

CRICH

CENTRE FOR RESEARCH ON INNER CITY HEALTH



Realist Multiple Explanatory Case Studies:

Strengthening the implementation of Health in All Policies

WORKSHOP BOOKLET

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Biographies

Ketan Shankardass is an Assistant Professor at Wilfrid Laurier University and Associate Scientist at CRICH. He uses social epidemiology to support innovative solutions for more equitable health systems, including the use of realist methods to study the implementation of intersectoral approaches to health equity by governments (e.g., Health in All Policies initiatives and the use of Health Impact Assessment tools).

Patricia O’Campo holds the Chair in Intersectoral Solutions in Urban Health and is Director of the Centre for Research on Inner City Health and Professor at the Dalla Lana School of Public Health at the University of Toronto. She is a social epidemiologist who has been working on the evaluation of interventions to reduce inequalities for over 20 years. Her research has several foci including neighbourhoods and wellbeing, youth and intimate partner violence, and housing and health.

Carles Muntaner is Professor of Nursing, Public Health and Psychiatry at the University of Toronto, Associate Researcher at CRICH and adjunct professor at Johns Hopkins University School of Public Health. Since the nineties, Dr. Muntaner has conducted extensive research, relying mostly on primary data collection studies among workers with a focus on social inequalities in health. Dr Muntaner contributed to advancing realist epistemology in social epidemiology. He participated in the “Marmot Review” and the review on social determinants and the health divide in the WHO European region.

Emilie Renahy is a postdoctoral fellow at CRICH. As a social epidemiologist, she has expertise in advanced quantitative methods and social inequalities in health. Due to her interest in understanding how macro-social determinants of health work, she has also developed expertise in using realist methods to evaluate interventions, including the implementation of public policies.

Introduction



“The **Adelaide Statement on Health in All Policies** is to engage leaders and policy-makers at all levels of government—local, regional, national and international. It emphasizes that government objectives are best achieved when all sectors include health and well-being as a key component of policy development. This is because the causes of health and well-being lie outside the health sector and are socially and economically formed. Although many sectors already contribute to better health, significant gaps still exist.”

(Adelaide Statement on Health in All Policies. WHO, Government of South Australia, Adelaide 2010)

For the purposes of our project, cases of “Health in All Policies” involve national or provincial/state level governments working to improve health equity with the following characteristics:

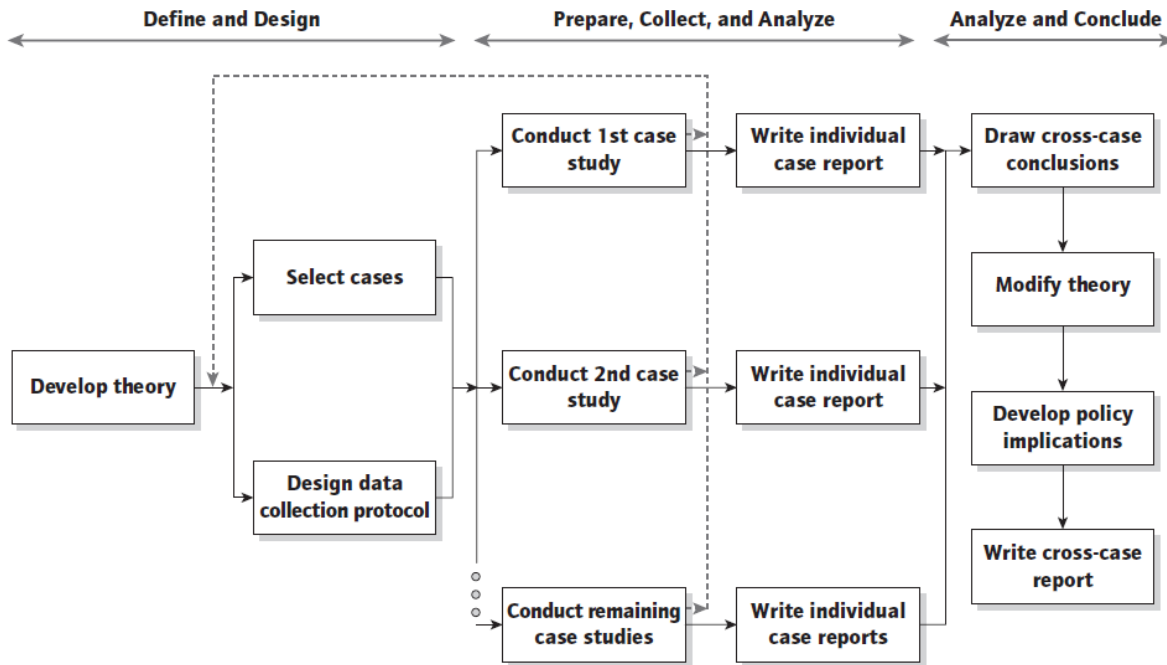
1. A pattern of relationships among government sectors (across geographic levels of government) described by either integration, coordination or cooperation in addressing inequities through specific entry points (i.e., more than mere information exchange);
2. A universal or mixed approach to actions addressing health equity (i.e., more than a merely targeted approach);
3. Action that addresses midstream or upstream social determinants of health (i.e., more than action on merely downstream determinants);
4. An intersectoral vision of health (i.e. policies from non-health sectors shape population health and equity);
5. A mechanism for action to move beyond merely describing health equity problems (e.g. needs/impact assessment) by responding to problems of inequity (i.e., reduce health inequity or promoting health equity).

