# Results

# **Descriptives**

### Descriptives

	Cloak
N	24
Missing	0
Median	0.500

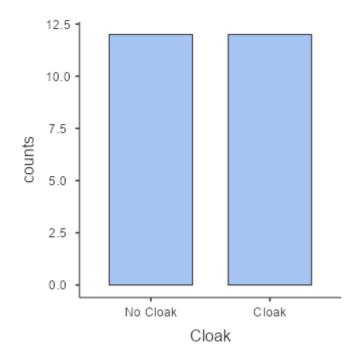
## **Frequencies**

## Frequencies of Cloak

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

## **Plots**

### Cloak



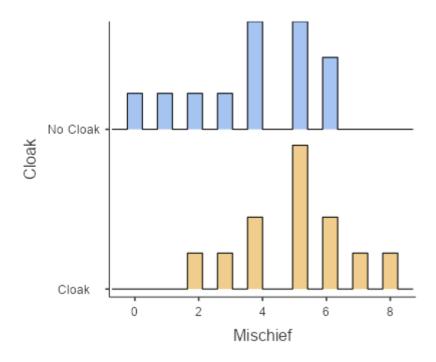
# **Descriptives**

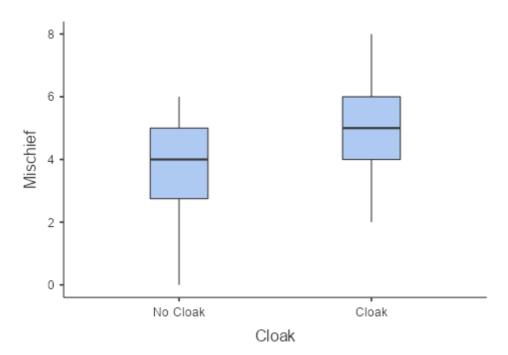
#### Descriptives

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

## **Plots**

Mischief





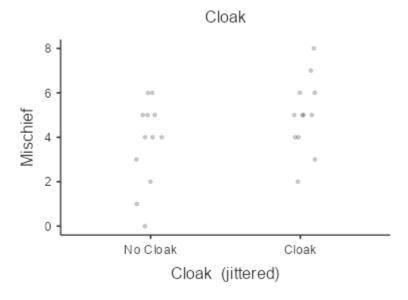
## **Relationships, Prediction, and Group Comparisons**

You have entered a numeric variable for Variable 1 / Dependent Variable and a dichotomous variable for Variable 2 / Independent Variables. Hence, the <a href="two sample t test assuming equal population variances">two sample t test assuming equal population variances</a> or the <a href="two sample t test not assuming equal population variances">two sample t test not assuming equal population variances</a> 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 <u>Mann-Whitney U test</u>. 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	р	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
	Welch's t	-1.71	21.5	0.101	-1.25	0.730	-2.76	0.265	Cohen's d	-0.700

## **Assumptions**

Normality Test (Shapiro-Wilk)

	W	р
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	р
Mischief	0.545	1	22	0.468

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

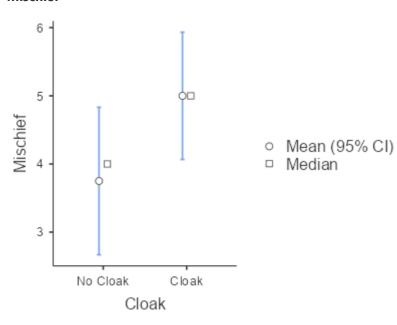
[3]

#### **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	р	Mean diff	Lower	Upper	ξ
Mischief	Yuen's test Yuen's bootstrapped		12.3	0.165 0.167	-1.00	-2.47	0.472	0.398

# **Bayesian Independent Samples T-Test**

Bayesian Independent Samples T-Test

	BF <sub>10</sub>	error %
Mischief	1.05	5.45e-4

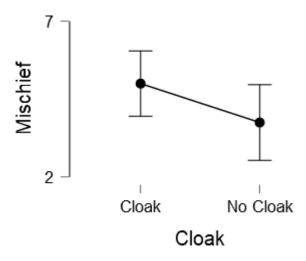
[4] [5] [6]

## **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**

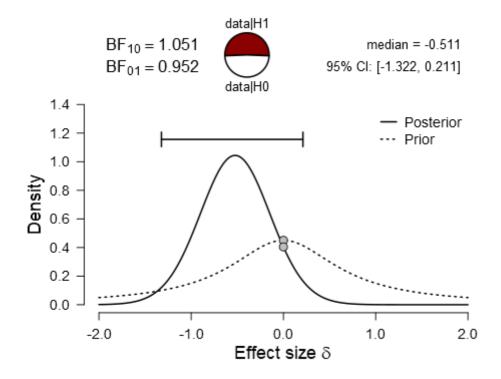
#### Mischief



#### **Inferential Plots**

#### Mischief

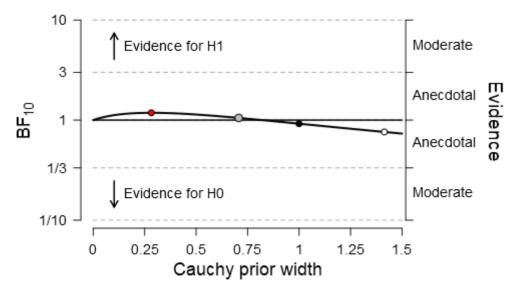
#### **Prior and Posterior**



max BF<sub>10</sub>: 1.183 at r = 0.2824

• user prior:  $BF_{10} = 1.051$ • wide prior:  $BF_{01} = 1.086$ 

ultrawide prior: BF<sub>01</sub> = 1.313



### References

[1] The jamovi project (2021). jamovi. (Version 2.2) [Computer Software]. Retrieved from <a href="https://www.jamovi.org">https://www.jamovi.org</a>.

[2] R Core Team (2021). *R: A Language and environment for statistical computing*. (Version 4.0) [Computer software]. Retrieved from <a href="https://cran.r-project.org">https://cran.r-project.org</a>. (R packages retrieved from MRAN snapshot 2021-04-01).

[3] Fox, J., & Weisberg, S. (2020). *car: Companion to Applied Regression*. [R package]. Retrieved from <a href="https://cran.r-project.org/package=car">https://cran.r-project.org/package=car</a>.

[4] JASP Team (2018). JASP. [Computer software]. Retrieved from <a href="https://jasp-stats.org">https://jasp-stats.org</a>.

[5] Morey, R. D., & Rouder, J. N. (2018). *BayesFactor: Computation of Bayes Factors for Common Designs*. [R package]. Retrieved from <a href="https://cran.r-project.org/package=BayesFactor">https://cran.r-project.org/package=BayesFactor</a>.

[6] 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.