Correlation of BMI at age 1 and age 8

\[ t_{\text{Student}}(181) = 6.87, p = 1.02 \times 10^{-10}, \hat{\rho}_{\text{Pearson}} = 0.45, \text{CI}_{95\%} [0.33, 0.56], n_{\text{pairs}} = 183 \]

Correlation of BMI at age 2 and age 8

\[ t_{\text{Student}}(164) = 7.98, p = 2.46 \times 10^{-13}, \hat{\rho}_{\text{Pearson}} = 0.53, \text{CI}_{95\%} [0.41, 0.63], n_{\text{pairs}} = 166 \]

Correlation of BMI at age 3 and age 8

\[ t_{\text{Student}}(162) = 11.51, p = 8.97 \times 10^{-23}, \hat{\rho}_{\text{Pearson}} = 0.67, \text{CI}_{95\%} [0.58, 0.75], n_{\text{pairs}} = 164 \]

Correlation of BMI at age 4 and age 8

\[ t_{\text{Student}}(171) = 15.21, p = 1.36 \times 10^{-33}, \hat{\rho}_{\text{Pearson}} = 0.76, \text{CI}_{95\%} [0.69, 0.82], n_{\text{pairs}} = 173 \]