

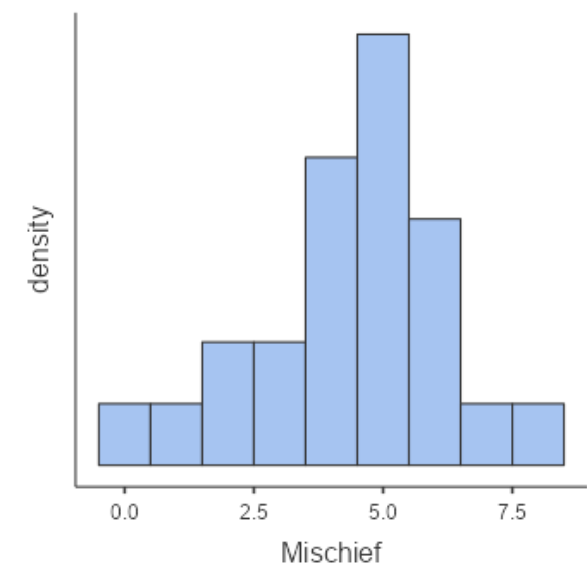
Results

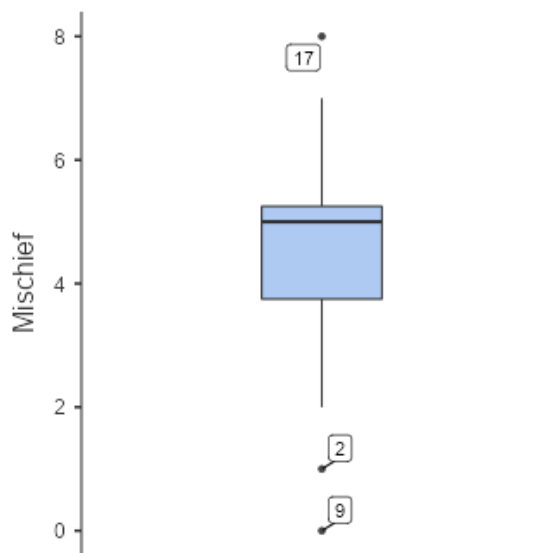
Descriptives

Descriptives		
	Mischief	Cloak
N	24	24
Missing	0	0
Mean	4.38	0.500
Median	5.00	0.500
Standard deviation	1.86	0.511
Variance	3.46	0.261
Minimum	0.00	0
Maximum	8.00	1
Skewness	-0.514	0.00
Std. error skewness	0.472	0.472
Kurtosis	0.410	-2.19
Std. error kurtosis	0.918	0.918

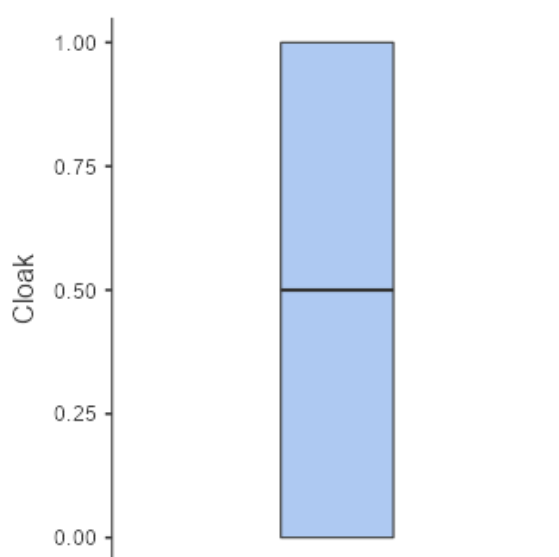
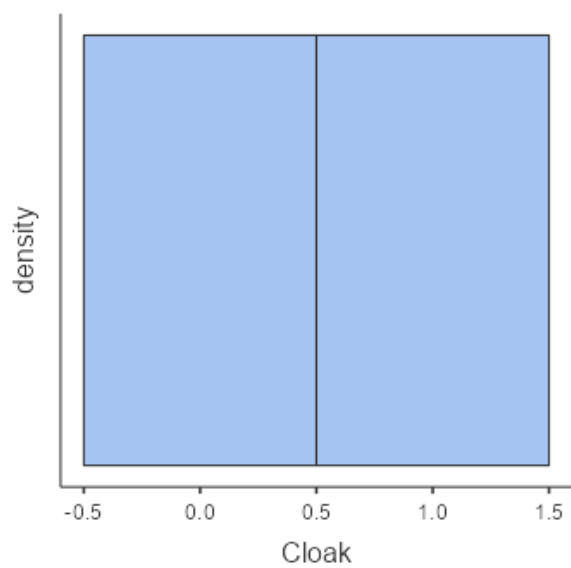
Plots

