

# The Importance of Theory in Health Services Research

Suman Budhwani, Kaileah McKellar, Kristen Pitzul, Juliana Yi  
Institute of Health Policy, Management, and Evaluation, University of Toronto

## Background

### Purpose

The purpose of this study is to highlight the importance of theory throughout each stage of the research process and promote an understanding of how research and evaluations can be linked to and driven by theoretical frameworks.

### What do we Mean by Theory?

According to Bacharach (1989), theory is a “statement of relations among concepts within a set of boundary assumptions and constraints.” It is a linguistic device used to organize and to communicate observations of a complex empirical world. Theory is intended to answer questions of how, when, and why. It consists of a system of variables and constructs: variables are related to each other by hypothesis and constructs are related to each other by propositions. Assumptions regarding values, time, and space bind a theory[1].

### Why Use Theory?

Using theory to inform research is a well-known verse heard by professors and graduate students alike. However, in the face of limited timelines and constrained budgets, theory is often the first to be discarded in favour of more “meaningful” endeavors. This is particularly common when theory is often thought of as an abstract phenomenon rather than the fundamental foundation in which research designs and methods are based upon. It remains an integral component of all academic research.

## The role of theory throughout the research process

### Research Question and Hypothesis

In a proposed study that aims to explore the use of evidence in health technology assessments, theory is used to generate research questions intended for investigation. It adopts three perspectives on organisational decision-making in which evidence is incorporated into decisions[2]:

#### **Functionalist Perspective:**

**Theory:** Mintzberg, Raisinghani and Theoret (1976): Decision-making consists of three phases: identification, development and selection[3]. **Research Question:** To what extent do decisions made by an HTA committee follow a linear path?

#### **Political Perspective:**

**Theory:** Langley (1989, 1990): 4 main motives behind formal analysis: information, communication, direction & control, symbolic[4,5]. **Research Question:** Do politics and interests play a role in gathering additional information in order for decision makers to persuade each other and thereby further push the norms of rational decision making?

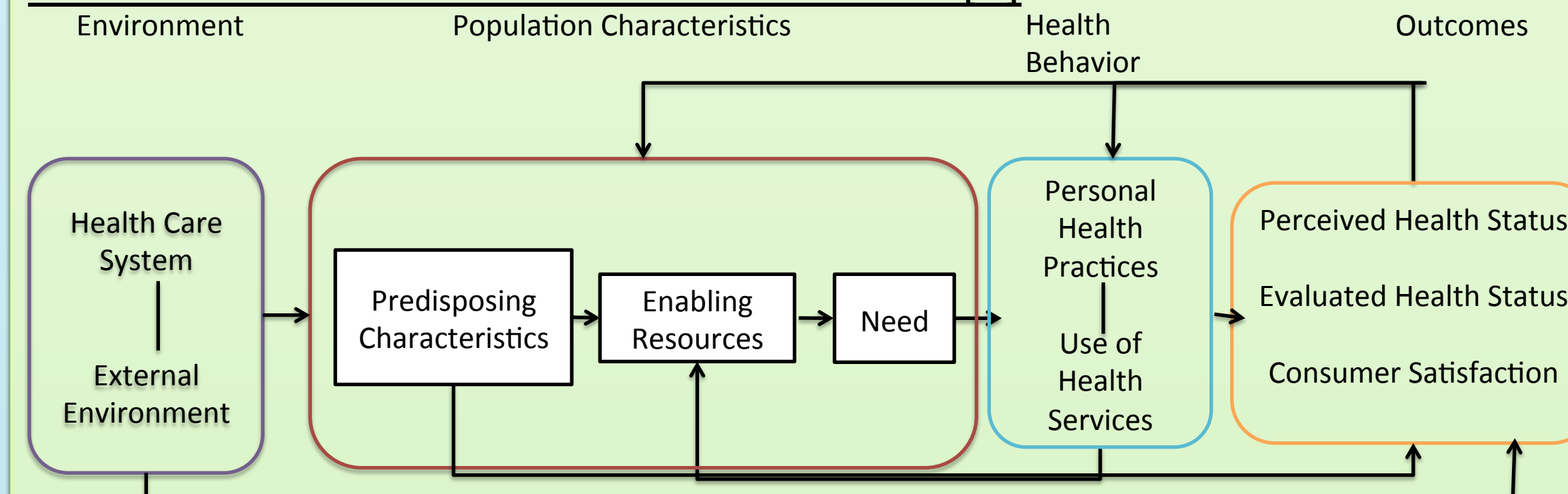
#### **Symbolic Perspective:**

**Theory:** Feldman & March (1981): Norms of rationality[6]. **Research Question:** How, when, and why are rational procedures (formal analysis, information gathering, etc) used in organization decisions?

