

Results

Descriptives

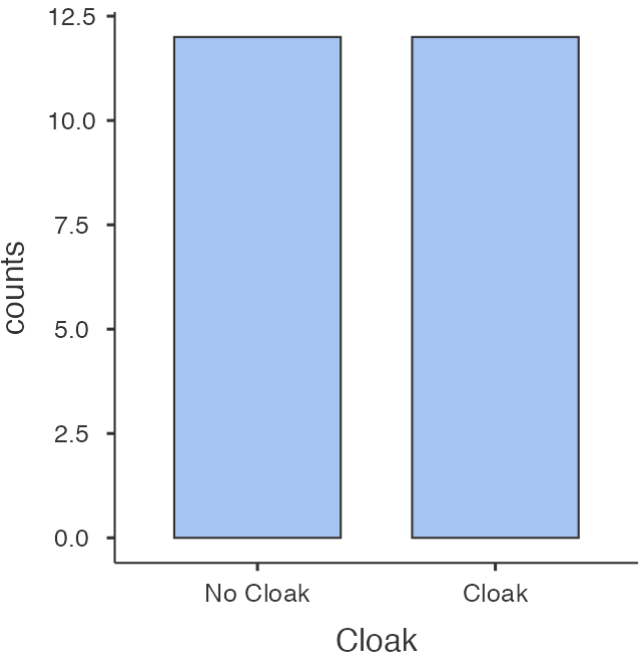
Descriptives	
Cloak	
N	24
Missing	0

Frequencies

Frequencies of Cloak			
Cloak	Counts	% of Total	Cumulative %
No Cloak	12	50.0 %	50.0 %
Cloak	12	50.0 %	100.0 %

Plots

Cloak



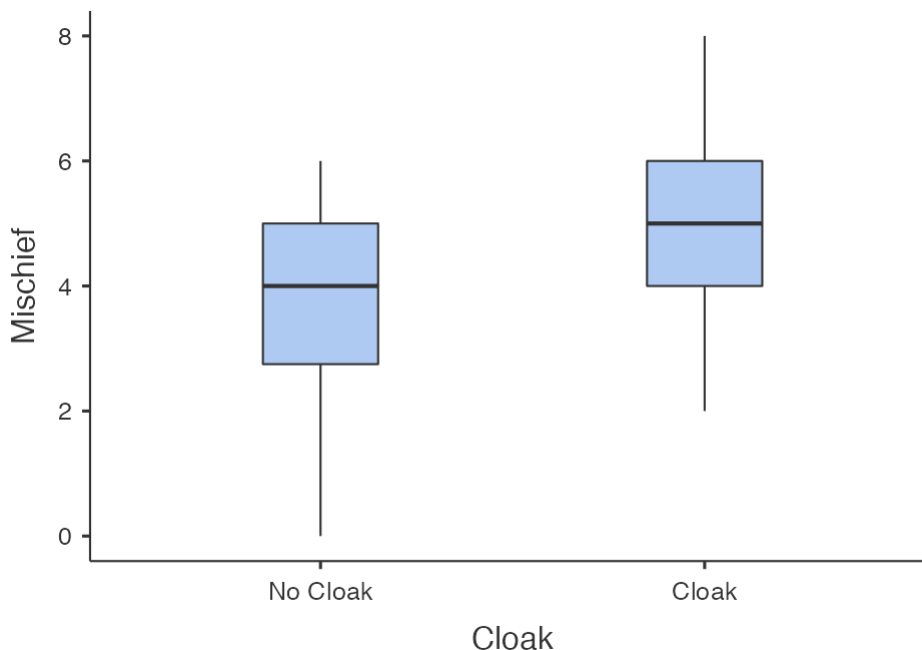
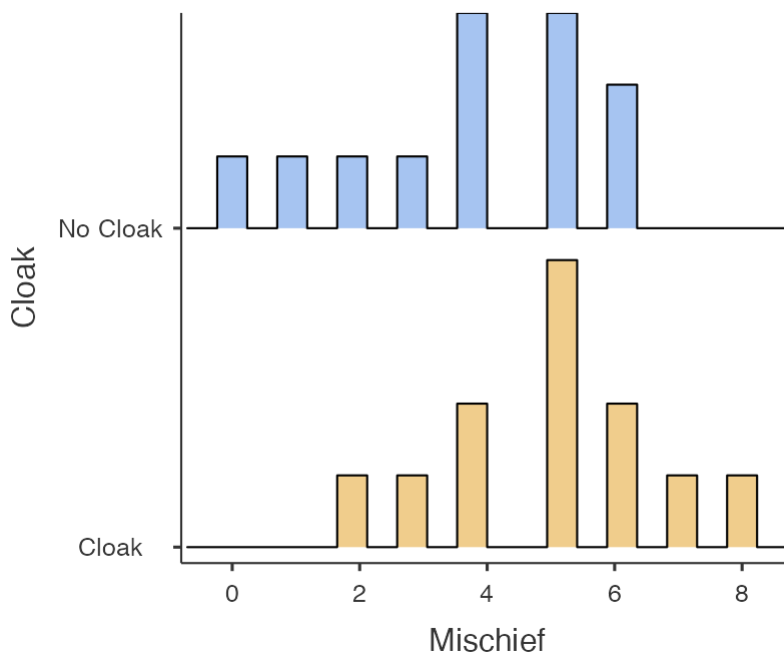
Descriptives

