

Book review

Patrick Rateau: METHODS AND EXPERIMENTAL STATISTICS IN HUMAN SCIENCES (Metodele si statistice experimentale in stiintele umane, Traducere de Andreea Gruev-Vintila, Ed. Polirom, 2004)

The book "Methods and experimental statistics in human science" written by Patrick Rateau and published by Polirom, Iasi, 2004 is, in fact, a textbook of methodologies and statistics necessary in any scientific approach area involving an experimental study.

The logic design of the book follows, in a certain measure, the operational design of the experimental research.

Thus, the first four chapters of the book refer to the main notions and methodology in order to background any experimental study.

The notions "variable" and "parameter" are defined and put in close relationship, with the notions of causality, interaction, and correlation in the second chapter, and, with the notions of the "control group" and "parasite variable" in the third chapter. The criteria to distinguish between parameters and variables are particularly important in order to clarify the problem of the studied hypothesis and most of all, to manage the parasite variables in the experimental studies.

The choice of the subjects and the structure of the monofactorial and plurifactorial experimental studies is presented in the fourth chapter of the book and is related to the notions of "population" and "random sampling" detailed in the second part of the book. The book becomes particularly useful for researchers because of many details related to population and the normal

(Gaussian) distribution, sampling methods, random measurement errors, confidence interval estimation and, most of all, for the hypothesis testing methods using inferential statistics.

The information in these books is accessible for a large category of investigators in experimental field, including students because of the statistical reasoning process that follows every general steps in statistical hypothesis testing. The size effect problem is discussed and clarified, too.

The parametric and non parametric tests aspects and the selecting an appropriate statistical test are presented in two separate chapters. The tests of statistical significance are presented both for paired and pooled test.

A special attention is given to all the categories of scales and their graphic representation in close relationship with the characteristics of the distribution of the data and the correct interpretation of the results.

The information in the book have a high accessibility because of a necessary division in two main aspects of the statistical approach: descriptive and inferential statistics. So, the author presents both methods to synthesize a large number of data and to extrapolation and interpretation of the data in synthetic ways.

METHODS AND EXPERIMENTAL STATISTICS IN HUMAN SCIENCES

The methods and statistics presented in the book are the most frequent used by the researchers and the most necessary in the experimental studies.

In order to ensure a good understanding of every stage that is decisive for the accuracy of the experimental researches, the book offers many examples and exercises.

The book includes a number of useful statistical tables specific for each chapter in the book.

The translator Andreea Gruev-Vintila proves a good knowledge of the specific language in the statistic area and performs a very good and necessary Romanian version of the Patrick Rateau' book "Methods and experimental statistics in human sciences."

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