### Overall Approach to Study Design

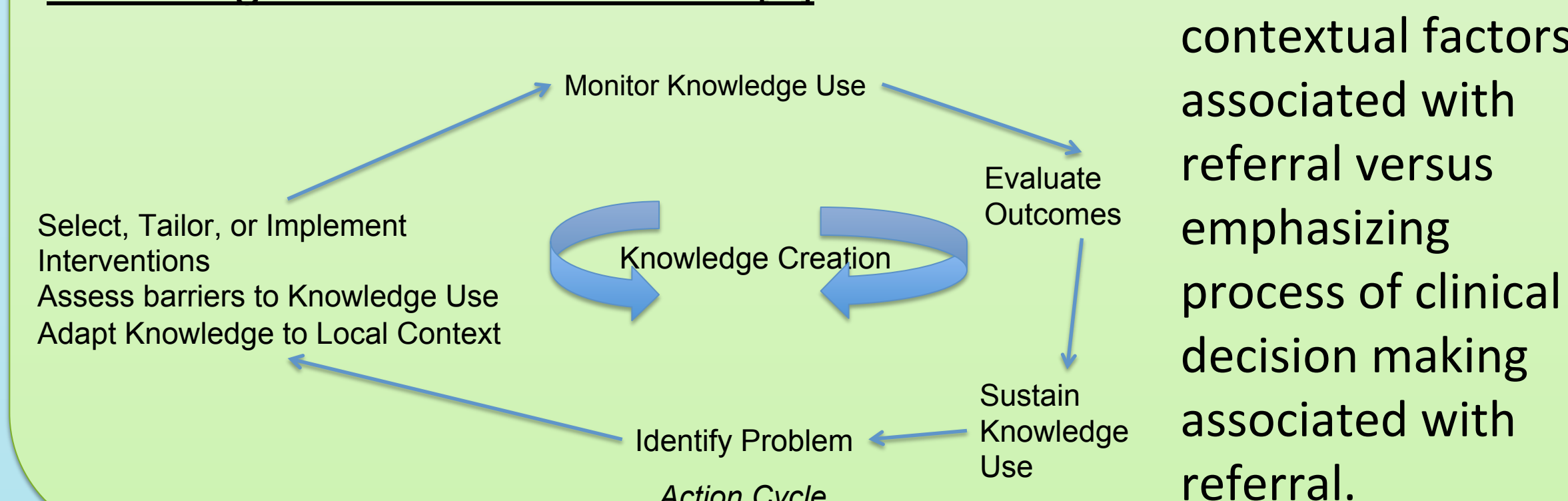
The overall approach to answering a given research question can vary greatly by the theoretical framework chosen, especially when comparing different areas of interest within health services research. For example: **Research Question:** What variables should be included in an objective triage tool for patients referred from acute care institutions to inpatient rehabilitation?

#### **Anderson’s Model of Healthcare Utilization[7]**



vs.

#### **Knowledge to Action Framework[8]**



Emphasizing patient and contextual factors associated with referral versus emphasizing process of clinical decision making associated with referral.

### Measurement in Intervention Research

#### **Moving from broad social network theory to program theory**

There are multiple levels of social network theory. At the *deep layer*, social systems are networks through which resources (e.g. information) flow, and actions are coordinated. The Strength of Weak Ties Theory is a *surface layer theory*, where nodes with more ties have greater exposure to resources[9].

Theories from the literature can be matched with program goals and objectives to build micro-level theories of how the objectives can be achieved by the program resources. The figure below outlines a simple idea that the characteristics of the network and a member’s position within the network will affect the degree of which that member is influenced by the network.

