

This diploma thesis is concerned with the means of verifying the assumption that the random component of the dependent variable in a linear model is normally distributed. Within the realm of a simulation study we observed how the use of various types of residuals in place of the original vector of errors impacts the ability of ten tests of normality to adhere to their significance levels. Because the individual residuals depend on the matrix of the model, four specific matrices of frequently used models were considered. In addition, the impact of the choice of a model along with the type of residuals on the power against five different alternative distributions of individual tests was studied. It turns out that the behavior of the tests is governed more by the type of the residuals used than by the choice of the model. In particular, studentized residuals appear to be unsuitable, because with their use the tests do not adhere to the prescribed significance level.