

Using multiple regressions in social sciences research : Some important aspects to be considered

Abstract

This article discusses one of the most commonly used statistical methods in studying the relationship between dependent and independent variables in social sciences research. The purpose of using multiple regression and types of data suitable for multiple regression analysis are discussed. Some important aspects to be considered when multiple regression analysis is used will be discussed in detail. These aspects are variables selection method (i.e. forward selection, backward elimination and stepwise), Multicollinearity, tolerance, variance inflation factor, influence statistics (DFFIT and DFBETA), Leverage, Cook's distance, standardized regression coefficient (β), coefficient of determination (R^2), assumptions such as normality, linearity, homoscedasticity and independence. Figures and tables are illustrated to give better picture of the concepts described.