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bipartite networks Peng Wang; 10. Longitudinal models Tom Snijders and Johan Koskinen; 11. Simulation, estimation and goodness of fit Johan Koskinen and Tom Snijders; 12. Illustrations: simulation, estimation and goodness of fit Garry Robins and Dean Lusher; 13. Personal attitudes, perceived attitudes and social structures: a social selection model Dean Lusher and Garry Robins; 14. How to close a hole: exploring alternative closure mechanisms in inter-organizational networks Alessandro Lomi and Francesca Pallotti; 15. Interdependencies between working relations: multivariate ERGMs for advice and satisfaction Yu Zhao and Olaf Rank; 16. Brain, brawn or optimism? The structure and correlates of emergent military leadership Yuval Kalish and Gil Luria; 17. An ALAAM analysis of unemployment: the dual importance of who you know and where you live Galina Daragonova and Philippa Pattison; 18. Longitudinal changes in face-to-face and text message-mediated friendship networks Tasuku Igarashi; 19. The differential impact of directors' social and financial capital on corporate interlock formation Nicholas Harrigan and Matthew Bond; 20. Comparing networks: a structural correspondence between behavioural and recall networks Eric Quintane; 21. Modelling social networks: next steps Philippa Pattison and Tom Snijders.

Sommario/riassunto

Exponential random graph models (ERGMs) are increasingly applied to observed network data and are central to understanding social structure and network processes. The chapters in this edited volume provide a self-contained, exhaustive account of the theoretical and methodological underpinnings of ERGMs, including models for univariate, multivariate, bipartite, longitudinal and social-influence type ERGMs. Each method is applied in individual case studies illustrating how social science theories may be examined empirically using ERGMs. The authors supply the reader with sufficient detail to specify ERGMs, fit them to data with any of the available software packages and interpret the results.
