1. Record Nr. UNINA9910300566003321 Autore Skiadas Christos H **Titolo** Exploring the Health State of a Population by Dynamic Modeling Methods / / by Christos H. Skiadas, Charilaos Skiadas Pubbl/distr/stampa Cham: .: Springer International Publishing: .: Imprint: Springer. . 2018 **ISBN** 3-319-65142-0 Edizione [1st ed. 2018.] Descrizione fisica 1 online resource (X, 244 p. 125 illus.) Collana The Springer Series on Demographic Methods and Population Analysis. , 1389-6784 ; ; 45 Disciplina 304.645021 Soggetti Demography Public health **Statistics** Public Health Statistics for Social Sciences, Humanities, Law Lingua di pubblicazione Inglese **Formato** Materiale a stampa Livello bibliografico Monografia Nota di bibliografia Includes bibliographical references at the end of each chapters and index. Nota di contenuto 1 Life Expectancy, Deterioration Function and Application to Halley Breslau Data -- 2 A Quantitative Method for Estimating the Human Development Stages based on the Health State Function Theory and the Resulting Deterioration Process -- 3 Estimating the Healthy Life Expectancy from the Health State Function of a Population in Connection to the Life Expectancy at Birth -- 4 The Health-Mortality Approach in Estimating the Healthy Life Years Lost Compared to the Global Burden of Disease Studies and Applications in World, USA and Japan -- 5 The Health State Status of the US States for the period 1989-1991 (Decennial Life Tables) -- 6 Life Expectancy at Birth, Estimates and Forecasts in the Netherlands (Females) -- 7 Remarks and Findings on "Evidence for a limit to human life span" -- 8 Stages of Human Development: The Life-Span Approach and Related Applications and Related Applications and Comparisons -- 9 Derivation and Validation of the Health State Function form of a Population -- 10 The Health Status of a Population: Health State and Survival Curves and HALE Estimates -- 11 Theoretical Approach to Health State Modeling. .

Sommario/riassunto

This book introduces and applies the stochastic modeling techniques and the first exit time theory in demography through describing the theory related to the health state of a population and the introduced health state function. The book provides the derivation and classification of the human development stages. The data fitting techniques and related programs are also presented. Many new and old terms are explored and quantitatively estimated, especially the health state or "vitality" of a population, the deterioration and related functions, as well as healthy life expectancy. The book provides the appropriate comparative applications and statistics as connecting tools accompanied by the existing literature, and as such it will be a valuable source to demographers, health scientists, statisticians, economists and sociologists.