# **Assumptions Checks**

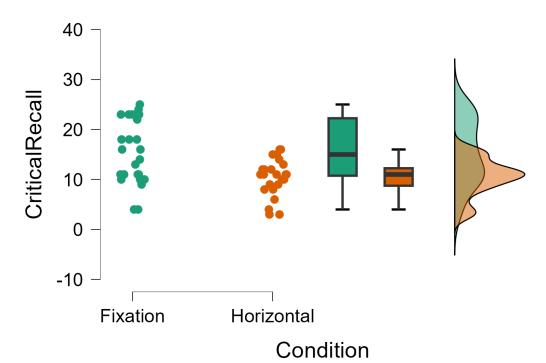
**Assumption 1.** The dependent variable (CriticalRecall) is a continuous level.

**Assumption 2.** The independent variable (Condition) consists of two categorical, independent groups (Fixed, Horizontal).

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

### **Raincloud Plots**

### CriticalRecall



An outlier within the dataset has been found as one falling in the horizontal condition. This has been removed from the data which is represented by the raincloud plot above.

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

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

Test of Normality (Shapiro-Wilk)

	<i>y</i> (214 <b>p</b> 11 0 + 1111)	**7	
		W	p
CriticalRecall	Fixation	0.926	0.079
	Horizontal	0.940	0.164

*Note.* Significant results suggest a deviation from normality.

**Assumption 6.** Homogeneity of variances. There is equality of variances between groups. (Fixed, Horizontal) on their number of mischievous acts (CriticalRecall), as assessed by Levene's test of equality of variances.

**Test of Equality of Variances (Levene's)** 

	F	df <sub>1</sub> d	lf <sub>2</sub>	p
CriticalRecall	10.903	1 4	46	0.002

# Computation

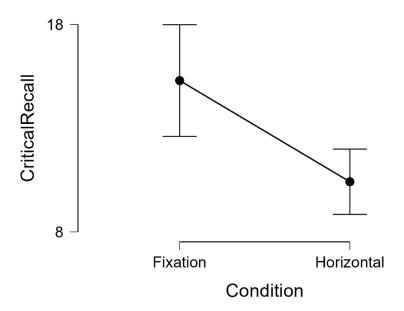
**Independent Samples T-Test** 

t	df	p	Mean Difference SE	Difference	Cohen's dSE	Cohen's d
CriticalRecall 3.233	37.087	0.003	4.875	1.508	0.933	0.319

Note. Welch'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.

#### CriticalRecall



# **Null hypothesis**

$$H_0$$
:  $\mu_1 = \mu_2$ 

There is no significant difference between Fixation and Horizontal on their number of correctly recalled words.