Assumptions Checks

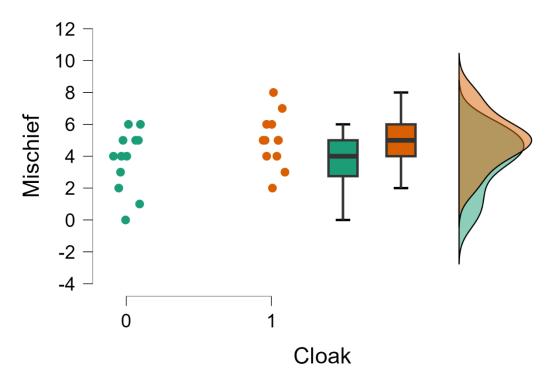
Assumption 1. The dependent variable (Mischief) is a continuous level.

Assumption 2. The independent variable (Cloak) consists of two categorical, independent groups (With a cloak, Without a cloak).

Assumption 3. Each participant is present to only one group.

Raincloud Plots

Mischief



Assumption 4. Outliers. There are no significant outliers in the two groups of independent variable (Cloak) in terms of the dependent variable (Mischief), as assessed by visual inspection of boxplots.

Assumption 5. Normality. The dependent variable (Mischief) for each group (Cloak) is normally distributed (p > 0.05), as assessed by Shapiro-Wilk test.

Test of Normality (Shapiro-Wilk)

		\mathbf{W}	р
Mischief	0	0.913	0.231
	1	0.973	0.936

Note. Significant results suggest a deviation from normality.

Assumption 6. Homogeneity of variances. There is equality of variances between groups (Without a cloak, With a cloak) on their number of mischievous acts (Mischief), as assessed by Levene's test of equality of variances.

Test of Equality of Variances (Levene's)

	F	\mathbf{df}_1	df ₂	p
Mischief	0.545	1	22	0.468

Computation

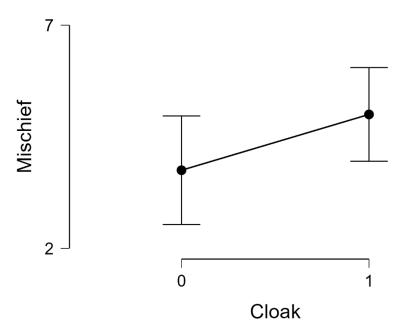
Independent Samples T-Test

t	df	p	Mean Difference SE	Difference (Cohen's dSE	Cohen's d
Mischief -1.713	22 (0.101	-1.250	0.730	-0.700	0.432

Note. Student's t-test.

This table shows the output for the independent samples t-test. The differences between the groups are not statistically significant at the .05 level, which means that the data do not provide much motivation to reject the null hypothesis.

Mischief



Null hypothesis

$$H_0: \mu_1 = \mu_2$$

There is no significant difference between With a Cloak and Without a Cloak on their number of mischievous acts.