CHAPTER VII

ANALYSIS

The main concern of this analysis chapter is to provide answers to the research questions addressed earlier. Outcome measures were described in detail in Chapter VI. This chapter will deal with summarization of data.

7.1. THE FIRST OUTCOME

As mentioned previously, the first outcome of this study is measured in terms of magnitude of association between predictor variables and criterion variable. Thus, the result can be expressed simply in terms of multiple correlation coefficient, R and R^2. F test was computed for significance of the multiple correlation coefficient. Multiple correlation coefficient and R^2 are obtained by the statistical procedure, stepwise multiple correlation analysis technique. It is a modified version of forward regression that permits reexamination, at every step, of the variable incorporated in the model in previous steps. It is one of the approach to multiple regression calculation. After computing the multiple correlation coefficient based on regression equation, the next step

is to summarize the obtained data. Since the initial task of data summarization is to tabulate the findings, the results are tabulated illustrating the outcome. (See Tables 7.1, 7.2, 7.3, 7.4).

7.2. THE SECOND OUTCOME

The second outcome is also measured in terms of magnitude of association between predictor variables and criterion variable. The same steps were followed for data computing process. The data are summarized in tables indicating multiple correlation coefficient and R^2, adjusted R^2 and it's significance. (See Tables 7.1, 7.2, 7.3, 7.4).

The multiple linear regression models characterize the relationship between a dependent variable and a set of independent variables. The models were formulated with the help of statistician to obtain a good fit to the data. The multiple linear regression model is determined according to response surface which may be plane, or curved or warped. Thus, the model should fit to a set of data associated with response surface. Once it is established, a best-fit prediction equation resulting from a multiple linear regression analysis can be used for estimation of mean value of Y for given values of the predictor variables and prediction. The concept of multiple regression analysis is discussed already in pages 69 to 70 in Chapter VI.

STEPWISE MULTIPLE REGRESSION OF ALL PREDICTOR VARIABLES
AND IFE SCORES:

VARIABLES	R	R^2	ADJUSTED R^2	P LEVEL

1. FIRST YEAR IFE SCORES

2. SECOND YEAR IFE SCORES

3. THIRD YEAR IFE SCORES

TABLE 7.1.

SUMMARY OF STEPWISE MULTIPLE REGRESSION FOR PREDICTING IFE SCORES:

| | | FIRST YEAR | | SECOND YEAR | | THIRD YEAR | |
PERCENTILE RANK	R^2	CRITERION VARIABLES	PREDICTORS	CRITERION VARIABLES	PREDICTORS	CRITERION VARAIBLES	PREDICTORS
	.04-.07						
33.30							
	.08-.14						
66.70							
	.15-.27						

P < .05‡
P < .01‡‡   TABLE 7.2
P < .001‡‡‡

THE NUMBERS USED TO IDENTIFY PREDICTOR VARIABLES FOLLOW THE VARIABLES IDENTIFICATION TABLE 5.1.

STEPWISE MULTIPLE REGRESSION OF ALL PREDICTOR VARIABLES
AND IFE SCORES:

CROSS-VALIDATION RESULT:

VARIABLES	R	R^2	ADJUSTED R^2	P LEVEL

GROUP 1.

1. FIRST YEAR IFE SCORES

2. SECOND YEAR IFE SCORES

3. THIRD YEAR IFE SCORES

GROUP 2.

1. FIRST YEAR IFE SCORES

2. SECOND YEAR IFE SCORES

3. THIRD YEAR IFE SCORES

TABLE 7.3

STEPWISE MULTIPLE REGRESSION OF THREE COMPULSORY SUBJECTS
OF ADMISSION CRITERION AND IFE SCORES:

VABIABLES	R	R^2	ADJUSTED R^2	P LEVEL

GROUP 1.

1. FIRST YEAR IFE SCORES

2. SECOND YEAR IFE SCORES

3. THIRD YEAR IFE SCORES

GROUP 2.

1. FIRST YEAR IFE SCORES

2. SECOND YEAR IFE SCORES

3. THIRD YEAR IFE SCORES

TABLE 7.4