

Results

Descriptives

Descriptives

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

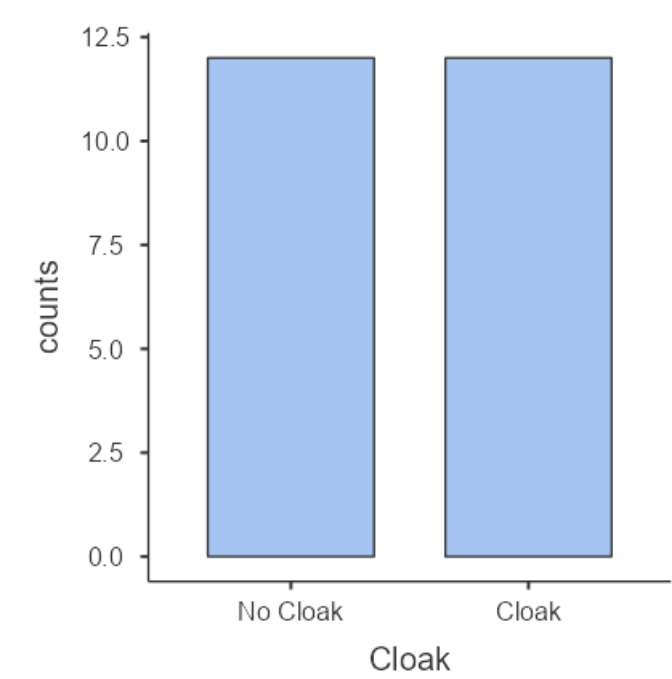
Frequencies

Frequencies of Cloak

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

Plots

Cloak



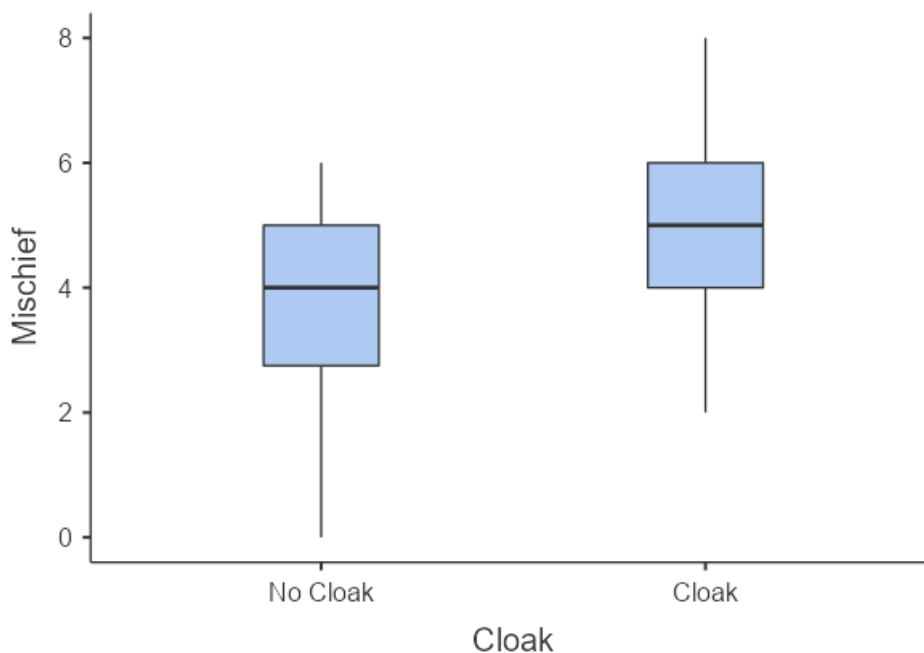
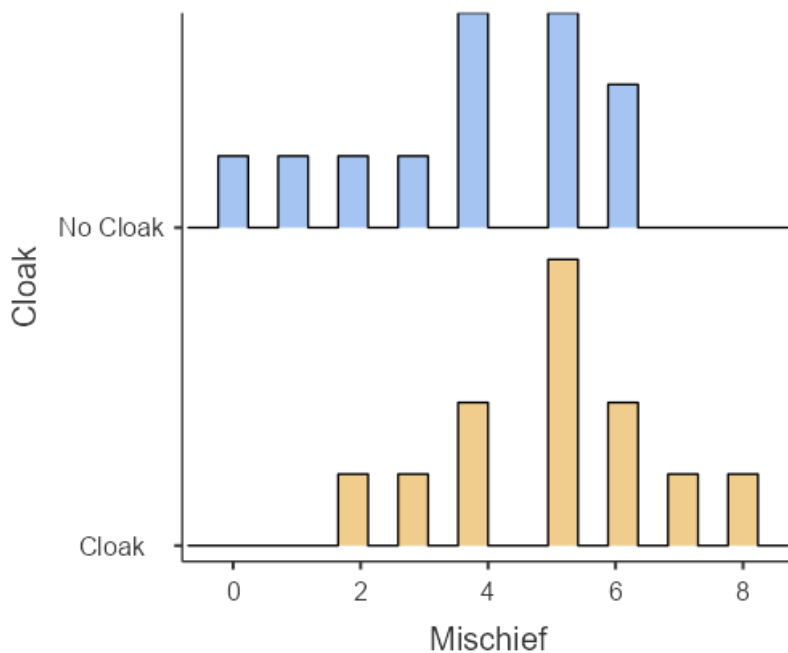
Descriptives

