

## Results

### Descriptives

Descriptives

| Cloak   |    |
|---------|----|
| N       | 24 |
| Missing | 0  |

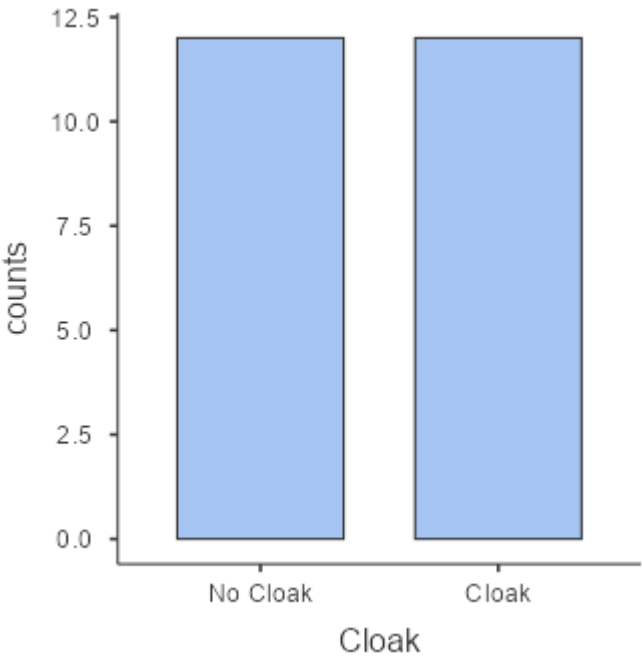
### Frequencies

Frequencies of Cloak

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

### Plots

Cloak



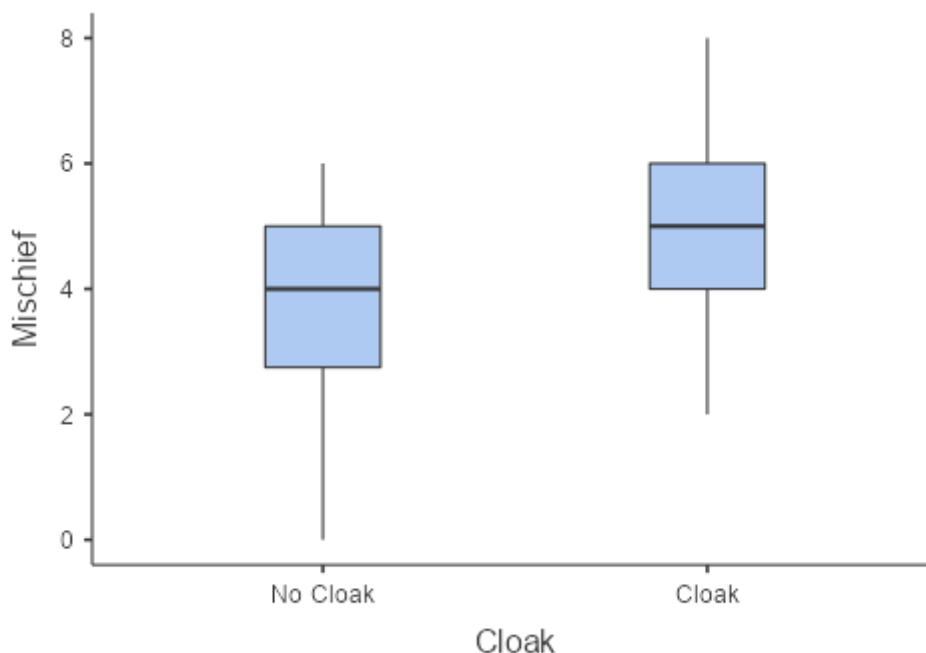
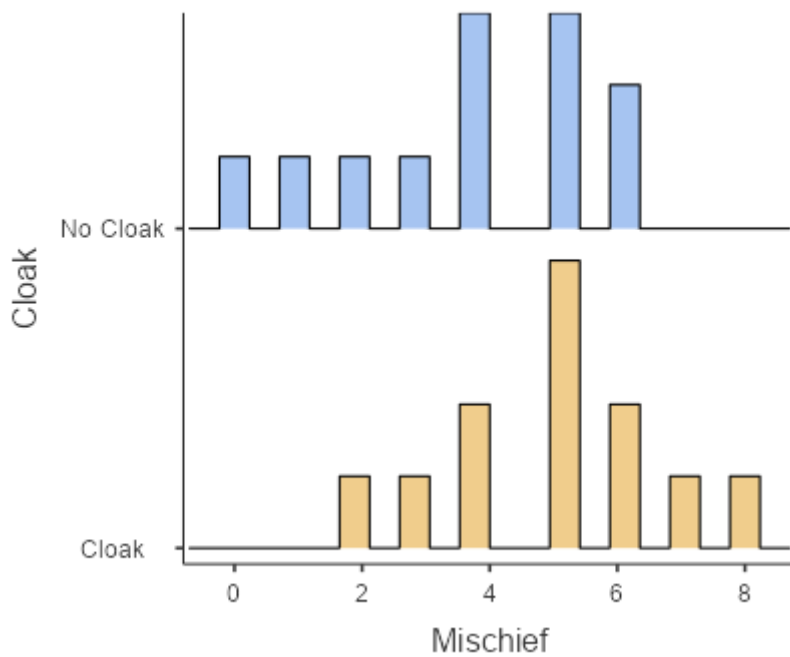
### Descriptives