Descriptives

	Cloak	Mischief
N	No Cloak	12
	Cloak	12
Missing	No Cloak	0
	Cloak	0
Mean	No Cloak	3.75
	Cloak	5.00
Median	No Cloak	4.00
	Cloak	5.00
Standard deviation	No Cloak	1.91
	Cloak	1.65
Minimum	No Cloak	0.00
	Cloak	2.00
Maximum	No Cloak	6.00
	Cloak	8.00
Skewness	No Cloak	-0.789
	Cloak	0.00
Std. error skewness	No Cloak	0.637
	Cloak	0.637
Kurtosis	No Cloak	-0.229
	Cloak	0.161
Std. error kurtosis	No Cloak	1.23
	Cloak	1.23
Shapiro-Wilk W	No Cloak	0.913
	Cloak	0.973
Shapiro-Wilk p	No Cloak	0.231
	Cloak	0.936

Plots

Mischief



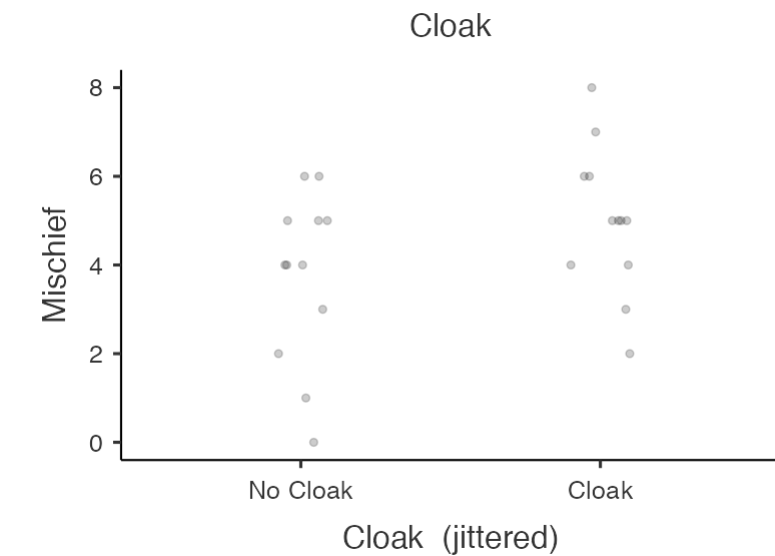
Relationships, Prediction, and Group Comparisons

