## ARS'23 Ninth International Workshop on Social Network Analysis



Contribution ID: 5

Type: Contribution in Organized Session

## Team Satisfaction and Network Integration: A Longitudinal Case Study of Two NSF Funded Science Teams with Varying Levels of Success

mercoledì 3 maggio 2023 11:30 (15)

As the world becomes more complex, interdisciplinary team-based research is required to understand wicked problems such as climate change. Yet despite the extensive focus on the essential scientific competencies to undertake these ambitious research projects, educational institutions overlook the importance of collaboration skills. In this paper, we use social network, quantitative, and qualitative data to evaluate team satisfaction, network integration, and productivity of two National Science Foundation funded teams over a two-year time period. One team performed well and continued to grow and integrate, while also reporting high levels of satisfaction and productivity. However, the other team remained similar in size and level of network integration. Though the leaders of this team who are situated in the core of the network reported high levels of satisfaction, the team members in the periphery were dissatisfied. Overall, the team was less productive than the first. As both teams were led by established scientists, the difference in team satisfaction, network integration, and productivity can be explained by the varying levels of collaboration skills. We argue that effective team science training as well as collaborative leadership structures explain the trajectories of the two teams. Given the importance of collaboration skills in scientific activities, more team science training is necessary to prepare the next generation scholars for interdisciplinary careers.

## Keywords

Science of Team Science, Collaborative Leadership, Social Network Analysis, Scientific Outcomes, Team Satisfaction

## **Topics**

Organizational networks

Primary author(s): MOOK, Anne (Colorado State University)

Presenter(s): MOOK, Anne (Colorado State University)

Session Classification: Networks and Behavior in Organizations

Track Classification: Networks and Behavior in Organizations