Results

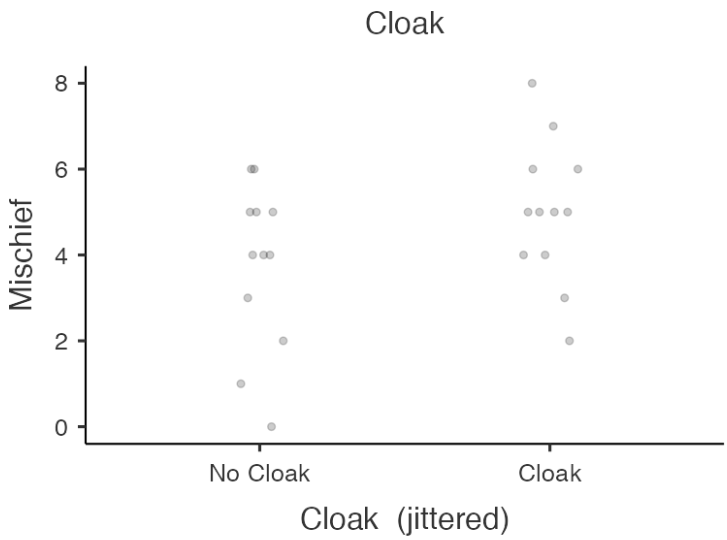
Relationships, Prediction, and Group Comparisons

You have entered a numeric variable for Variable 1 / Dependent Variable and a dichotomous variable for Variable 2 / Independent Variables. Hence, the two sample t test assuming equal population variances or the two sample t test not assuming equal population variances seems to be a good option for you! Both tests are tests for the difference between two population means. In order to run these tests in jamovi, go to: T-Tests > Independent Samples T-Test

- Drop your dependent (numeric) variable in the box below Dependent Variables and your independent (grouping) variable in the box below Grouping Variable
- Under Tests, select Student's if you want to assume equal population variances, and Welch's if you don't want to assume equal population variances
- Under Hypothesis, select your alternative hypothesis

If the normality assumption is violated, you could use the non-parametric Mann-Whitney U test. Click on the links to learn more about these tests!

Scatter Plots of Bivariate Relationships - Dependent/Independent Variables



Independent Samples T-Test

Independent Samples T-Test

								95% Confidence Interval			
		Statistic	±%	df	p	Mean difference	SE difference	Lower	Upper		Effect Size
Mischief	Student's t	-1.71		22.0	0.101	-1.25	0.730	-2.76	0.263	Cohen's d	-0.700
	Bayes factor$_{10}$	1.05	3.55e-5								
	Welch's t	-1.71		21.5	0.101	-1.25	0.730	-2.76	0.265	Cohen's d	-0.700
	Mann-Whitney U	47.0			0.149	-1.00		-3.00	2.55e-5	Rank biserial correlation	0.347

Note. H_a $\mu_{No\ Cloak} \neq \mu_{Cloak}$

Assumptions

Normality Test (Shapiro-Wilk)

	W	p
Mischief	0.965	0.546

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

Homogeneity of Variances Test (Levene's)

	F	df	df2	p
Mischief	0.545	1	22	0.468

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

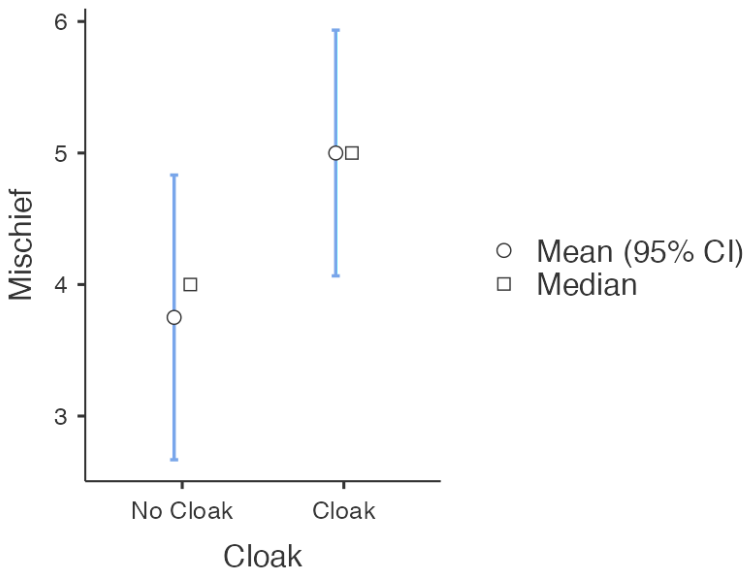
[6]

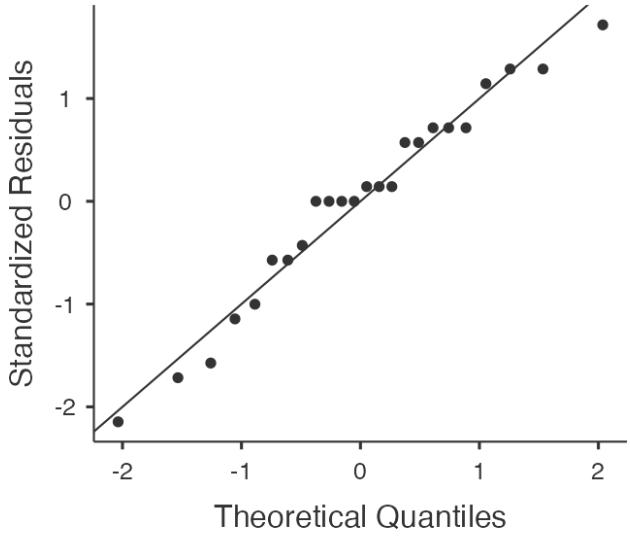
Group Descriptives

	Group	N	Mean	Median	SD	SE
Mischief	No Cloak	12	3.75	4.00	1.91	0.552
	Cloak	12	5.00	5.00	1.65	0.477

