Reading Descriptive Statistics

Below you will review presentations of descriptive statistics in published research. Often such information is presented in two locations within research reports, the Participants section and Results section. If in the participants section, such statistics are used to describe the sampled participants. If in the results section, the statistics are usually to describe data collected for variables studied.

(a) The next two sets of questions - (a) and (b) - use Hoffman and Nadelson's (2010) study.

Find the two paragraphs used to describe Participants in the Hoffman and Nadelson (2010) study. These two paragraphs are preceded with the sub-title "Participants and design."

Hoffman, B., & Nadelson, L. (2010). Motivational engagement and video gaming: A mixed methods study. *Educational Technology Research and Development*, *58*(3), 245-270.

http://www.bwgriffin.com/gsu/courses/edur7130/readingstudies/2010-Hoffman-Motivational-engagement.pdf

1. Which, and how many, variables are used to describe, statistically, the Participants in these two paragraphs?

2. What do the numbers 9.61 and 13.39 in the following sentence mean?

> "The total population of 189 was 75.3% female with an average age of 24.4 years who reported playing video games an average of 9.61 hours per week (M = 13.39, F = 8.35)."

(b) Find Table 3 in the Hoffman and Nadelson (2010) study.

3. What is the difference between "Observed range" and "Possible range?"

4. Did any variables measured demonstrate the same observed and possible ranges?

5. What do the symbols "n/a" and ∞ indicate in Table 3?

(c) Find Table VI in Davies and Brember (1999) study.

Davies, J., & Brember, I. (1999). Reading and mathematics attainments and self-esteem in years 2 and 6-an eight-year cross-sectional study. *Educational Studies*, *25*(2), 145-157.

http://www.bwgriffin.com/gsu/courses/edur7130/readingstudies/1999-Davies-Reading-and-Mathematics.pdf

6. How many and which variables are presented in Table VI?

7. Which set of data displayed the most variability for Reading Scores?

(d) Find Tables 1 and 2 in Mattox et al.'s (2005) study.

Mattox, K., Hancock, D. R., & Queen, J. A. (2005). The effect of block scheduling on middle school students' mathematics achievement. *NASSP Bulletin*, *89*(642), 3-13.

http://www.bwgriffin.com/gsu/courses/edur7130/readingstudies/2005-Mattox-Block-Scheduling.pdf

8. How many and which variables are presented in Table 1?

9. Among the following three variables in Table 1, which has the greatest range of values reported?

10. How many and which variables are presented in Table 2?

11. Which schools have teacher turnover rates below the district average?

12. Which schools have total number of teachers below the sample average?

13. How can the district average for total number of teachers differ from the sample average?