#### **Theory Testing**

Once a theory has been developed, measures are assigned to each construct within the program theory.

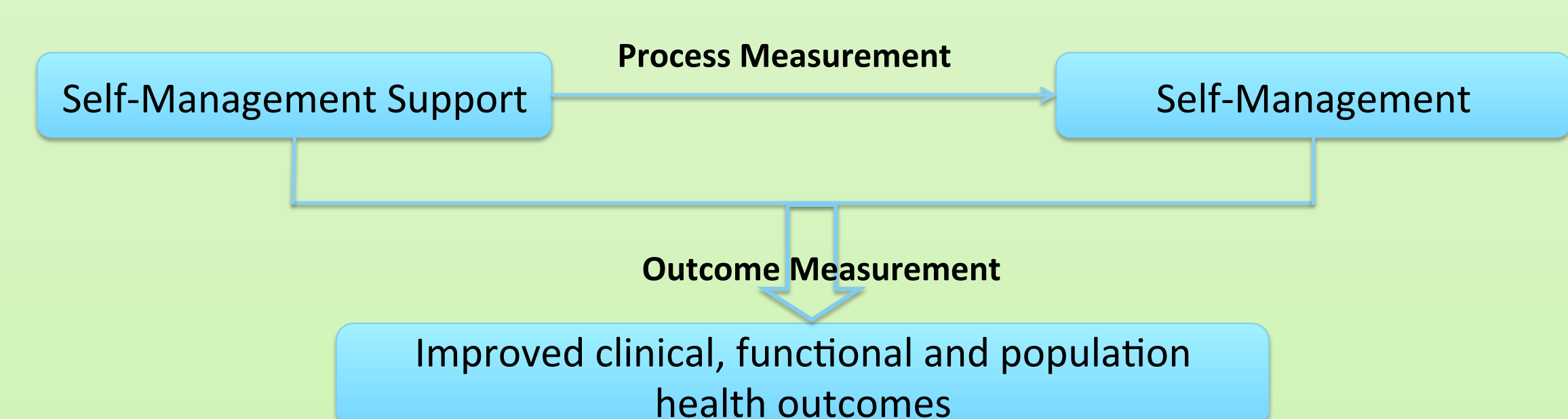
Program Theory	Network structural	Members' network position	Mechanism	Outcome (influenced members)
Measures	• Size • Density • Reciprocity	• Degree • Closeness • Betweenness	Explore network, positioning, influences, changes	Influence on members re: practical guidance, learning approach
Data Source	Network survey	Network survey	Member interviews	Network Survey, member interviews
Analysis	Social network analysis	Social network analysis	Grounded theory	Statistical models, grounded theory

### Practical Contributions

Theories can be used to solve real world problems as they enable users to understand the assumptions behind their research through their choice of theory and/or conceptual framework.

One example of this is theory of change logic models, which outline the theoretical reasoning behind the chosen and implemented components of a program[10] (Kellogg Foundation, 2004). Such logic models assist service providers in the planning, implementation, and evaluation of their program.

Another example is through the authors’ thesis research which seeks to identify the key areas of performance measurement within the practice of self-management in end-of-life patients. A conceptual framework helps to outline where the key points of measurement should occur, thereby assisting policymakers in the development of quality improvement indicators..



## Conclusion

### Challenges

- Developing a theory requires significant resources
- Finding an appropriate theory for your study is often difficult
- Some believe that theorizing is purely academic and creates discordance between decision makers and researchers
- Where a theory is placed in a study and the engagement with theory may, at times, be complicated when a study utilizes both inductive and deductive approaches for inquiry.

### Policy Relevance

Theories increase the validity of research studies by providing the foundation on which research can be conducted. By strengthening each stage of the research process through the use of theories, evidence-informed policy making can be achieved- one of the ultimate goals of health services research.

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### Acknowledgements

Suman Budhwani and Kristen Pitzul are funded by the Health Systems Performance Research Network (HSPRN). Juliana Yi and Kristen Pitzul are funded by the University of Toronto’s School of Graduate Studies.

