## Plotting a straight line

 For any data plots such as on the previous slide, when we have one predictor (x) we could plot many straight lines.

$$y = \beta x_i + \beta_o + residual_i$$

 $\beta$  = gradient of the line

 $\beta_0$  = intercept (when x=0)

residual<sub>i</sub> = difference between predicted score and actual score for participant i