## Descriptives

|                     | <b>Cloak</b> | <b>Mischief</b> |
|---------------------|--------------|-----------------|
| 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



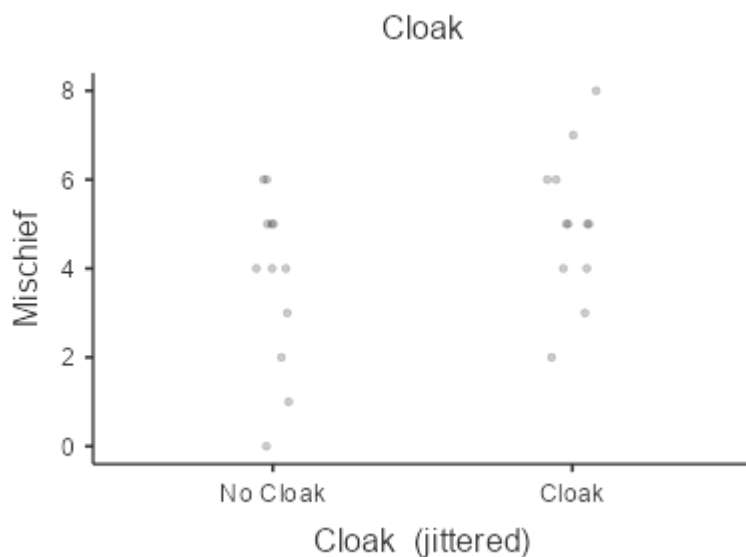
## Relationships, Prediction, and Group Comparisons

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

|          |             |           |      |       |                 |               | 95% Confidence Interval |       |             |        |
|----------|-------------|-----------|------|-------|-----------------|---------------|-------------------------|-------|-------------|--------|
|          |             |           |      |       |                 |               | Lower                   | Upper |             |        |
|          |             | Statistic | df   | p     | Mean difference | SE difference |                         |       | 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     | 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 |