Plots

Mischief





Bayesian Independent Samples T-Test

Bayesian Independent Samples T-Test

	BF_{10}	error %
Mischief	1.05	0.00355

[7] [3] [4]

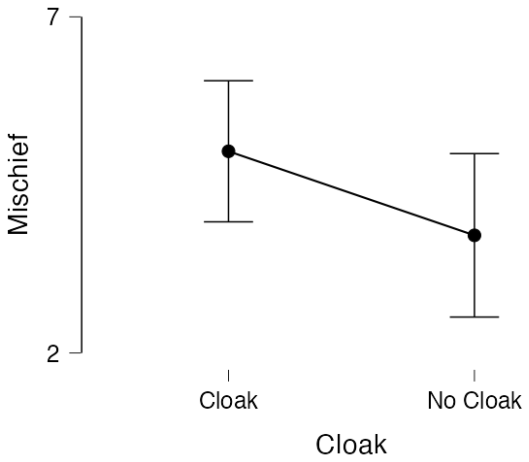
Descriptives

Group Descriptives

						95% Credible Interval	
	Group	N	Mean	SD	SE	Lower	Upper
Mischief	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

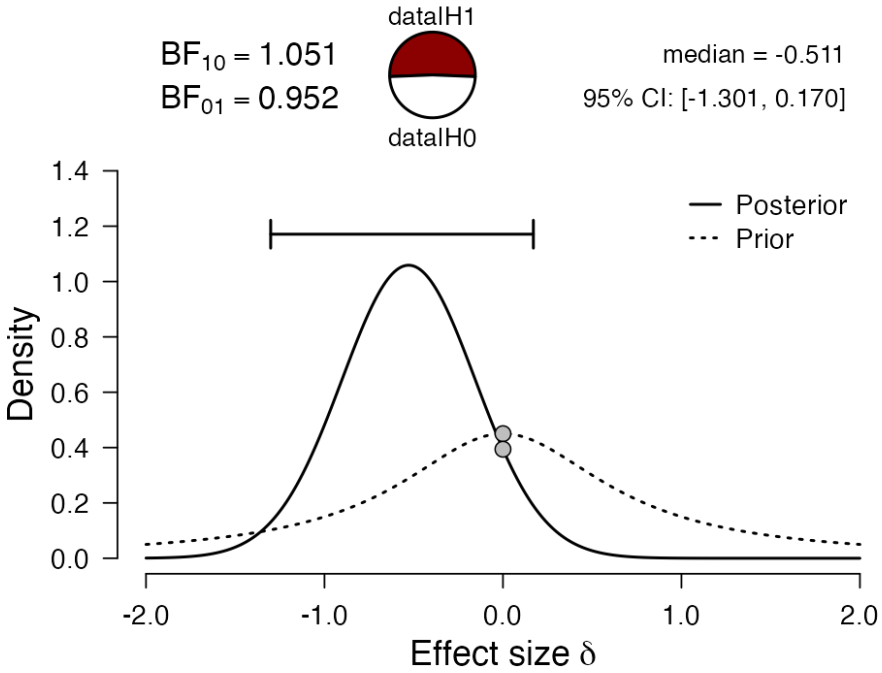
Mischief



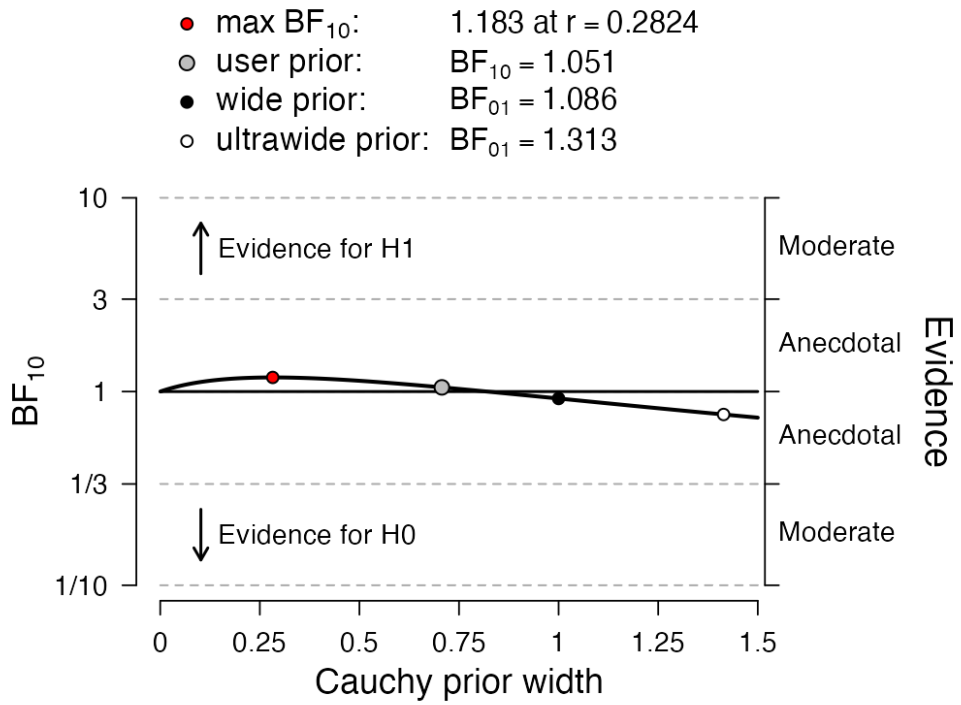
Inferential Plots

Mischief

Prior and Posterior



Bayes Factor Robustness Check



References

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[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.

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