

CHAPTER VI

DATA ANALYSIS AND INTERPRETATION.

The data analysis is an important part of a research study. The main concern of this analysis is to provide answers to research questions. This chapter deal with data processing, data analysis, interpretation, and outcome measurement.

6.1. DATA PROCESSING AND ANALYSIS.

Data processing is an indispensable step in the research process. Once data comes from field, the processing and analysis can begin. The data left of respondents' who refused to answer the questionnaire or missing data, were excluded before data analysis. There are two types of data, quantative and qualitative. The information is in raw score, nominal scale and continuous data. The student's final examination total clinical score, total theory score, and total score are raw score and continuous data. The components a of relationship are on a rating scale and continuous data. The nominal scale includes; sex, marital status and name of campuses. Numerical codes were used for nominal scale and rating scale.

The data analysis were performed by employing the DBASE III/plus SPSS PC + Programme (statistics package for social science).

6.2. PRIMARY OUTCOME OF THE STUDY.

The primary outcome is measured by the average level of interpersonal relationship as perceived by nursing students. The summary of this outcome measurement is presented in table 6.1.

There are 2 categories of data analysis performed to answer to primary and secondary research questions.

Category 1. The primary data were computed in frequency, percentage Mean (\bar{X}), Standard Deviation (SD), Standard Error of Mean (SEM) and 95% Confidence Interval (CI). The data were analyzed by descriptive statistics. In this study Mean, SD, SEM 95% CI, one way ANOVA and Multiple Range Test are considered standard and are appropriate to answer the stated primary research question.

Category 1 (A) Demographic information: The student's demographic information were analyzed in frequency and percentage regarding age, sex and parent's occupation.

Category 1 (B). The average level of interpersonal relationship as perceived by the nursing student such as trust, support system, open communication, effective class room teaching and characteristics of clinical teacher were computed in Mean, standard deviation, standard error mean and 95% confidence interval.

The Mean or average is a simple descriptive statistics and one of the most widely used. It is obtained by adding together all of the values of scores and dividing this number by the total number of scores.

The standard deviation is the normal frequency distribution curve, also called the bell shaped curve. Standard deviation indicates a groups' average spread of scores or values around the mean. It is measured by how much each score is scattered from the mean.

A ninety-five percent confidence interval provides a method of stating both how close the value of a statistic is likely to be to the value of a parameter and the chance of its being that close. In this study the level of significance was set at .05. Which is acceptable error of the study.

Category 1 (C): A one way ANOVA was computed to compare the information from second and third year nursing students in seven nursing campuses to determine an average level of interpersonal relationship. The Multiple Range Test also was applied in this study to determine which campus student obtained a high Mean score and its significant difference. It was compared to seven nursing campuses. The factors which affect components of relationships were performed by the one way ANOVA test.

6.3. SECONDARY OUTCOME MEASUREMENT.

The secondary outcomes measured are the components of relationships related to student academic achievement.

Category 2 (A): The data were analyzed in Univariate analysis (Pearson product moment correlation coefficient). Pearson product moment correlation coefficient was used to examine the relationship between components of teacher-student relationships and academic achievement of students. To determine the predictors of the dependent variables, various combinations of independent variables were entered, into regression equations. In addition the

variables with significant influence on the dependent variables, were identified. Pearson product moment correlation coefficient was used because both dependent variable and independent variables are continuous data. The Pearson product moment correlation coefficient procedure was applied in this study to answer the secondary question.

Table.6.1. SUMMARY OF OUTCOME MEASUREMENT.

| Outcome | Data sources. | Instrument. | Data analysis |
|---|--|-----------------------------------|---|
| Average level of relationship score. | Nursing student. | Questionnaire. | Descriptive statistics. One way ANOVA. Multiple range test. |
| Components of relationship related to academic achievement. | Nursing student. Mark sheet. Score record. | Questionnaire. Recording form. | Pearson product moment correlation coefficient. |