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



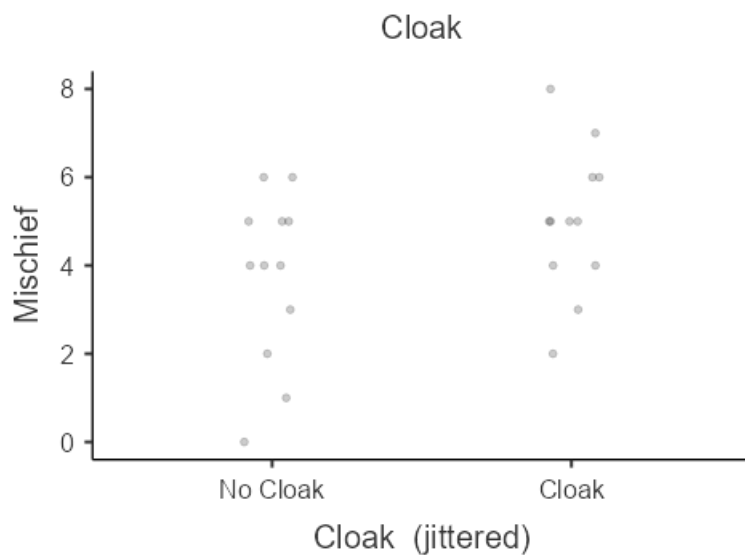
Relationships, Prediction, and Group Comparisons

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

| | | | | | | | 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 |

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 |

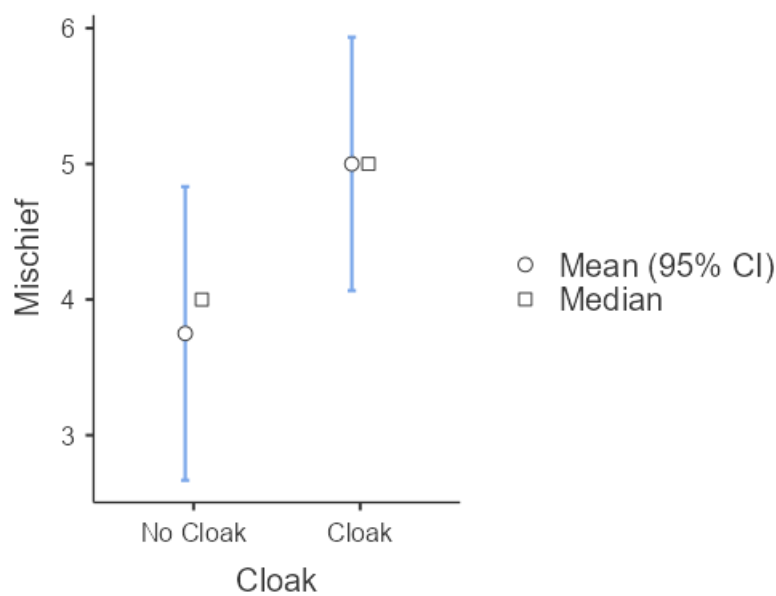
Note. A low p-value suggests a violation of the assumption of equal variances

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 | | 0.154 | | | | |

Bayesian Independent Samples T-Test

Bayesian Independent Samples T-Test

| | BF ₁₀ | error % |
|----------|------------------|---------|
| Mischief | 1.05 | 0.00355 |

[4] [5] [6]

