Record Nr. UNINA9910254837803321 Group Processes: Data-Driven Computational Approaches / / edited by Titolo Andrew Pilny, Marshall Scott Poole Cham:,: Springer International Publishing:,: Imprint: Springer,, Pubbl/distr/stampa 2017 **ISBN** 3-319-48941-0 Edizione [1st ed. 2017.] Descrizione fisica 1 online resource (VI, 206 p. 80 illus., 59 illus. in color.) Computational Social Sciences, , 2509-9574 Collana 001.422 Disciplina Soggetti Computer simulation Social sciences Big data Data mining Industrial psychology Knowledge management Simulation and Modeling Methodology of the Social Sciences Big Data/Analytics Data Mining and Knowledge Discovery Industrial and Organizational Psychology Knowledge Management Lingua di pubblicazione Inglese **Formato** Materiale a stampa Livello bibliografico Monografia Nota di bibliografia Includes bibliographical references at the end of each chapters. Introduction -- Response Surface Models to Analyze Nonlinear Group Nota di contenuto Phenomena -- Causal Inference using Bayesian Network -- A Relational Event Approach to Modeling Behavioral Dynamics -- Text Mining Tutorial -- Sequential Synchronization Analysis -- Group Analysis using Machine Learning Techniques -- Simulation and Virtual Experimentation: Grounding with Empirical Data. This volume introduces a series of different data-driven computational Sommario/riassunto methods for analyzing group processes through didactic and tutorialbased examples. Group processes are of central importance to many

sectors of society, including government, the military, health care, and

corporations. Computational methods are better suited to handle (potentially huge) group process data than traditional methodologies because of their more flexible assumptions and capability to handle real-time trace data. Indeed, the use of methods under the name of computational social science have exploded over the years. However, attention has been focused on original research rather than pedagogy, leaving those interested in obtaining computational skills lacking a much needed resource. Although the methods here can be applied to wider areas of social science, they are specifically tailored to group process research. A number of data-driven methods adapted to group process research are demonstrated in this current volume. These include text mining, relational event modeling, social simulation, machine learning, social sequence analysis, and response surface analysis. In order to take advantage of these new opportunities, this book provides clear examples (e.g., providing code) of group processes in various contexts, setting guidelines and best practices for future work to build upon. This volume will be of great benefit to those willing to learn computational methods. These include academics like graduate students and faculty, multidisciplinary professionals and researchers working on organization and management science, and consultants for various types of organizations and groups.