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Nota di contenuto	Introduction: 1: Introduction: The Biodemography of Complex Relationships among Aging, Health, and Longevity -- Part I: Informational on Aging, Health, and Longevity from Available Data.: 2: Age Trajectories of Physiological Indices: Which Factors Influence Them? -- 3: Health Effects and Medicare Trajectories: Population-Based Analysis of Morbidity and Mortality Patterns -- 4: Evidence for Dependence among Diseases -- 5: Factors that May Increase Vulnerability to Cancer and Longevity in Modern Human Populations -- 6: Medical Cost Trajectories and Onsets of Age-Associated Diseases -- 7: Indices of Cumulative Deficits -- 8: Dynamic Characteristics of Aging-related Changes as Predictors of Longevity and Healthy Lifespan -- 9: The Complex Role of Genes in Diseases and Traits in Late Life: An Example of the Apolipoprotein E Polymorphism -- 10: Conclusions Regarding Empirical Patterns of Aging, Health, and Longevity -- Part II: Statistical Modeling of Aging, Health, and Longevity -- 11: Approaches to Statistical Analysis of longitudinal Data on Aging, Health, and Longevity: Biodemographic Perspectives -- 12: Stochastic Process

Models of Mortality and Aging -- 13: The Latent Class Stochastic Process Model for Evaluation of Hidden Heterogeneity in Longitudinal Data -- 14: How Biodemographic Approaches Can Improve Statistical Power in Genetic Analyses of Longitudinal Data on Aging, Health, and Longevity -- 15: Integrative Mortality Models with Parameters that Have Biological Interpretations -- 16: Integrative Mortality Models for the Study of Aging, Health, and Longevity: Benefits of Combining Data -- 17: Analysis of the Natural History of Dementia Using Longitudinal Grade of Membership Models -- 18: Linear Latent Structure Analysis: Modeling High-Dimensional Survey Data -- 19: Conclusions Regarding Statistical Modeling of Aging, Health, and Longevity -- Part III: Conclusions: Continuing the Search for Determinants of Healthy Life Span and Longevity.

Sommario/riassunto

This volume is a critical exposition of the data and analyses from a full decade of rigorous research into how age-related changes at the individual level, along with other factors, contribute to morbidity, disability and mortality risks at the broader population level. After summarizing the state of our knowledge in the field, individual chapters offer enlightening discussion on a range of key topics such as age trajectory analysis in select and general populations, incidence/age patterns of major chronic illnesses, and indices of cumulative deficits and their use in characterizing and understanding the detailed properties of individual aging. The book features comprehensive statistical analyses of unique longitudinal data sets including the unique resource of the Framingham Heart Study, with its more than 60 years of follow-up. Culminating in penetrating conclusions about the insights gained from the work involved, this book adds much to our understanding of the links between aging and human health.