

Grading Key to Assignment 1

Due 2/8/16

Grading notes: Spot check for thoughtfulness, accuracy, quality of language, and effort. If pretty good → 9 or 10; if “ehh” → 7 or 8 (only because this is the first assignment); if poor → 7 or 6, if missing or late → 0 – 5, depending on reason.

1.2 Oral contraceptives and breast cancer

Q. What population is being studied in this investigation? ANS: The population is women between the age of 50 and 70 who might have used oral contraceptives in their past.

Q. Is the population restricted to the 135,000 study participants? ANS: No, the population is not restricted to the 135,000 women in the study.

1.3 Hospital duration

Q. Describe the *population* that this study addresses. ANS: The population is all individuals in this region who might end up at this hospital. Q. Describe the *sample*. ANS: The sample is the 30 observations in the study.

1.4 Body weight expressed as a percentage of ideal.

Q. Describe the *population* and *sample* for this study. ANS: The population is 35- to 44-year old male diabetics. The sample consists of the 18 diabetics in the study.

1.5 Teaching effectiveness

Q. What measurement scale was used to record this data? ANS: The measurement scale is ordinal.

Q. Does the measurement meet the criteria for objectivity? ANS: “Objectivity” means that things are observed as they are without shaping the data to conform to your own preconceived world view. The extent to which the data are objective is dubious. Most (not all) students views their classes in highly subjective, shaped by their grades, the compatibility of their personality with that of the professors, and the extent to which they are entertained and respect the teacher.

Q. Does it meet the criteria for accuracy (validity)? ANS: Accuracy is the extent to which the results of the measurement agrees with the true nature of things. Therefore the answer of this question depends on how you define the true nature of things. If you intend to measure that nature of student opinions, then the data are accurate. If you intend to measure the amount the student had learn, the data are not very accurate. The point is, that the accuracy the data depends on having an unambiguous definition of the quantity you want to measure.

1.6 Dietary fat consumption.

Q. Which method of measuring dietary is more likely to achieve objective and accurate results? ANS: Dietary logs are apt to achieve more objective and accurate results.

Q. Explain you reasoning. ANS: Any reasonable explanation will be accepted. Here’s one way to answer the question: Memory, especially distant memories, become colored by expectations, emotion, and wishful thinking

1.7 Duration of hospitalization.

(A) The following variables are categorical: SEX, AB, CULT, SERV

The following variables are quantitative: DUR, AGE, TEMP, WBC

There are no ordinal variables in this data set.

(B) The value of DUR for observation 4 is 11.

(C) The value of AGE for observation 4 is 43.