

Body Measurements of American Boys and Girls for Garment and Pattern Construction: A Comprehensive Report of Measuring Procedures and Statistical Analysis of Data on 147,000 American Children, - Ruth O'Brien, Meyer A. Girshick, Eleanor Mix (Phelps) Hunt, Eleanor Phelps Hunt - U.S. Government Printing Office, 1941 - 1941

Multivariate analysis includes methods both for describing and exploring such data and for making formal inferences about them. The aim of all the techniques is, in a general sense, to display or extract the signal in the data in the presence of noise, and to find out what the data show us in the midst of their apparent chaos. In addition, most analyses of multivariate data should involve the construction of appropriate graphs and diagrams and this will also need to be carried out by the same package. R and S-PLUS® are statistical computing environments, incorporating implementations of the S programming language. Both are powerful, extensible, and, in addition, have excellent graphical facilities. It is for these reasons that they appear in this book. Made-to-measure: Personal body measurements and calculated measurements. As a foundation for the design pattern, the basic block (or basic pattern) is drafted using personal body measurements. Nevertheless, patternmakers and tailors work increasingly with basic patterns based on standard measurements and standard sizes to improve efficiency. Often, the basic block can be altered within a short period. Industrial sizing code: Standard measurements from a size chart. Size charts reflect average measurements and are based on measurement surveys. The data of 1000 girls and women between 2 to 70 years. Body measurements are a prerequisite to pattern construction. The size and fit of a garment depends upon the accuracy. From the data collected, the development of size charts for pattern grading and garment production begins. Size chart formulation begins with the division of average body measurements artificially into categories to form a range of sizes. These average body measurements are obtained from surveys of body measurements. Body measurements of the national survey were compiled in order to develop size designation and to facilitate commercial communication. These resulted from the cooperation of various interest groups which fulfilled a perceived need within the industry (Kadolph, 1998).