

Introduction

Sometimes there are indications that a linear relationship might not be a good model for the data. For example: Before you begin your regression analysis, it is recommended that you do both univariate and bivariate analyses and visually inspect the results. A simple scatter plot can reveal a curvilinear relationship. As you saw earlier, a graph of the residuals and the predicted values might show a clear pattern, which indicates a misspecified model. As a researcher, you might simply hypothesize that specific relationships are curvilinear. In these situations, you need to move beyond linear regression and build a polynomial regression model instead. You learn how to do that in this section.