Realism and other philosophies of science

	Ontologic	Epistemological	Methodologic	Axiological	Moral
Scientific Realism	The external world exists independently of our sensory experience, ideation, and volition.	The world can be known yet partially and progressively.	The best way to understand the world is the scientific method.	There are objective values.	There are true moral precepts.
Empiricism/ Positivism	The world is a set of experiences.	The only source of knowledge is experience.	The best way to understand the world is the scientific method.	Value neutral	Neutral ethics
Antirealism/ Subjectivism/ Idealism	The world is a creation of the observer. There is no objective reality.	All we can know is subjective. No difference between fiction and fact.	The scientific method is not superior to other forms of knowledge (intuition, personal experience, mysticism).	Values are subjective.	Moral relativism

Multiple explanatory case study methodology

Multiple case study flowchart



SOURCE: COSMOS Corporation.

(Yin RK. *Case study research: design and methods*. 5th ed. Thousand Oaks, CA: Sage Publications; 2014)

Methodology (cont'd)

Detailed steps of realist multiple explanatory case study research

1. Preparation of the multiple case study
 - 1.1. Selection and training of the team
 - 1.2. Theory development (*Skills building session 1*)
 - 1.3. Cases selection
 - 1.4. Protocol for single case studies
 - 1.4.1. Strategies for ensuring rigor (Triangulation, Quality, Case study database)
 - 1.4.2. Initial literature review and case description
 - 1.4.3. Interview data preparation (*Skills building session 1*)
2. Single case studies: Data collection and analyses
 - 2.1. Data collection
 - 2.1.1. Interview data collection
 - 2.1.2. Systematic literature review
 - 2.1.3. Collection of other data sources
 - 2.2. Case study data coding and analysis (*Skills building session 2*)
 - 2.2.1. How to ensure rigor while coding and analyzing
 - 2.2.2. Summary of evidence
 - 2.3. Produce single case study reports
3. Cross case analyses and conclusions
 - 3.1. Cross-case analyses
 - 3.2. Summary of evidence
 - 3.3. Initial theory modification
 - 3.4. Development of policy implications and translation of results into successful practices
 - 3.5. Cross-case report

Methodology (cont'd)

Strategies for ensuring rigor

- Overcoming 'Stigma'

Historically, case studies have been viewed as a weak approach due to perceptions of:

- **Lack of rigor:** Older case studies were not transparent enough about methodology and systematic use of protocols. We remedy this by drawing up & adhering to a clear protocol, and establishing complete single and multi-case databases of evidence that facilitate replication of findings.
- **Generalizing from case studies:** There is a perception that one cannot 'generalize' from single cases and therefore, they are an inferior method (versus population based quantitative studies for instance). Generalizing explanations and theory (e.g., as in realist approaches) in a rigorous manner are possible with the right case study design and analysis process.

