

Logistic Regression in R

What is Logistic Regression?

- Type of regression
- Used for prediction
- DV is categorical, not continuous

Assumptions for Logistic Regression

- Minimum Sample Size
- Linearity of the Logit
- Absence of Multicollinearity
- Absence of Outliers
- Independence of Errors

Minimum Sample Size

- At least one case per cell
- No more than 20% of cells having less than 5 cases

	Observed	Expected
Observed		
Expected		

Each box is a cell



Linearity of the Logit

- Logit
 - AKA log-odds
 - Log of the odds of the probability of your outcome
- Should be linearly related to the IV

Absence of Multicollinearity

- Correlation of the independent variables must be no higher than .8

Absence of Outliers

- Test the same way as for linear regression

Independence of Errors

- Your residuals cannot be related to your data