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

		Statistic	df	p	Mean difference	SE difference	Effect Size	
Mischief	Student's t	-1.71	22.0	0.101	-1.25	0.730	Cohen's d	-0.700
	Welch's t	-1.71	21.5	0.101	-1.25	0.730	Cohen's d	-0.700

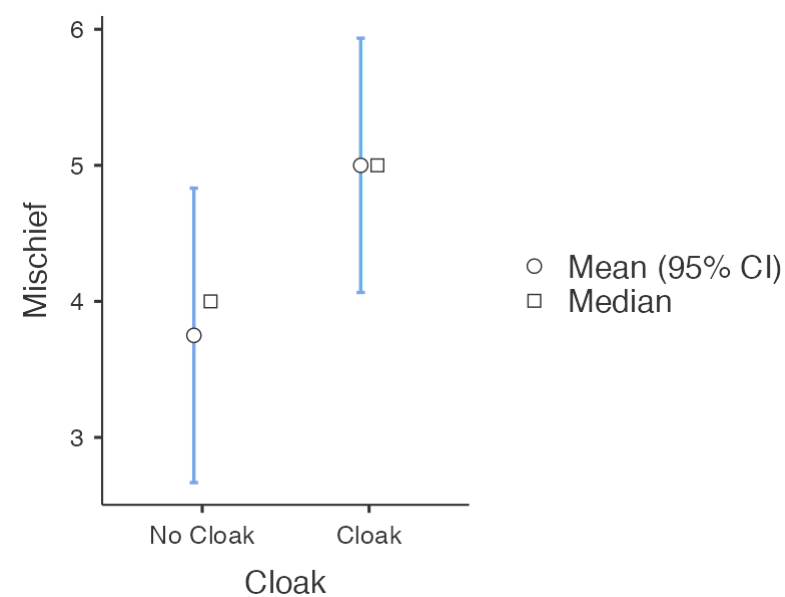
Note. $H_a: \mu_{\text{No Cloak}} \neq \mu_{\text{Cloak}}$

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

						95% Confidence Interval		
		t	df	p	Mean diff	Lower	Upper	ξ
Mischief	Yuen's test	1.48	12.3	0.165	-1.00	-2.47	0.472	0.398
	Yuen's bootstrapped	-1.36		0.185				

Independent Samples T-Test

Independent Samples T-Test

		Statistic	±%	df	p	Mean difference	SE difference		Effect Size
Mischief	Student's t	-1.71	3.55e-5	22.0	0.101	-1.25	0.730	Cohen's d	-0.700
	Bayes factor ₁₀	1.05							
	Welch's t	-1.71		21.5	0.101	-1.25	0.730	Cohen's d	-0.700
	Mann-Whitney U	47.0			0.149	-1.00		Rank biserial correlation	0.347

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

[3] [4] [5]