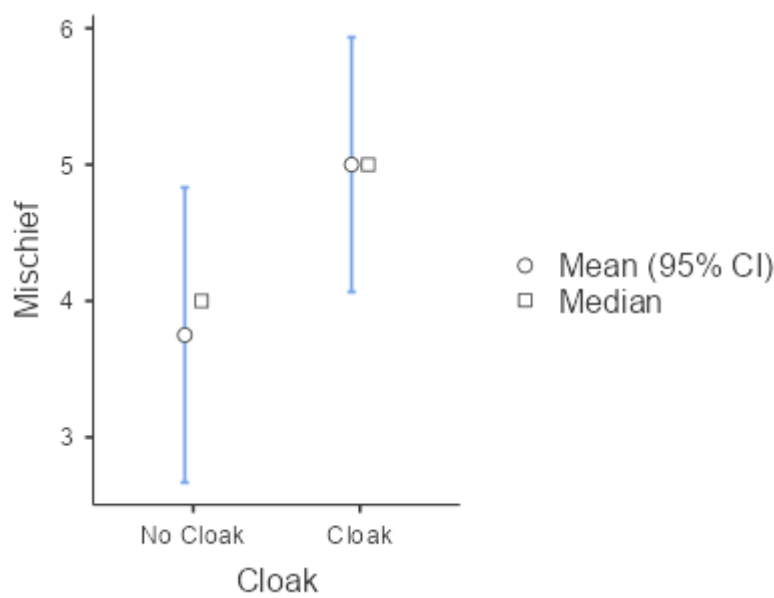
*Note.* A low p-value suggests a violation of the assumption of equal variances

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 |       |       |
|----------|---------------------|-------|------|-------|-------|-------------------------|-------|-------|
|          |                     |       |      |       |       | 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 |      | 0.157 |       |                         |       |       |

Bayesian Independent Samples T-Test

Bayesian Independent Samples T-Test

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

[4] [5] [6]

