

Evaluating Multicollinearity

You know that multicollinearity can inflate the standard errors of the parameter estimates and can cause a model to be unstable. It can make interpreting the relationships between the dependent and independent variables almost impossible. To evaluate multicollinearity, you can use the CORR procedure to compute the correlation statistics that measure the linear relationship between pairs of the independent variables. Variance inflation factors can help determine the presence of multicollinearity. You use the VIF option in the MODEL statement in PROC REG to calculate these factors. In addition, the collinearity statistics available in PROC REG are useful in diagnosing multicollinearity. You use the COLLIN and COLLINOINT options in the MODEL statement in PROC REG to identify the sets of variables involved in multicollinearity.