Prediction of stature from hand measurements

Abstract:

A sample of 166 normal adult males and females was taken from different colleges of Assiut representing those living in upper Egypt. Each subject has been studied for measurements of stature (S), hand length (HL) and hand breadth (HB). The data were statistically analysed in order to assess the relationship between stature and hand measurements. The correlation matrix of the study indicates close similarity of the relationship between stature and hand measurements in both sexes and in both sides. A generalized multiple regression equation has been designed to estimate stature from values of hand length and hand breadth regardless of sex or side in the form: $S = 34.5 + 5.77 \, HL + 2.7 \, HB \pm 5.1$. This equation may be helpful to obtain approximate stature when there is difficulty in obtaining a direct measurement or where there is a chance print of a criminal or an amputated hand or arm.