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

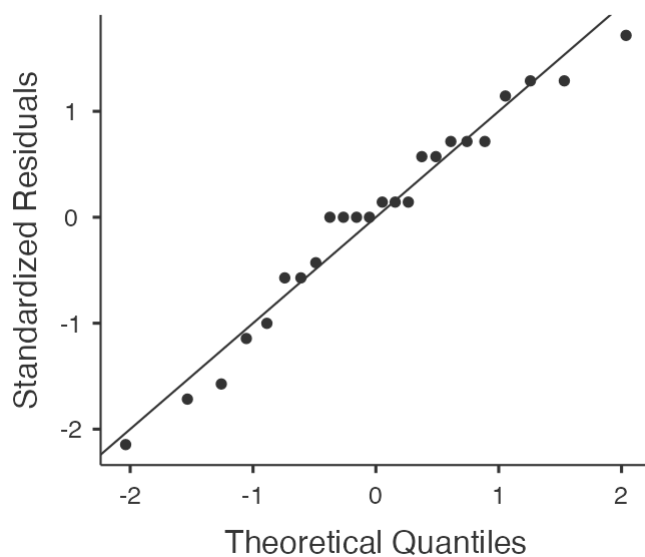
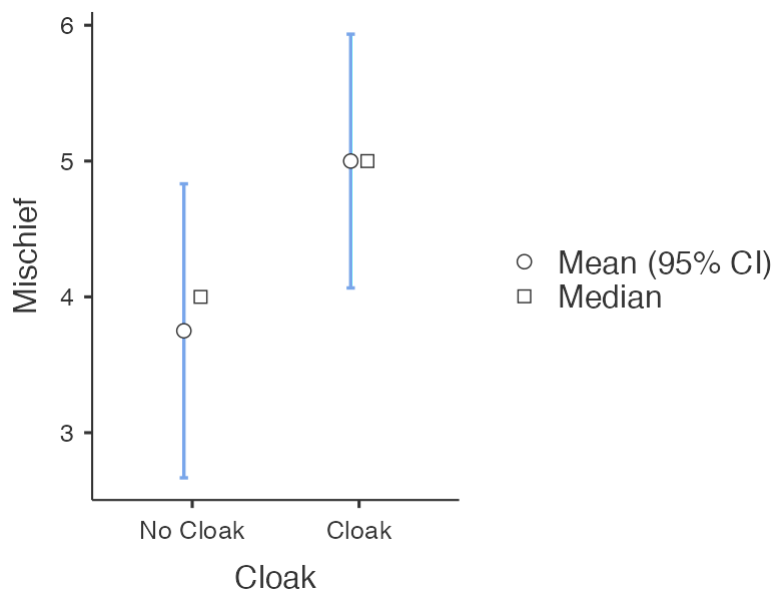
[6]

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



Descriptives

Descriptives

N
Missing
Mean
Median
Standard deviation
Minimum
Maximum

Bayesian Paired Samples T-Test

Bayesian Paired Samples T-Test

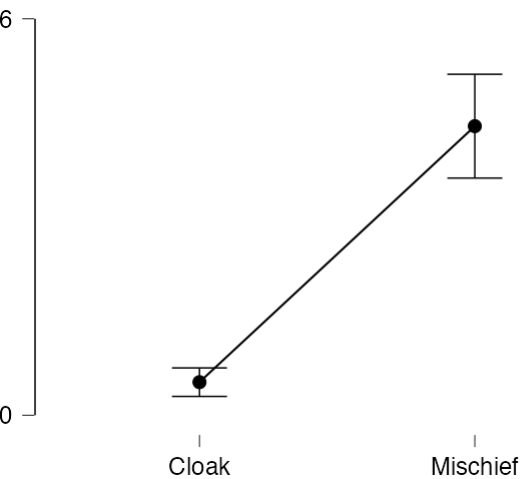
			BF_{10}	error %
Cloak	-	Mischief	6.02e+7	1.10e-10

[7] [3] [4]