- Multiple sources of evidence

- Documents (e.g., newspapers; articles, books)
- Archival records (e.g., government reports, parliamentary proceedings/records)
- Interviews (e.g., open-ended conversations with key informants)
- Focus groups (e.g., group interviews with key stakeholders)

- Judging quality

- Construct validity: Identifying correct operational measures for concepts in the study
- Internal validity: Seeking to establish a causal relationship (distinct from spurious relationships)
- External validity: Identifying the domain to which the study's findings can be generalized
- Reliability: Demonstrating that the operations of a study can be repeated

- Creating case study database

- Databases, separate from case reports, enable 'reviewers' to inspect raw data if necessary
- Why this is important?
 - You'll be working with many files – having everything in one place simplifies your analysis
 - Improves transparency and replicability (Yin)
- How to do it
 - Keep all literature references in one place (EndNote) – simplifies paper-writing process
 - Single case analysis folder – all case content kept in individual case folders (i.e., interview transcripts, case description, case report, literature).
 - Set up a catalogue/numbering system for later referencing
 - Multiple case analysis folder – anything related to cross-case analysis
- How to maintain
 - One person maintains over time – avoids duplication and ensures no content is misfiled/lost
 - Keep most recent versions of files in main database folders – file name should have save date
 - Create ARCHIVE folder for any past work – you will likely need to refer to this folder frequently
- Ongoing maintenance is required to keep database up to date.

Methodology (cont'd)

Data analysis

- In general, getting a feel for your data is a good way to get started to begin to see patterns, anomalies from what was expected, and rich/thin themes.
- Some strategies recommended includes:
 - Putting information in arrays or matrices that have categories representing hypotheses/domains
 - Creating flow charts or ordering by chronology
 - Reading and writing memos to yourself/team
 - Ordering your data by proposition and 'richness'
- During these activities you might try:
 - Finding patterns that emerge from the data
 - Developing a case description by highlighting key themes
 - Relying on theoretical propositions by tracing the evidence found in your data (e.g., you've organized your data collection efforts by propositions so just start to summarize)
 - Focusing on pursuing rival explanations
- The data collection efforts should not just focus on 'supporting the main proposition' but must include collecting evidence to support the rival or alternative explanations. The more you try to 'prove'/support the rival (and fail) while finding support for the main, the stronger your evidence is for the main proposition

Notes:

Skill Building Session One: *Creating Propositions*

Theories Overview

1. Theory: A set of abstract statements about reality.
2. Proposition: One abstract statement within a theory.
Example: "The greater the human capital investment, the greater the life chances."
3. Hypothesis: A specific case of the proposition.
Example: "The greater the formal education, the greater the income."
4. Operational Definition: The description of how each concept will be measured.
Example: "The greater the years of formal schooling, the greater the total household income before taxes in 2010."

