Statistics-chart and graph paper essay sample



Charts and graph are images that present data symbolically. They are used to present information and numerical data in a simple, compact format. This paper will focus on three types of charts and/or graphs which are: pie charts, bar graphs, and histograms.

What types of data there are and how the data was collected is important for the reader to understand. According to Bennett, Briggs, and Triola (2003) there are two types of data. They are:

*Qualitative data- Data consisting of values that describe qualities or nonnumeric categories.

*Quantitative data- Data consisting of values representing counts or measurements (p G-4).

In the following three examples of charts/graphs the type of data being displayed will be discussed.

Pie Chart

Excellent use of section headings!

The first type to be discussed is a pie chart. A pie chart is "a circle divided so that each wedge represents the relative frequency of a particular category. The wedge size is proportional to the relative frequency, and the entire pie represents the total relative frequency of 100%" (Bennett et al., 2003, p G-3).

This first chart displays the results of a 60-day survey to determine the amount of library users conducting searches within the nursing profession

(Jones, 2006, p 1). Excellent citations throughout your paper. In this study qualitative data was analyzed to determine and measure user activity. The qualitative data was gathered using random sampling. A survey tool was developed to interactively collect information from library users.

Example 1

Note: Virginia Henderson International Nursing Library: A work in progress, 2006, retrieved from

http://www. nursingsociety. org/RNL/Current/in_touch/library. html

Excellent chart!

Bar Graph

The second example of a graph is the bar graph. A bar graph is "a diagram consisting of bars representing the frequencies (or relative frequencies) for particular categories. The bar lengths are proportional to the frequencies" (Bennett et al., 2003, p G-1).

The second chart displays the ranking of formats containing risk information. In this study qualitative data was analyzed to determine client preferences for the presentation of complex risk information. The qualitative data was obtained using random sampling of 25 women by using hospital flyers and advertisements (Fortin, Hirota, Bond, O'Connor, & Col, 2001).

Example 2

Ranking of Graphical Formats Containing Risk Information

Note: Identifying Patient Preferences for Communicating Risk Estimates: A

Descriptive Pilot Study, 2001, retrieved from

http://www. biomedcentral. com/1472-6947/1/2

Histograms

The last example of a graph to be discussed is a histogram. A histogram is " a bar graph showing a distribution for quantitative data (at the interval or ratio level of measurement). The bars have a natural order, and the bar widths have specific meaning" (Fortin et al., 2001, p G-2).

This last graph displays the amount of time that a physician is expected to spend with an average weight client versus an overweight client. In this study qualitative data was analyzed on how much time the physician believed they would spend with the client and changed to quantitative data in the form of numbers. The quantitative data appears to have been gathered using the convenience sampling of 122 primary care physicians with three major hospitals in the Houston, Texas (Hebl & Xu, 2001).

Example 3

Time Expected to be with Average-Weight and Overweight Patients

Note: Physicians' Reactions to Patient Size by Hebl and Xu, 2001, p 1, retrieved from

http://onlinestatbook.com/case studies rvls/weight/index.html

Conclusion

When people read a newspaper, a government study, or a corporation's annual report they are likely to see charts and/or grafts of statistical data. Charts and grafts can send a very powerful message to people. The use of images is able to make a more vivid image than trying to decipher a page full of numbers. The three examples presented are able to demonstrate this concept well. Nice conclusion.

References

Good research and excellent APA format.

Bennett, J., Briggs, W., & Triola, M. (2003). Statistical reasoning for everyday life, 2nd ed. Addison Wesley, a Pearson Education Imprint.

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