

Computational Social Sciences

Computational Social Sciences

A series of authored and edited monographs that utilize quantitative and computational methods to model, analyze and interpret large-scale social phenomena. Titles within the series contain methods and practices that test and develop theories of complex social processes through bottom-up modeling of social interactions. Of particular interest is the study of the co-evolution of modern communication technology and social behavior and norms, in connection with emerging issues such as trust, risk, security and privacy in novel socio-technical environments.

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Sara McComb • Deanna Kennedy

Computational Methods to Examine Team Communication

When and How to Change the Conversation

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To Abhi and Kip

Acknowledgments

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Deanna Kennedy is an associate professor in the School of Business at the University of Washington Bothell. She received her PhD in Management Science from the Isenberg School of Management, University of Massachusetts Amherst. Her research interests are in using communication and other processes to advance group and team effectiveness for those teams engaged in supply chain, operations, and project management. Her work identified team process shift points within communication where there is a potential for intervention strategies to help teams work toward an optimal benchmark. She is a proponent of computational methods including simulation and optimization that can uncover new and productive areas for inquiry.

List of Abbreviations

AIC	Akaike Information Criterion
ANOVA	Analysis of Variance
ARIMA	Auto Regressive Integrated Moving Average
CAR	Consultation Analysis Record
CoPrA	Collaboration Process Analysis
DDV	Dynamic Dummy Variables
DET	Determinism
ENTR	Entropy
LSA	Latent Semantic Analysis
M	Mean
MANCOVA	Analysis of Covariance
Q1	Quartile 1
Q2	Quartile 2
Q3	Quartile 3
Q4	Quartile 4
RQ	Research Question
RQA	Recurrence Quantification Analysis
RR	Recurrence Rate
SD	Standard Deviation
T1	Performance Episode 1
T2	Performance Episode 2
UAV	Unmanned Aerial Vehicle

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