Mischief





Cloak



Relationships, Prediction, and Group Comparisons

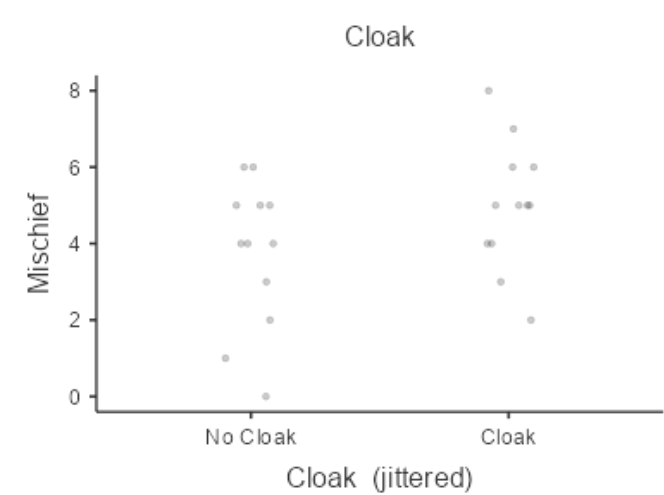
You have entered a numeric variable for Variable 1 / Dependent Variable and a dichotomous variable for Variable 2 / Independent Variables. Hence, the [two sample t test assuming equal population variances](#) or the [two sample t test not assuming equal population variances](#) seems to be a good

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		95% Confidence Interval				
		Statistic	±%	df	p	Mean difference	SE difference	Lower	Upper		Effect Size	Lower	Upper
Mischief	Student's t	-1.71		22.0	0.101	-1.25	0.730	-2.76	0.263	Cohen's d	-0.700	-1.54	0.165
	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. $H_a: \mu_{\text{No Cloak}} \neq \mu_{\text{Cloak}}$

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

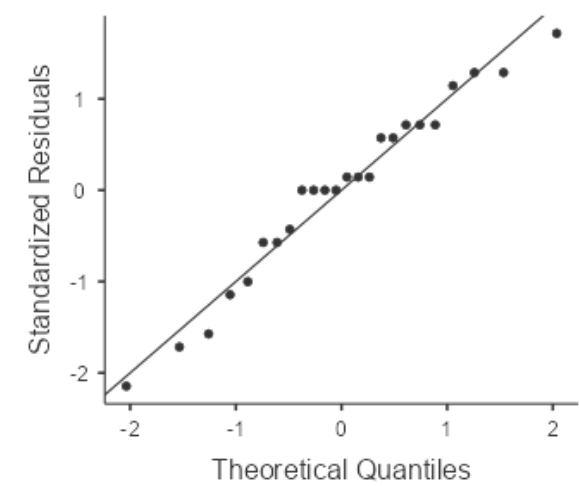
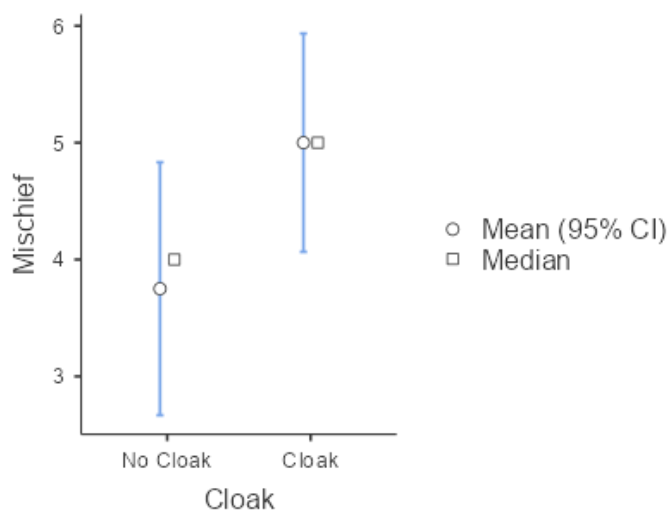
Note. A low p-value suggests a violation of the assumption of equal variances
[6]

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



Robust Independent Samples T-Test

Robust Independent Samples T-Test

		t	df	p	Mean diff	95% Confidence Interval		ξ	95% ξ Confidence Interval	
						Lower	Upper		Lower	Upper
Mischief	Yuen's test	1.48	12.3	0.165	-1.00	-2.47	0.472	0.398	0.00	0.859
	Yuen's bootstrapped	-1.36		0.155						