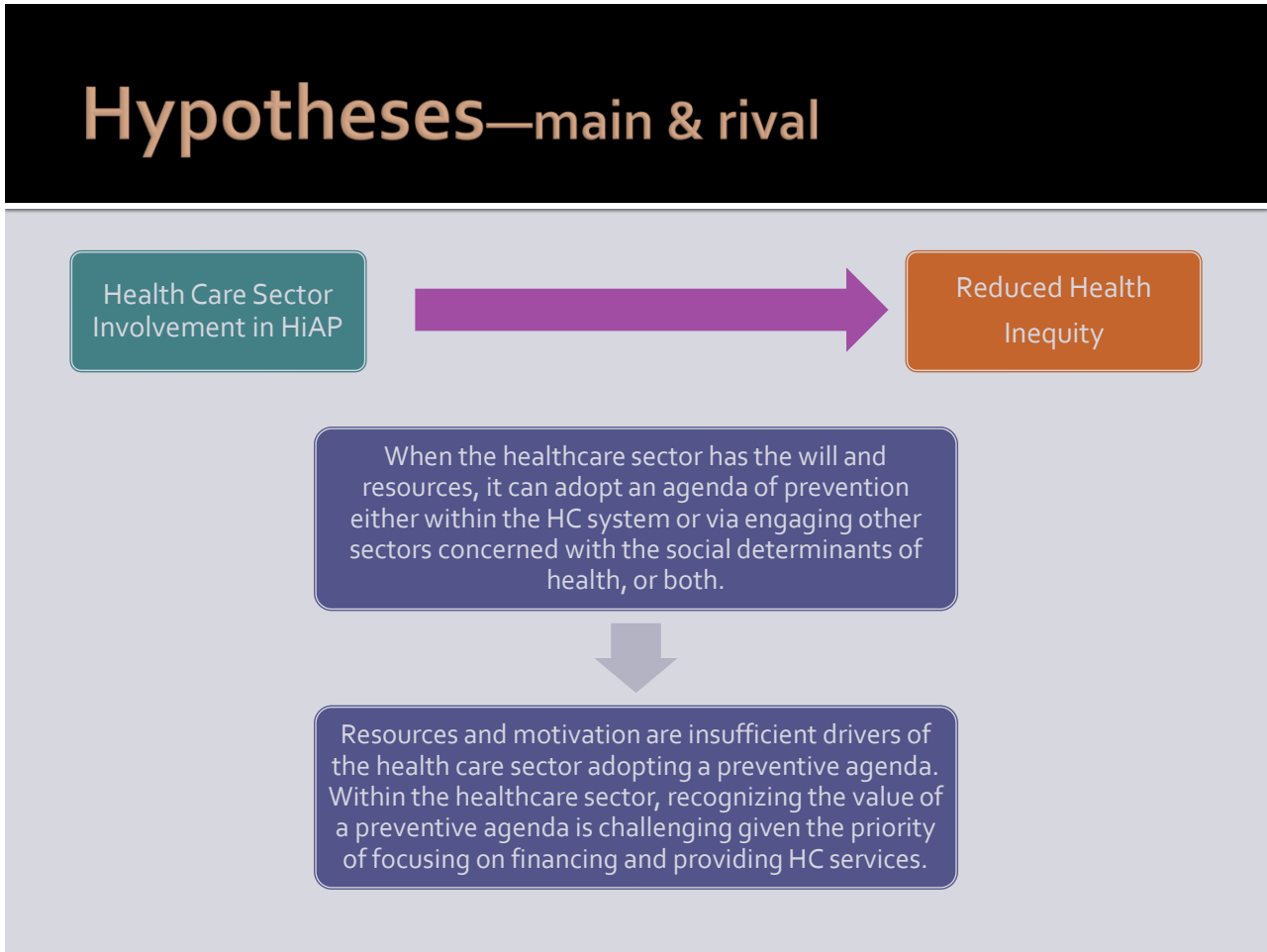
Statement	Independent Variable	Dependent Variable
Proposition (abstract)	Human capital investment	Life chances
Hypothesis (concrete)	Formal education	Income
Operational definition, quantitative)	Years of formal schooling	Total household income before taxes in 2010

(Sociology 401: Primer in Theory Construction, 10/6/2014 <http://www.soc.iastate.edu/sapp/soc401theory.html>)

Notes:

Skill Building Session One (cont'd)

Proposition and Design of Data Collection Tools



Notes:

Skill Building Session One (cont'd)

Your Turn! (*Exercise Sheet*)

