Phil 12
Winter 2005

First Writing Assignment

Write a short paper (1-2 pages, double-spaced, typed) on the question assigned for your section. These are to be turned in at the beginning of class on Thursday, February 17.

A-01. What is an operational definition, and why do scientists need them? Create an example of a possible relationship between two variables that need to be operationally defined. Propose a way to operationally define them and evaluate the resulting construct validity.

A-02. You find the scatterplot to the right in a paper you are reading. It has the caption: Relationship between Haemoglobin A1c (%) and random plasma glucose (mmol/L). Write a tutorial explaining to a friend who does not understand scatterplots how to understand this information (note: you do not need to know what *Haemoglobin A1c* or *random plasma glucose* mean).

$$y = 0.303x + 5.5682$$
$$R^2 = 0.4412$$
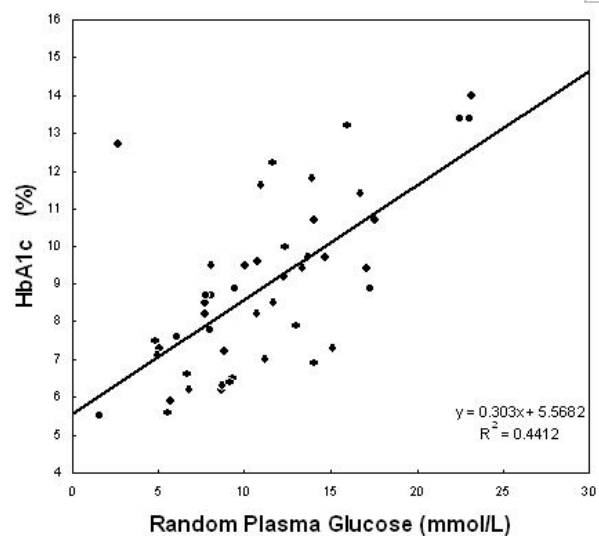
A-03. In an article on politics, you find the scatterplot at the right relating the percentage that voted for Reagan in each state in the 1980 election to the percentage in that state that voted for Reagan in the 1984 election. The caption tells you that $r = .90$ and that $1984\% = 14.86 + 0.88 \times 1980\%$. Write a tutorial explaining to a friend who does not understand scatterplots how to understand this information.
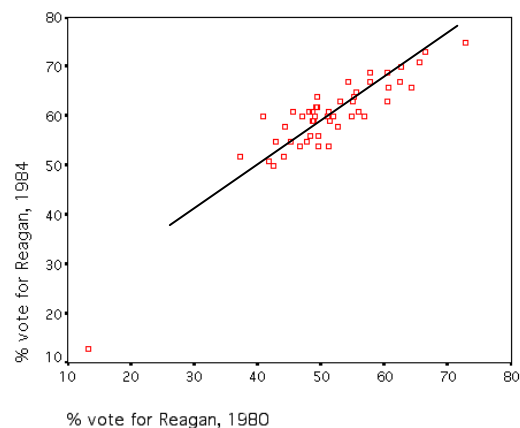
A-04. Write a tutorial explaining to a friend who does not understand p values what the statement p<.001 means in a study showing differences in means between samples involving two nominal variables, and under what conditions it might be important to have such a high p value.