



CHAPTER VI

OUTCOME MEASURES

In order to be valuable in prediction the magnitude of association between variables must be substantial and the greater the association the more accurate the prediction it permits. This study concerns with the importance of admission criteria for performance on institute final examinations.

The outcome measures are measured in terms of magnitude of association between the independent variable, admission criteria of certificate level nursing program, and dependent variable, institute final examination.

According to the first study question, the first outcome is measured in terms of magnitude of association between independent and dependent variables. The outcome of second question is also measured in terms of magnitude of association between stated predictor variables and criterion variable. The main concern is about one variable may relate with the other. In other words, the estimation of success in institute final examination from the information of admission criteria. The predictor variables were selected that have a high

correlation with the criterion variable.

In this study, the criterion variable is stated in terms of success on institute final examinations that involves various subjects. (see Table 5.2, Chapter V). The information on admission criteria serve as predictor variables that are illustrated in Table 5.1 in Chapter V.

The magnitude of association refers to the strength of relationship. A correlation coefficient indicates both direction and the strength of the relation between two variables in a single number. The correlation coefficient is expressed in terms of numerical value. The numerical value of coefficient indicates the strength of relation. When the relation is perfect, the numerical value is 1.00, and when no systematic relation exists, the numerical value is 0.00. Thus the typical range of values for a correlation coefficient extends from 1.00 for a perfect relation to 0.00 for no systemic relation between the variables. If two variables are unrelated, knowing an individual's score in one distribution does not provide useful information for predicting that individual's score in the other distribution. When two variables are systematically related more accurate predictions can be made between distribution. The association between the predictors and the criteria is reflected in the multiple

correlation coefficient, R . It indicates the strength of relationship between one variable and two or more others combined with optimal weights. The multiple correlation is related to their correlations with the dependent variables. It is also related to the intercorrelations between independent variables. Multiple correlation analysis generates R^2 , an index of the proportion of the variance in dependent variable that is predictable from the set of independent variables. It also provides a direct means of evaluating accuracy of prediction equation.

The concept of correlation is fundamental to prediction based on association among variables. Therefore in order to get the answer of study questions, stepwise multiple regression analysis technique was employed. The stepwise multiple regression analysis is a statistical technique in which the estimate of the criterion measure is based on the linear combination of several independent variables. In this technique, the operation begins with the selection of the test that by itself has the highest correlation with the dependent variable. In multiple regression, one aspect of understanding the phenomenon under investigation is determination of relative importance of independent variables.

As already stated, the first outcome of this study is measured in terms of magnitude of association

between SLC scores as predictor variables and institute final examination as criterion variable. It is also mentioned earlier that the institute final examination is conducted at each year at end of the course and subjects are different. For this reason, all three SLC subjects scores including other predictor variables were entered into the equation with all the subjects of first year, second year and third year institute final examinations based on selected statistical procedure. (see Table 5.1 and 5.2, Chapter V). The second outcome is similar to first outcome so it was treated in same manner. All the stated information on admission criteria like previously earned academic certificate, previous work experience, parents' occupation, residence, age, attended campus, high school division and marital status were similarly entered into equation with all the subjects of first, second and third year institute final examination scores respectively after coding them. The independent variables were also correlated with total scores of institute final examination. The statistical procedure, stepwise multiple regression analysis was employed to compute for both outcome measures.

QUESTION	OUTCOME	DATA SOURCES	DATA COLLECTING INSTRUMENT	ANALYSIS MEASURES
1.	Strength of association between SLC & IFE scores. - estimate of success on IFE.	SLC transcript. IFE score record.	Recording form.	Multiple regression.
2.	Strength of association between stated admission information & IFE.	Admission application forms. SLC transcript & certificate. IFE score records.	Recording form.	Multiple regression.

Table 6.1. Summary of outcome measures.

NOTE: IFE = Institute final examination.