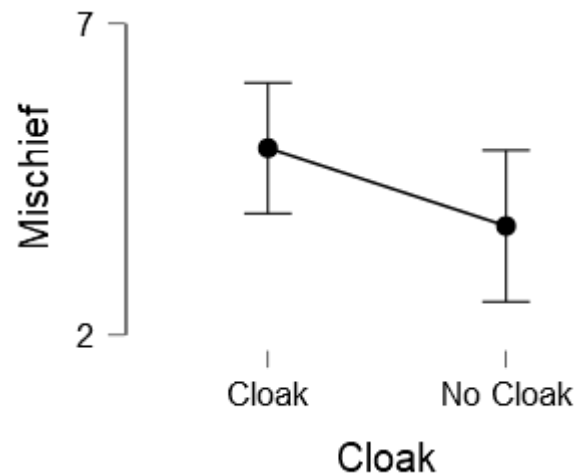
Descriptives

## 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

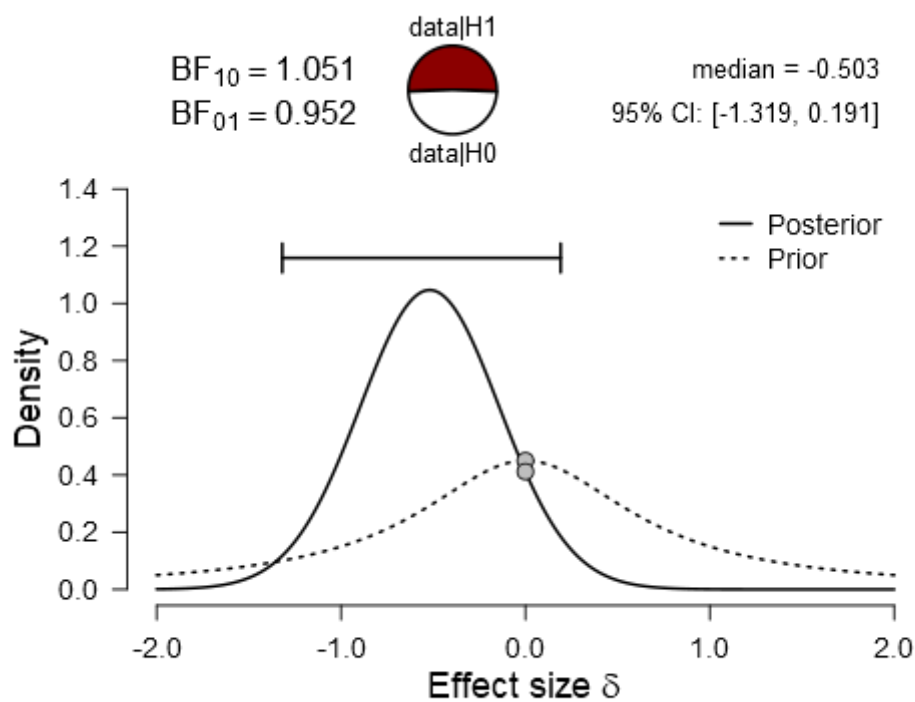
### Mischief



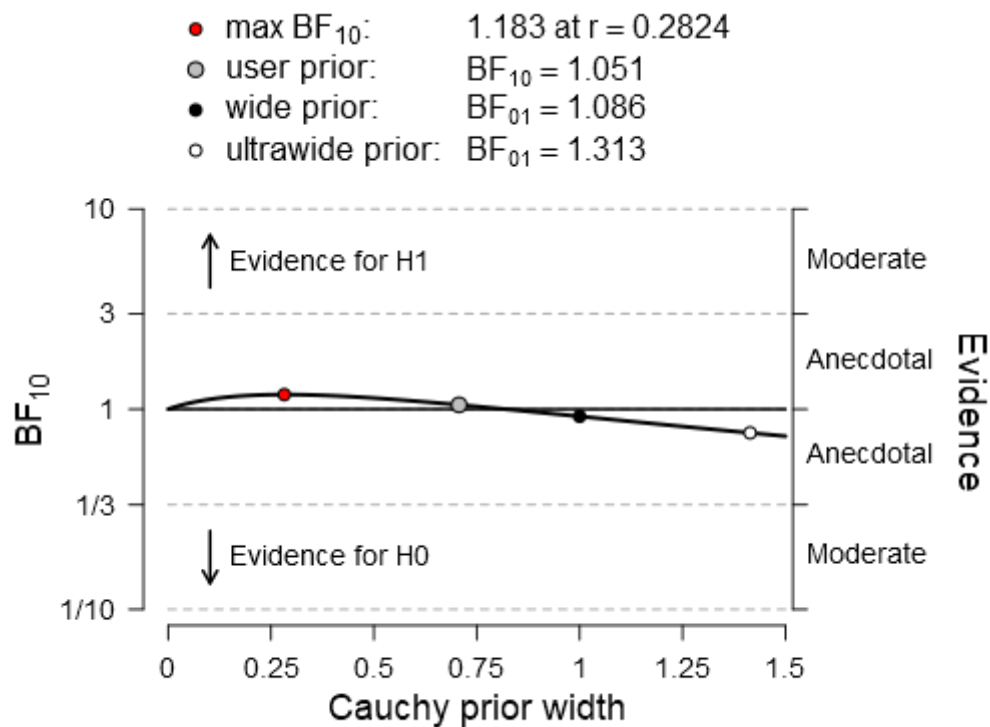
## Inferential Plots

### Mischief

#### Prior and Posterior



## Bayes Factor Robustness Check



[4]

## References

- [1] The jamovi project (2021). *jamovi*. (Version 2.2) [Computer Software]. Retrieved from <https://www.jamovi.org>.
- [2] R Core Team (2021). *R: A Language and environment for statistical computing*. (Version 4.0) [Computer software]. Retrieved from <https://cran.r-project.org>. (R packages retrieved from MRAN snapshot 2021-04-01).
- [3] Fox, J., & Weisberg, S. (2020). *car: Companion to Applied Regression*. [R package]. Retrieved from <https://cran.r-project.org/package=car>.
- [4] JASP Team (2018). *JASP*. [Computer software]. Retrieved from <https://jasp-stats.org>.
- [5] 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>.
- [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.