical line
- Under Hypothesis, select your alternative hypothesis

If the normality assumption is violated, you could use the non-parametric <u>Wilcoxon signed rank test</u>. Click on the links to learn more about these tests!

Scatter Plot



Scatterplot



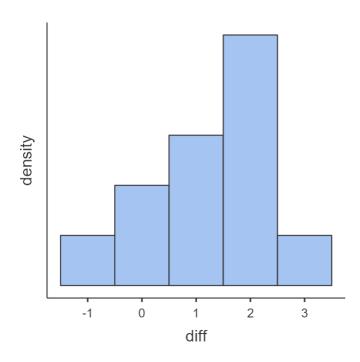
Descriptives

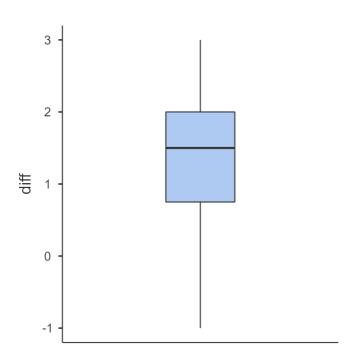
Descriptives

	diff
N	12
Missing	0
Mean	1.25
Median	1.50
Standard deviation	1.14
Minimum	-1.00
Maximum	3.00
Skewness	-0.583
Std. error skewness	0.637
Kurtosis	-0.138
Std. error kurtosis	1.23
Shapiro-Wilk W	0.912
Shapiro-Wilk p	0.228

Plots

diff





Paired Samples T-Test

Paired Samples T-Test

								Confi	5% dence erval		
			statistic	df	р	Mean difference	SE difference	Lower	Upper		Effect Size
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

Note. $H_a \mu_{Measure 1 - Measure 2} \neq 0$

Normality Test (Shapiro-Wilk)

		W	р
No_Cloak	- Cloak	0.912	0.228

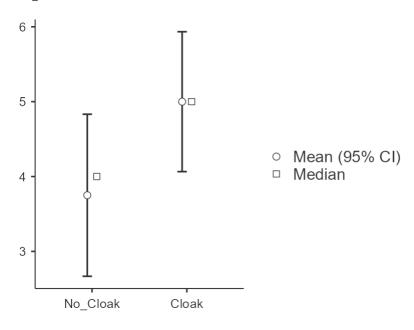
Note. A low p-value suggests a violation of the assumption of normality

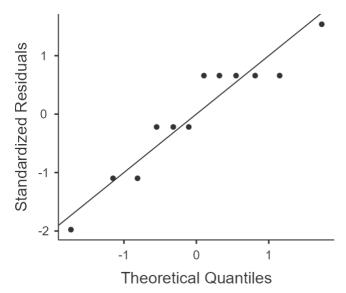
Descriptives

	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

							95% Confidence Interval		
		t	df	р	Mean difference	SE	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 ₁₀	error %
No_Cloak	-	Cloak	16.3	4.03e-6

[3] [4] [5]

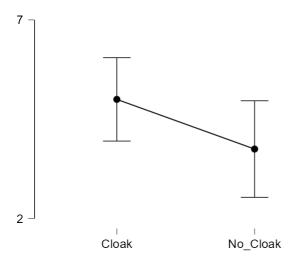
Descriptives

Descriptives

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

Descriptives Plot

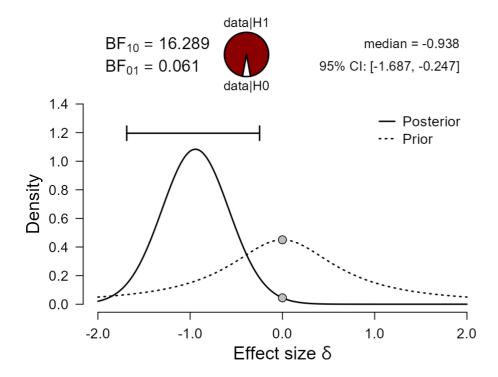
No_Cloak - Cloak



Inferential Plots

No_Cloak - Cloak

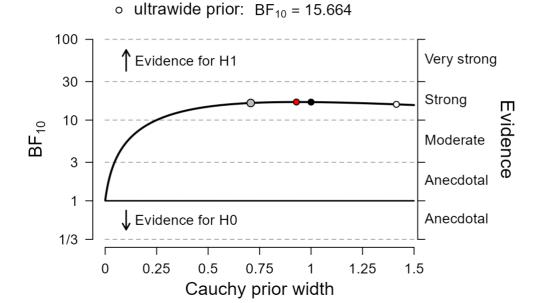
Prior and Posterior



Bayes Factor Robustness Check

max BF₁₀: 16.738 at r = 0.9288

• wide prior: $BF_{10} = 16.705$ • user prior: $BF_{10} = 16.289$



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

- **[4]** 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.
- [5] 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.