1. *How does the use of food diaries increase weight loss?*

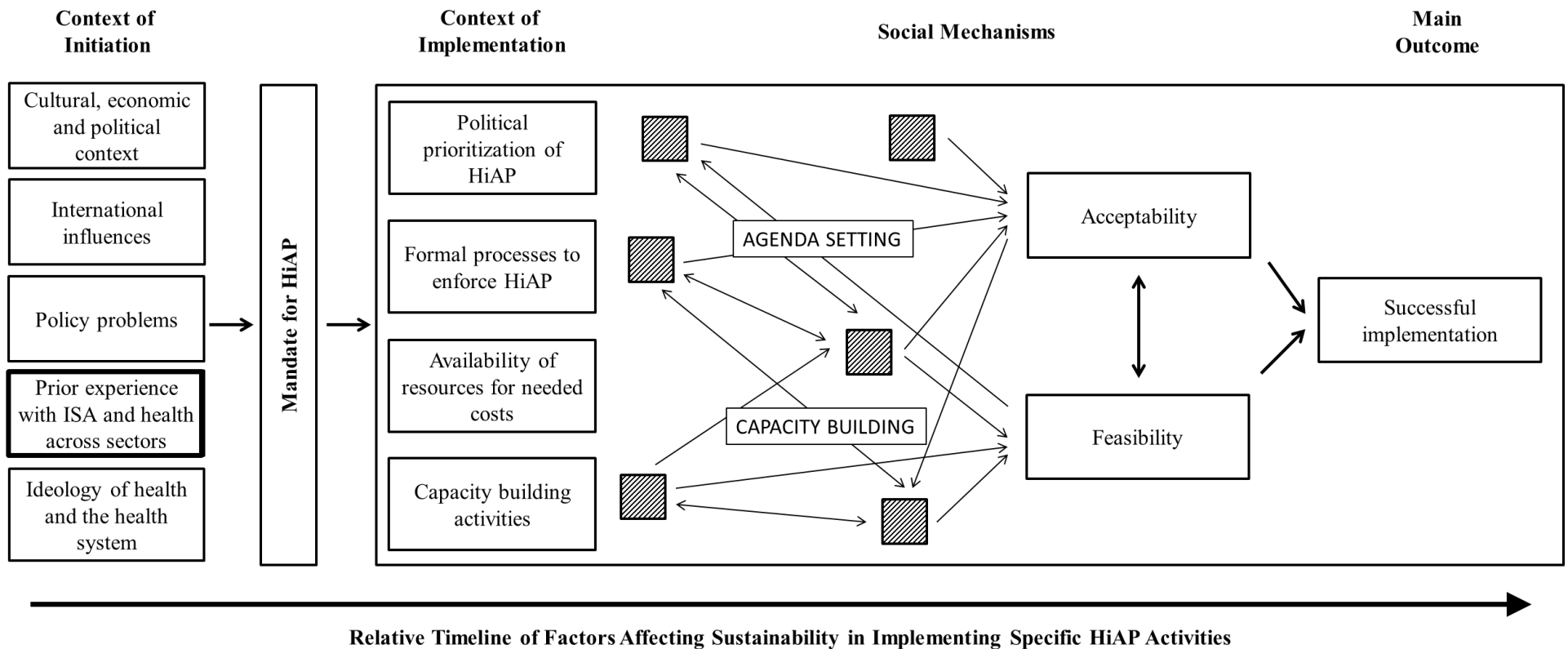
2. *How do parks and green space reduce mental health problems?*

3. *Your own example.*

Skill Building Session Two

Conceptual framework on the implementation of HiAP:

