# Assumptions: Linearity

- The relationship to be modelled must be linear.
- That is, an increase in the scores of a predictor should be followed by a increase in the outcome and vice versa.
- There must be a uniform relationship between the fitted values and the residual error that can be captured by a straight line.
- Violation of this assumption is not dire – it weakens the power of the analysis to capture the relationship between the variables, but the analysis can proceed.

# 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.