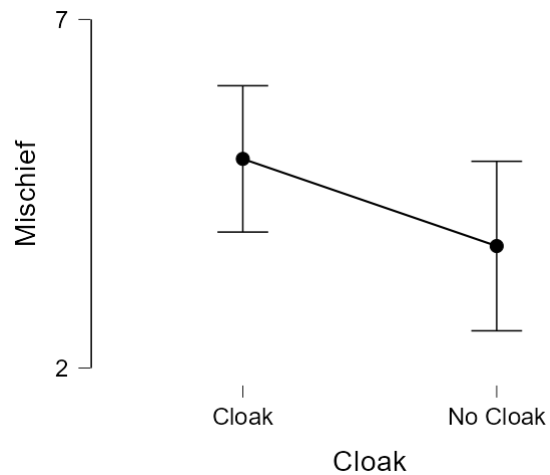
Descriptives

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

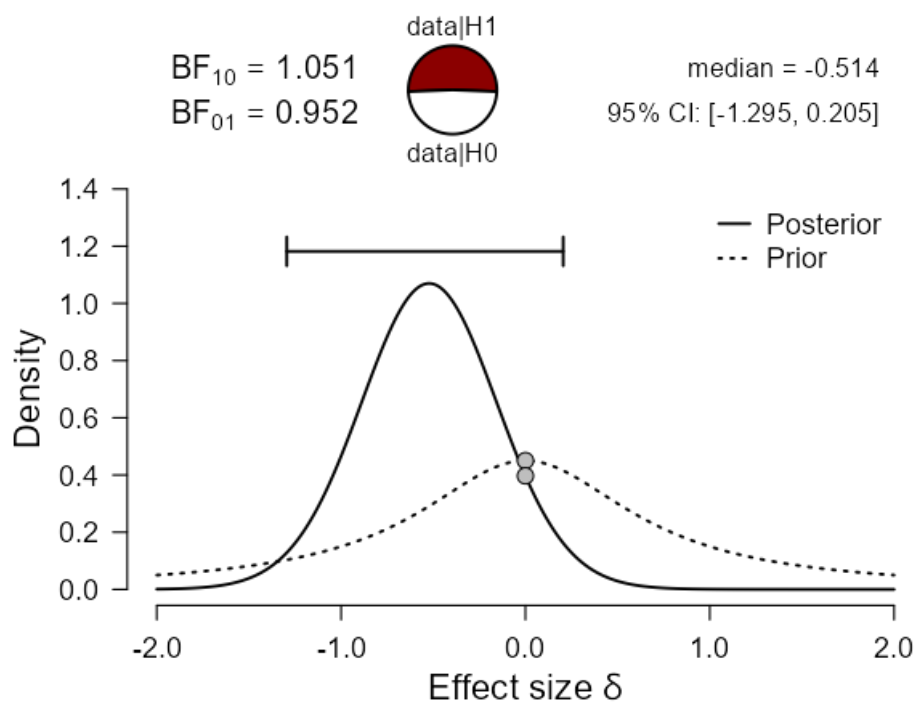
Mischief



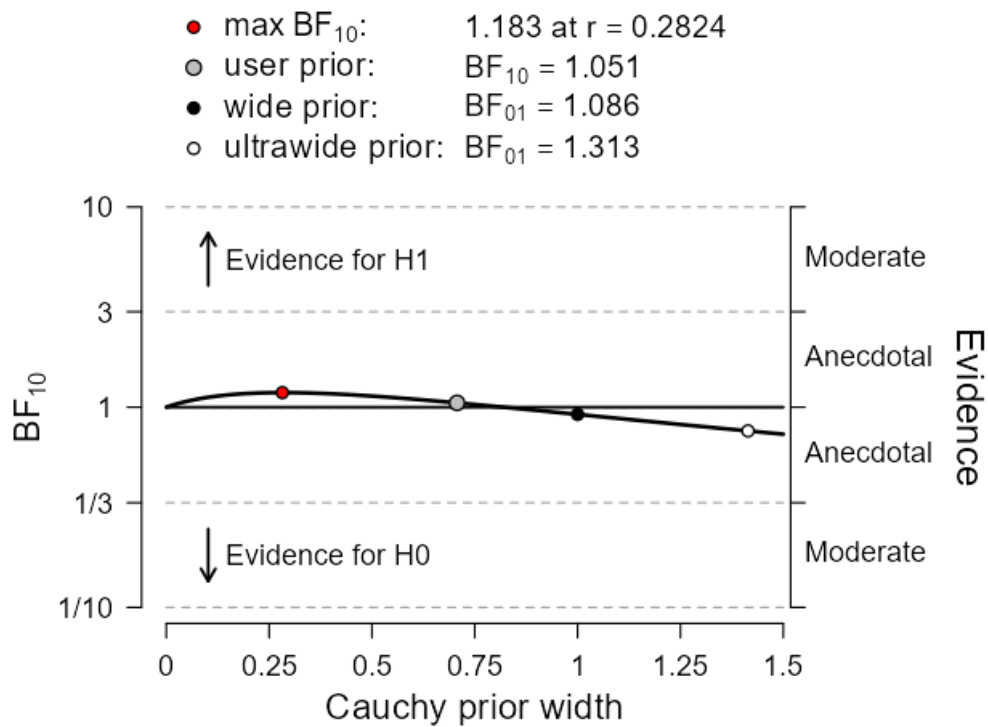
Inferential Plots

Mischief

Prior and Posterior



Bayes Factor Robustness Check



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] 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.