What about normality?

- In LMMs (as with the GLM) we need to worry about the normality of the residuals…

- You can check normality in a number of ways.

- Graphically, you can use the *qqnorm* function (which produces a Q-Q plot), and *hist* (which produces a histogram) applied to the model residuals.

- Statistically, you could use the *shapiro.test* function applied to a distribution of data. Be aware that for large datasets, even small deviations from normality will result in a significant Shapiro test. So best not to use this…

Log transform

Typically, RT data are non-normal and more often the DV looks like this.
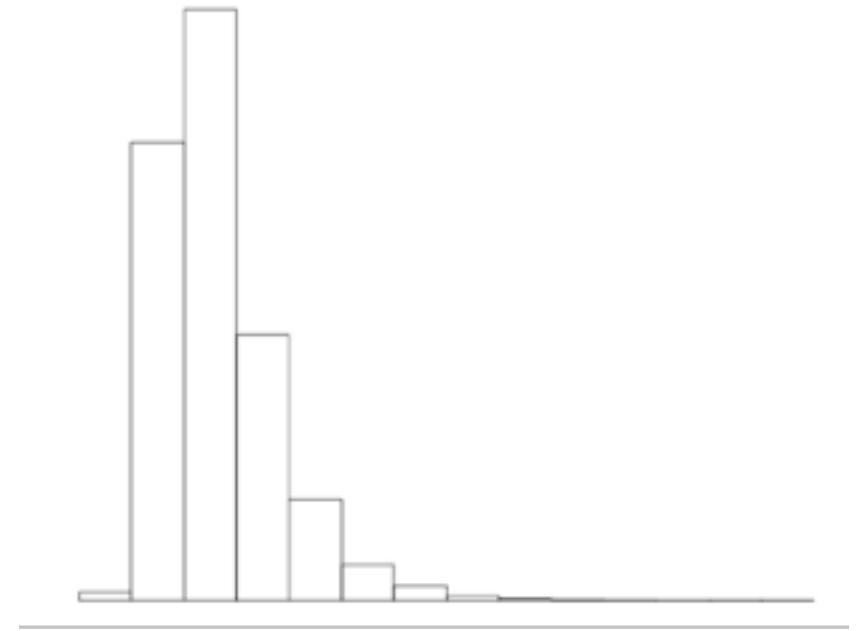
We can log transform our DV to approximate something that looks a bit more like the normal distribution (could also look at inverse RT). But there are risks around transforming data (Lo & Andrews, 2015)