An anthropometric survey of Italians
"L’Italia si misura": a decade of research

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Abstract

Knowledge of human body measures is required for standardisation in ergonomics and to set limits for dimensions of machines, space and passages. Knowledge of human population dimensions can also give information about whether humans adapt to the technological environment or not. A project named “L’Italia si Misura” started a decade ago with a survey on over 5000 Italian participants. The study was carried out in the Adriatic coast area (Ancona, Central Italy) during the summer of 1990. Most participants were born in the area of Central, East and North Italy. One year later, in 1991, a second survey was carried out on the South Tyrrhenian coast (Naples). In this paper results of a follow up study of consequences for ergonomic design in transportation and military equipment are reported. The research had two goals: i) to produce a national anthropometric standard (Norma Italiana UNI 10120) and to contribute to the European standards; ii) to start a specific anthropometric survey on the Italian population that focused on a man to the environment adaptation instead of vice versa.

Introduction

An anthropometric survey is not per se an ergonomic study. It begins to be so only when the choice of variables and the structure of the sampling follow precise criteria of application to the design of specific tools and/or products, also taking into account the particular dynamic needs related to some types of activity.

Although scarcely known, a field that has produced a whole series of useful information for ergonomic design is Physical Anthropology. It provides both a wide base of knowledge about the characteristics of man and the methodologies for the quantitative definition of human traits functional to the design of the man-machine-environment interface. Moreover, Physical Anthropology is a good source of