## Statistics project example

Science, Statistics



Statistics Affiliation Answers to study questions in Exercise 11 The demographic variable that were measured at the interval level of measurements were age, annual income, length of labor, return to workers, and number of workers per week (Troy & Dalgas-Pelish, 2003).

- 2. Descriptive statistics were used in the description of length of labor in this study. Descriptive statistics were not appropriate because it considered only the features of the group being studied (Agresti, 2007).
- 3. Other statistic that could have been used in describing the length of labor is categorical statistics distribution (Agresti, 2007). In this case, a description of the length of labor could have been initiated whereby the length of labor of one works would be considered as a random variable. A probability distribution that provides a description to such a random variable would them be initiated.
- 4. The distributions of scores for the experimental and control groups were not similar for the length of labor because the two means were different. The mean of the experimental group was 14. 63 while that of the control group was 12. 79, portraying a mean difference of 1. 84 (Troy & Dalgas-Pelish, 2003).
- 5. The experimental and control groups were slightly in their type of feeding since in all types of feeding such as bottle feeding, breast feeding, as well as the combination of the two modes of feeding depicted a difference in their mode, as a measure of central tendency (Mann, 1995). Breast-feeding was found to have a mode of 40. 6% for the experiment group against 41. 7% for the control group, while bottle-feeding had a mode of 53. 1% against 50. 0% for the experimental group and control group respectively. On the other

hand, the combination of both the breast and bottle-feeding showed a mode of 6. 3 and 5. 6 for the experimental group and the control group respectively (Troy & Dalgas-Pelish, 2003).

- 6. The marital status mode for the subjects in the experimental and control groups included 78. 1% for the married subject in the experimental group, against 86. 1% for the control group. The mode also included 3. 1% for the separated/divorced subjects in the experimental group against 2. 1% in the control group, and 18. 8% for the single subjects in the experimental group, against 8. 3 in the control group (Troy & Dalgas-Pelish, 2003). The frequencies for these three subject categories for the experimental groups against the control groups were 0. 781 vs. 0. 861, 0. 031 vs. 0. 021, and 0. 188 vs. 0. 083 for the married, separated/divorced, and single subjects respectively.
- 7. The median for the education data cannot be obtained for specific levels of education, but it is possible to determine the median number and median education level for both the control group and the experimental group.

  Median is typically the middle number given a list of numbers in an ascending or descending order (Mann, 1995). For the experimental group, the median value for education data is 11 while the median value for the control group is 13.
- 8. The findings for this study cannot be generalized for Black women because the population of Black women represented is close to being insignificant because it is only 1% (Troy & Dalgas-Pelish, 2003).
- 9. Given that the study consisted of 32 subjects in experimental group and 36 subjects in the control group, the income data only reported 30 subjects

in the experimental group and 34 subjects in the control group because of the issue of missing data (Troy & Dalgas-Pelish, 2003). This aspect is also reflected on the percentages, which have failed to be 100% in the two groups.

10. The sample for this study was adequately described because the most important variables in a population were considered. The sample size was also relative large enough to represent the entire population, which further implies that the level of biasness was low (Mann, 1995).

## References

Agresti, A. (2007). An Introduction to Categorical Data Analysis. Wiley-Interscience.

Mann, P. S. (1995). Introductory Statistics (2nd ed.). Wiley.

Troy, N. W., & Dalgas-Pelish, P. (2003). The effectiveness of a self-care intervention for the management of postpartum fatigue. Applied Nursing Research, 16(1), 38–45.