Descriptives

Descriptives Plot

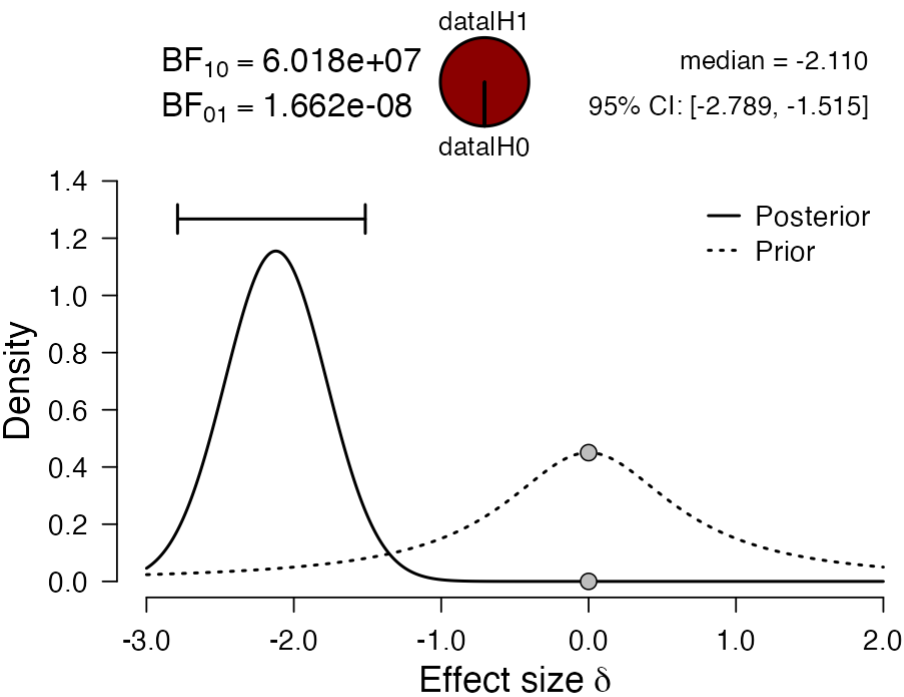
Cloak - Mischief



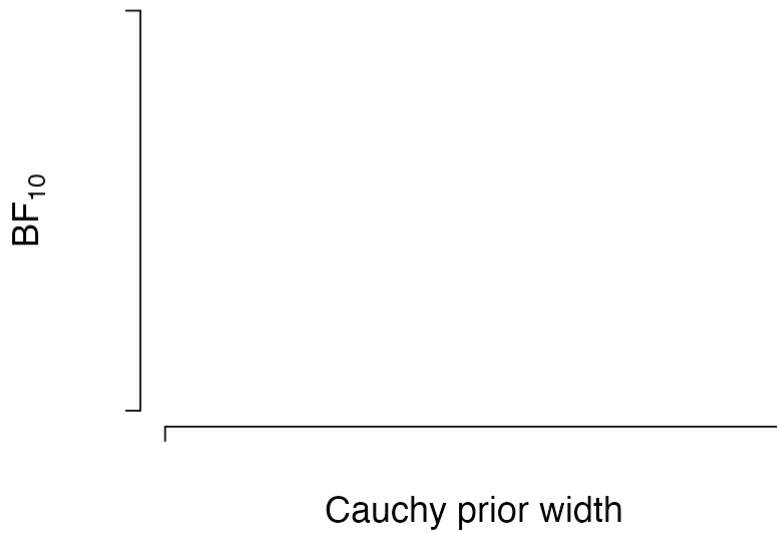
Inferential Plots

Cloak - Mischief

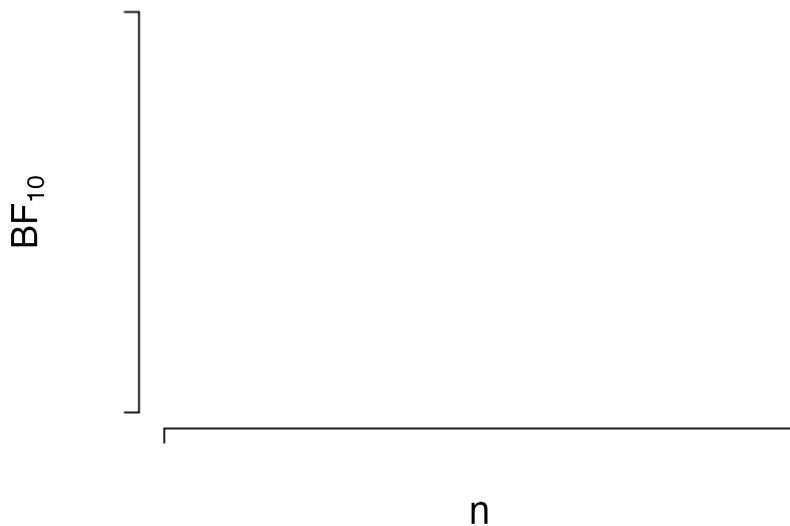
Prior and Posterior



Bayes Factor Robustness Check



Sequential Analysis



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>.