

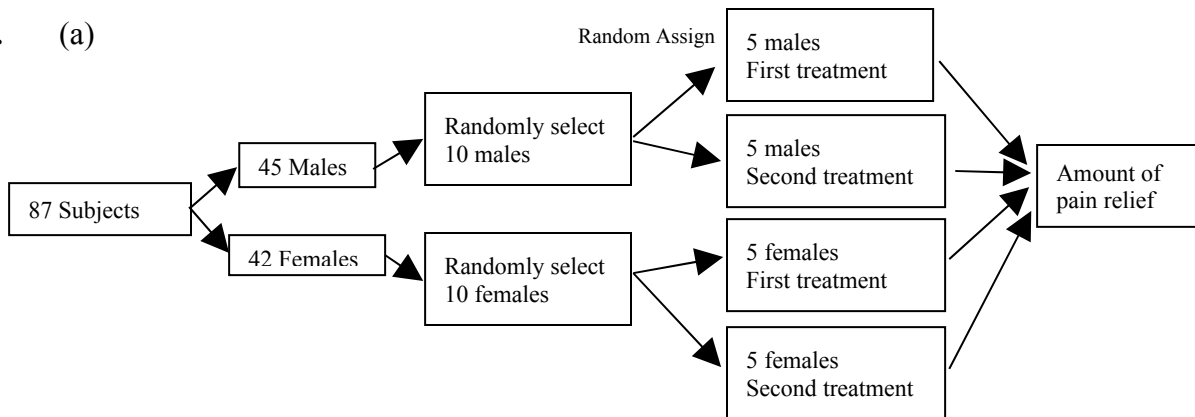
9. The question is certainly flawed. It is biased towards the response “strongly agree”. Since the question is prefaced with the conclusion of a study by a professor from a leading university, a respondent would have to be willing to say that their opinion is more reliable than an expert’s study in order to disagree with the statement. Few people would do that.

10. (a) Using a random digit table we would assign digits 0 – 9 thus:

- 0 – 2 : Indicate acid rain damage
- 3 – 9 : Indicate no acid rain damage.

(b) The first 10 digits from line 120 are 3547655972 . So the proportion of trees in my sample that indicate acid rain damage is  $\frac{1}{10} = 0.1$

11. (a)



(b) Divide the 87 subjects into males and females. Number the males 1 to 45 and the females 1 to 42. Using a random number generator, randomly select 10 males and then 10 females.

(c) Beginning from line 123 I will first select the males, then the females. The 20 participants are

Males #				
8	15	7	27	10
25	27	23	30	41

Females#				
28	18	3	1	36
27	19	15	21	37

12. Joe’s method is not appropriate. Note that the students in the second sample are more likely to be chosen than the students in the first sample. This means that Joe’s method is not truly random. This essentially means that the sample is most likely not representative and will thus be biased.