

In the previous sections, we used ANOVA to assess the importance of a categorical predictor to a continuous response variable, SalePrice. We'd like similar tools for assessing the importance of continuous predictor variables as well. Often, we want to build linear regression models that relate a continuous response variable to several continuous predictors. Before building such models, it can be helpful to use correlation analysis to test for linear associations among the continuous variables. For example, we want to determine which continuous variables in the Ames data set are correlated with sale price before we create a regression model. Because correlation is a measure of the linear association between two variables, identifying correlations provides information about how well a continuous predictor will explain the response within a regression analysis.