

KUNGLIGA TEKNISKA HÖGSKOLAN

SF2930 PROJECT I

# Scenario I: Large-Sample Regression

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# 1 Residual analysis

## 1.1 Introduction

## 1.2 Normality of Residuals

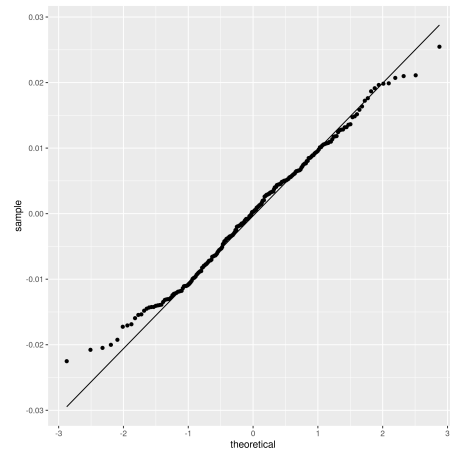


Figure 1: Normality plot of residuals.

## 1.3 Fitted Against Residuals

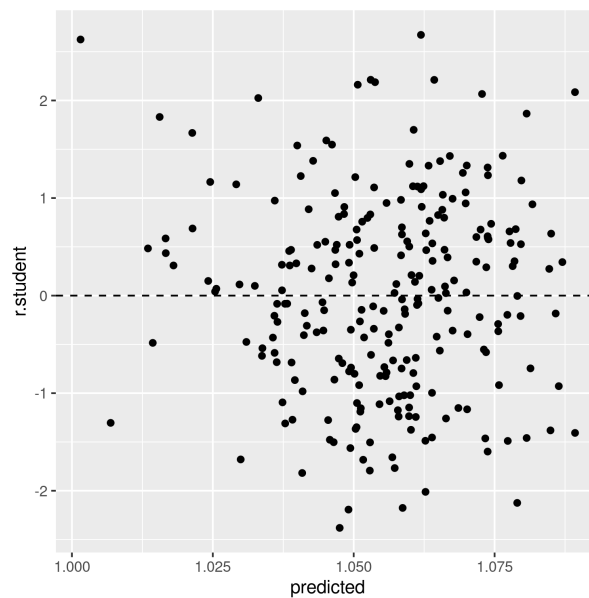


Figure 2: Fitted values against R-student residuals.

## 1.4 Added Variable Analysis

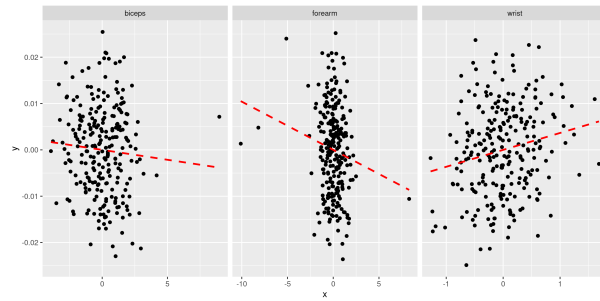


Figure 3: Partial regression plots of regressors **biceps**, **forearm**, and **wrist**.

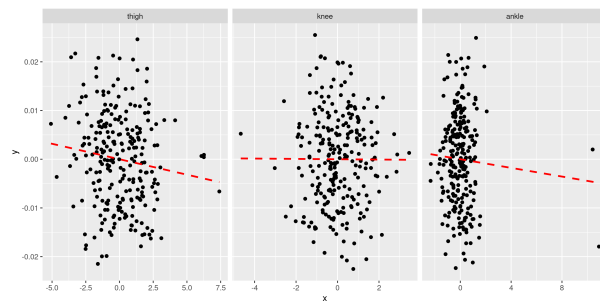


Figure 4: Partial regression plots of regressors **thigh**, **knee**, and **ankle**.

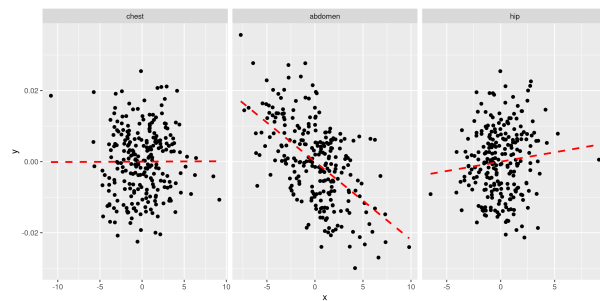


Figure 5: Partial regression plots of regressors **chest**, **abdomen**, and **hip**.

## 2 Outlier detection

## 3 Multicollinearity

## 4 Computer-Intensive Procedures

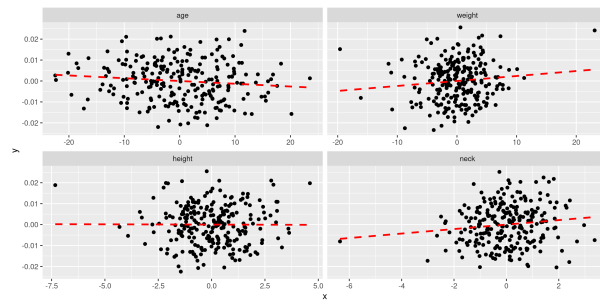


Figure 6: Partial regression plots of regressors `age`, `weight`, `height`, and `neck`.