Bayesian Independent Samples T-Test

Bayesian Independent Samples T-Test

	BF ₁₀	error %
Mischief	1.05	0.00355

[7] [3] [4]

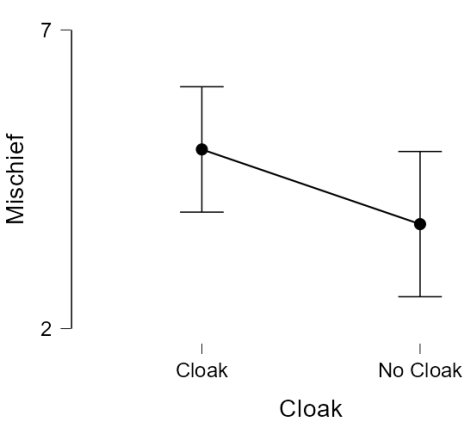
Descriptives

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

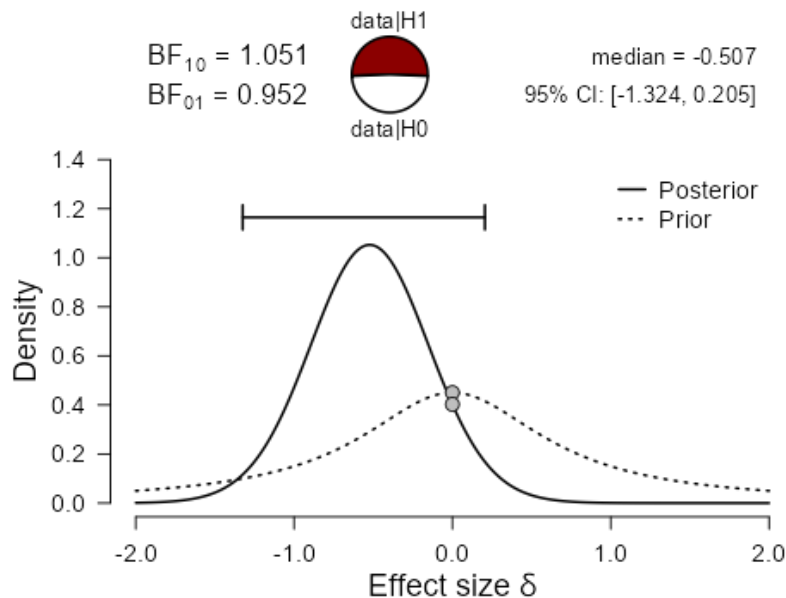
Mischief



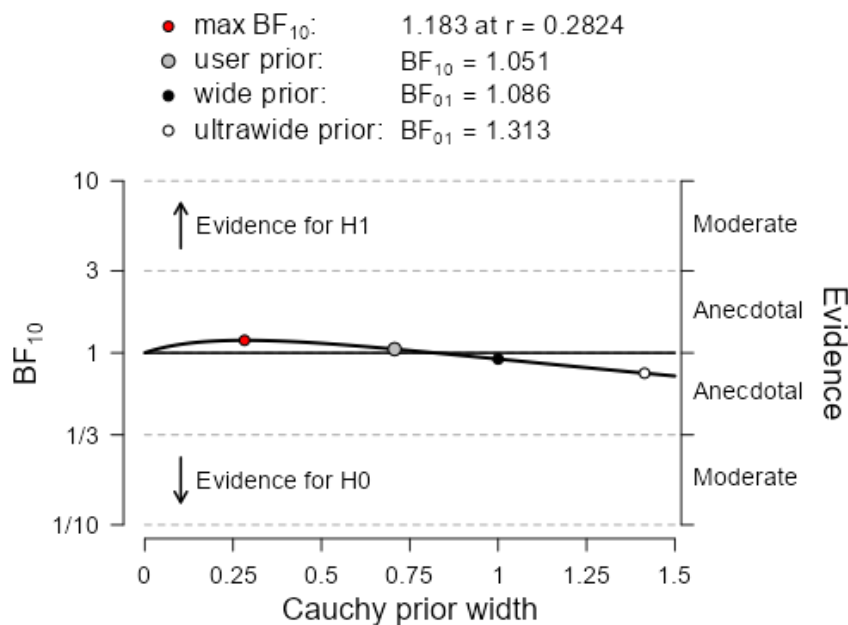
Inferential Plots

Mischief

Prior and Posterior



Bayes Factor Robustness Check



References

- [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] Fox, J., & Weisberg, S. (2020). *car: Companion to Applied Regression*. [R package]. Retrieved from <https://cran.r-project.org/package=car>.
- [7] JASP Team (2018). *JASP*. [Computer software]. Retrieved from <https://jasp-stats.org>.