

Discovering Statistics Using IBM SPSS Statistics 4th edition

Education Testbank

Using this testbank:

This testbank is designed to be used in conjunction with Field, A. P. (2013). *Discovering Statistics Using IBM SPSS Statistics*, 4th edition. London: SAGE.

The multiple choice questions are listed under the chapter they best represent. Correct answers are denoted with a *.

Acknowledgements:

Special thanks to Aidan Thompson from the University of Birmingham for writing the Education testbank for the 4th edition. Also thanks to all business lecturers who took the time to take part in the companion website and testbank survey. Your feedback was instrumental in creating the resources for the 4th edition.

More about this testbank:



The questions in this testbank are also available in WebAssign.

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Testbank Questions:

CHAPTER ONE – Why is my evil lecturer forcing me to learn statistics?

1. Which of the following is an example of a quantitative research method?
 - a. Systematic reviews
 - b. Blog research
 - c. Visual methodologies
 - d. Statistical and correlational analysis*

2. Which of the following is a common example of self-reporting measurement error?
 - a. Lying on a questionnaire*
 - b. Calculator malfunction
 - c. Miscalibrated scales
 - d. Dud batteries in a stopwatch

3. Which of the following is an effective data collection tool in educational research?
 - a. Baseline surveys*
 - b. Acting
 - c. Visiting a solicitor
 - d. Brushing your teeth

4. SPSS is a computer software program used for..?
 - a. Doing your work for you
 - b. Analysing data sets*
 - c. Checking football scores
 - d. Voting on *The X Factor*

5. An independent variable is:
 - a. A variable thought to predict an outcome variable
 - b. An outcome
 - c. Synonymous with a dependent variable
 - d. A variable thought to be the cause of some effect*

6. Analysing data is which stage in the five-stage model of research?

- a. 1st
- b. 2nd
- c. 4th
- d. 5th*

7. What does this symbol mean? $\sqrt{\quad}$

- a. Divide by
- b. $2+2=4$
- c. Square root*
- d. Equal to

8. What is the answer to the following equation? $\sqrt{1999} =$

- a. 44.71*
- b. 43.07
- c. 45.98
- d. 44.00

9. Two distributions (D_1 and D_2) are plotted onto the same graph. D_1 is right skewed, D_2 is left skewed. The mean of D_1 is lower than D_2 . Which of the following statements is incorrect?

- a. The mean of D_2 is higher than the median of D_2 .
- b. The mean of D_2 is lower than the median of D_1 .
- c. The median of D_1 is the same as the mean of D_2 .
- d. All of the above*

10. Which of the following is a brief definition of 'contiguity'?

- a. Cause and effect must occur close together in time,*
- b. The effect will occur before the cause,
- c. Cause and effect can occur randomly,
- d. Effect never determines cause,

11. Your seminar tutor congratulates all students for working hard on their statistics homework. This is an example of:

- a. No reinforcement
- b. Negative reinforcement
- c. Positive reinforcement*
- d. Data collection

12. Negative reinforcement is a type of:

- a. Manipulation*
- b. Ignorance
- c. Refusal
- d. Variation

13. A repeated-measures design uses:

- a. Different subject groups throughout
- b. The same subject group throughout*
- c. Mixed subject groups throughout*
- d. No subject groups

14. A sample of size n is used to estimate the confidence interval for a proportion. Upon review, you consider the standard deviation too large. If you want to reduce your standard deviation so that it is a tenth ($1/10$) of the original size, what size sample do you need?

- a. $10n$
- b. $100n$ *
- c. $1000n$
- d. $10,000n$

15. A randomized controlled trial (RCT) is often used to test:

- a. Efficacy of various types of intervention within a patient population*
- b. Popularity of types of music
- c. Methods of data collection
- d. Versions of SPSS software

16. The random allocation to groups of participants in an RCT occurs:

- a. Before assessment of eligibility and recruitment
- b. After assessment of eligibility and recruitment but before implementation of the intervention*
- c. After both assessment of eligibility and recruitment and implementation of the intervention
- d. At any point

17. The two most important sources of systematic variation in RCTs are:

- a. Counterbalancing and randomization
- b. Systematic and unsystematic variation
- c. Practice effects and boredom effects*
- d. Frequency distributions and positive skews

18. You begin a study with primary school children. You show them a box which contains 3 yellow, 2 black, 4 white and 3 clear buttons. Two buttons are taken one after the other at random from the box. What is the probability that both buttons are black?

- a. $1/6$
- b. $1/16$
- c. $1/60$
- d. $1/66^*$

19. You ask a participant in a study to roll a die, and to keep rolling until they roll either a 5 or a 6. What is the variance of the distribution of the number of rolls required?

- a. 6^*
- b. 3
- c. $1/3$
- d. $1/18$

20. The median is always:

- a. The middle score when results are ranked in order of magnitude*
- b. The most frequently occurring value in a data set
- c. The same as the mean

d. Never the same as the mode

21. You ask a class of 15 students to tell you the number of people who follow them on Twitter. They give their answers as 10, 27, 145, 70, 8, 23, 2, 0, 66, 201, 12, 5, 9, 34, 20. Calculate the median number of followers.

a. 0

b. 12

c. 20*

d. 145

22. Calculate the mean number of followers to 2 decimal places.

a. 13.42

b. 42.13*

c. 24.31

d. 34.12

23. How is a null hypothesis denoted?

a. H_0 *

b. H_1

c. H_2

d. H_3

24. Which of the following are true statements?

I. All bell-shaped distributions are symmetric.

II. Bar charts are useful to describe quantitative data.

III. Cumulative frequency plots are useful to describe quantitative data.

a. I only

b. I and II only

c. I and III only*

d. II and III only

25. A data set is usually collated in:

a. Tabular form*

- b. Histograms
- c. Pie charts
- d. A Word document