

Organizational Theory for Implementation Science Workgroup Proposal



*Cancer Prevention and Control Research Network
Annual Meeting*

January 21-22nd, 2020

OTIS Workgroup



Goal

To develop a framework of implementation determinants and strategies derived from organizational theories

OTIS Background

1

We developed and distributed a Qualtrics survey to scholars with expertise in organizational and/or implementation science

2

Identified 12 relevant organizational theories, as well as texts describing their constructs and illustrating their applications

3

Those texts were used to independently abstract theory constructs, and abstractors met to reconcile findings

Past OTIS Activities

Overview	
Social, technical, and organizational subsystems are interrelated parts of one system. Dynamics and mutual influences exist among the three subsystems, giving rise to the system.	
Example Application to Implementation Science	
McDonald, K. M., Su, G., Lisker, S., Patterson, E. S., & Sarkar, U. (2017). Implementation science for ambulatory care safety: a novel method to develop context-sensitive interventions to reduce quality gaps in monitoring high-risk patients. <i>Implementation Science</i> , 12(1), 79.	
Westbrook, J. I., Braithwaite, J., Georgiou, A., Ampt, A., Creswick, N., Coiera, E., & Iedema, R. (2007). Multimethod evaluation of information and communication technologies in health in the context of wicked problems and sociotechnical theory. <i>Journal of the American Medical Informatics Association</i> , 14(6), 746-755.	
Construct	Definition
External subsystems	Outside forces and influences on an organization (e.g., stakeholders; regulations)
Social subsystems	Attributes of people (i.e., skills, attitudes, concerns, expectation, and values); relationships among people; reward systems; and authority structure
Technical subsystems	Technologies, techniques, tasks performance, methods and work setting; features include data cleansing and migration, features and functionalities of application, adaptability and flexibility or new system, system benefits, usability, stability
Organizational subsystems	Infrastructure, leadership and management, resources, teamwork and communication, organizational readiness for change, organizational context
Interdependence	The interaction among social subsystems, technical subsystems, and organizational subsystems
Propositions	
1. As subsystems are individually optimized and mutually aligned, organizational performance increases.	
2. The successful adoption of new technology depends on optimizing and aligning subsystems.	
Potential Relevance to Implementation Science	
1. Implementation may be facilitated by optimizing individual subsystems:	

Extracted constructs from organizational theories, consolidated into simplified format, and validated with experts in organizational theory and workgroup members.

Current OTIS Activities

Concept mapping: ~25 org and implementation science scholars will sort constructs from organization theories into conceptual domains and rate constructs' importance and relevance to implementation.



OTIS framework

To be completed by mid-April

Future OTIS Activities

1

Develop deliverables:

- Theories at a Glance white paper
- Propositions from theories
- OTIS framework

2

Test and refine tools using human-centered design.

To be completed in the next 6-9 months

Diversity, Equity, and Inclusion

Assessing organization theories through the lens of DEI:

- What does that look like?
- How do we evaluate this practically?
- What will the deliverables be?
- Who will lead this?
- How does this feed back into CPCRNC and its efforts?
- What are the implications for what we produce?

Discussion