

Assumptions: homoscedasticity

- Standard deviations of errors of prediction should be approximately equal for all predicted scores.
- That is, the amount of error is the same at different predicted values of the outcome.
- Violation is not terminal, but does weaken the analysis.
- Can be corrected by using weighted (generalised) least squares regression instead of ols regression.

Outliers

- Outliers are cases that do not fit well with the regression model (cases with large residuals).
- Like correlation, regression models are sensitive to outliers so it makes sense to remove them to improve the model.
- Bear in mind that even if you remove them they may be theoretically interesting.
- Influential cases can be detected easily via Cook's distance (part of one of our diagnostic plots).