

Bibliographic Reference: Florou, G. (2023). Statistical Research Methods [Postgraduate textbook]. Kallipos, Open Academic Editions. http://dx.doi.org/10.57713/kallipos-230

Abstract

In this book, the main statistical methods which are implemented almost in all other sciences are presented. Theory and implementation examples are described in a simple way. In first part methodology and ethics are presented. Ways of data collection by questionnaires are described, as well as interval confidences and hypothesis tests in order to extract conclusions for qualitative or quantitative data. Using SPSS the ways of examination quantitative or qualitative variables are analyzed by calculation of correlation coefficients and regression estimations. When data are described by many qualitative variables, the factor analysis is presented by real data examples and its results commented. Factor axis interpretations are recommended. In the second part, time value of money, rents and loans are presented and ways of investment evaluation are described using probabilities in decision making. Finally game theory and ways of solving simple game are analyzed. Effort was made in order this book became understood by student without grand mathematical background. Its scope is the understanding and implementation of statistical methods in various scientific areas.







The Project is funded by the National Development Programme 2021-2025 of the Ministry of Education and Religious Affairs and implemented by the Special Account for Research Funds of the National Technical University of Athens.