

This manual is extremely brief because the DETECT MULTIPLE REGRESSION PROGRAM (DETECT MR) uses the same programs described in detail in the DETECT for WINDOWS manual. Thus, there is very little to add to the manual except for the material listed here.

## **DIFFERENCES**

The first and main difference is that the data that are to be input to DETECT must be organized in the following way:

1. Variables that are not to be analyzed (for example cell indicators, etc.) followed by
2. All independent variables followed by
3. One dependent variable.

The second difference is that DETECT MR reports results for the independent variables as one variable and for the dependent variable. All correlations in DETECT MR are multiple (ordinary least squares) correlations. A modified program from Chapter 6 in the original manual is provided in the file called progeg.txt. Likewise, data set b from the manual is provided in the file datasetB.txt. The program performs an analysis based on the following regression equation: Structure + Culture = Performance. The program and data are from Section 6.3 in the DETECT Application and User's in the original CD. The results show two multiple regression analyses in two different conditions and at two levels.

Third, the only new table that DETECT MR outputs is the regression table based on the total scores. (A multiple correlation is calculated multiple times when Multiple Relationship analysis is called.) The new table presents the total multiple correlation that would result from analyzing simple raw or total scores as well as the constant and the beta weights for each variable. The regular WABA tables then provide the results from analyzing the total multiple correlation based on within and between variation and covariation.

Fourth, because multiple regression assumes a particular alignment of variables, multiple variable analysis can not be performed.

## **SUGGESTION**

Once you have written a regular detect program, it is easy to run DETECT MR. Simply make sure that the variables are organized as shown above and click on the DETECT MR icon. Then follow the steps listed for submitting an already written program described in the DETECT for Windows manual. Or, use one of the editors to create a new program. The output is simple to interpret if you understand the output from regular DETECT. See the Detect Interpretation Guide (DIG) for a description of how to interpret the output.