A heuristic for articulating context-mechanism-outcome patterns configurations

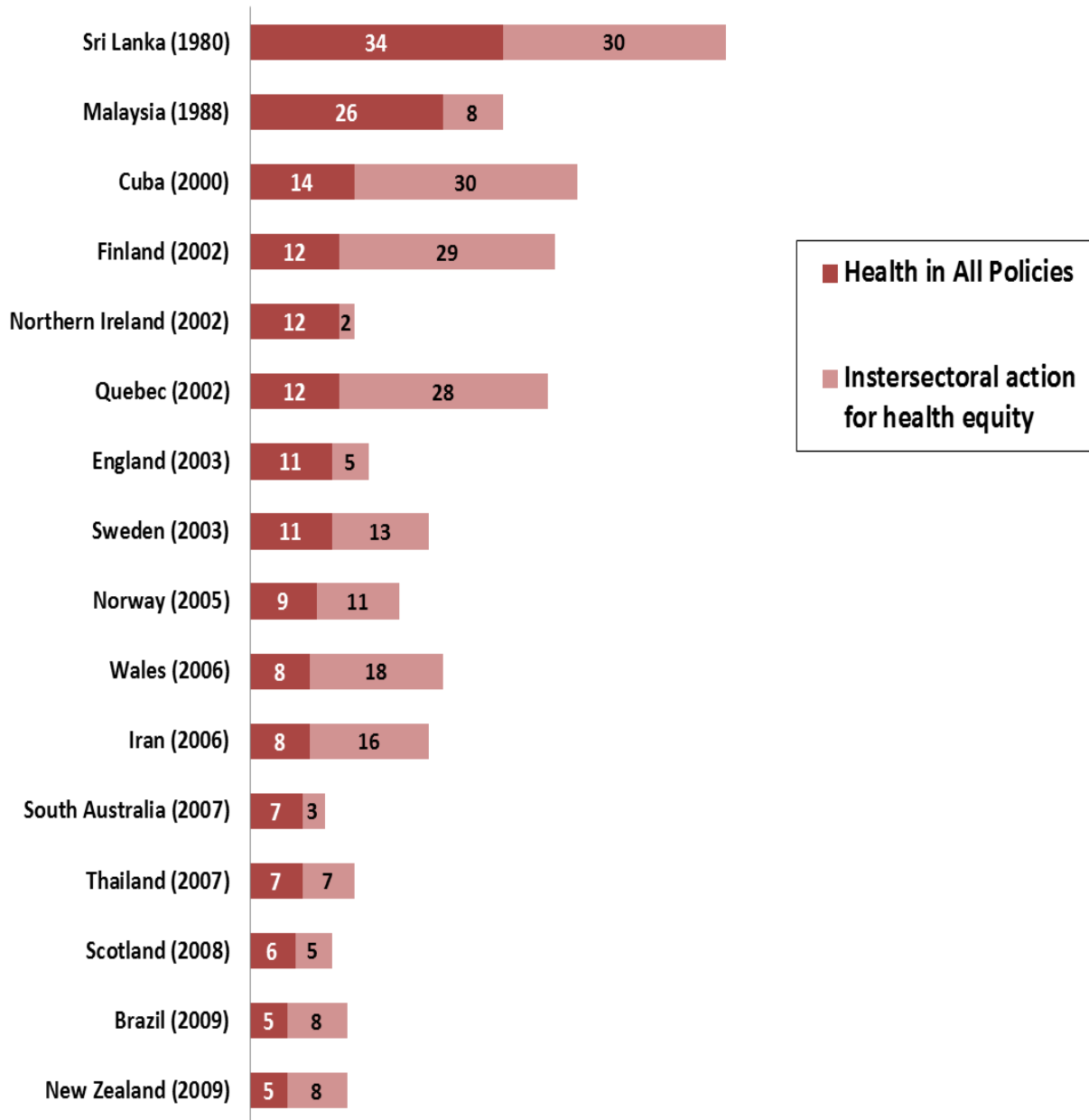


(Adapted from Shankardass et al, 2014)

Skill Building Session Two (cont'd)

RESEARCH THEME: *Relevance of prior experience with intersectoral action (ISA) for the implementation of HiAP*

Years of HiAP and prior ISA for health equity, by case setting (2014)



Skill Building Session Two (cont'd)

Initial hypotheses explaining how prior experience with ISA influences the mechanisms leading to buy-in and participation into HiAP

Hypothesis 1: Prior negative experiences with ISA or tools for ISA (e.g. ineffective or time and resource consuming experiences) affect the level of motivation to further pursue ISA and ultimately act as a deterrent to the perceived acceptability and willingness to buy-in and participate into HiAP.

Hypothesis 2: In the context of prior positive experience with ISA (e.g. for health, sustainability, or other social outcome), awareness raising activities (i.e. provide an opportunity to learn about HiAP) ensure a greater willingness to buy-in and participate into HiAP because actors have greater and existing knowledge with which they can understand the need for HiAP.

Hypothesis 3: In the context of prior positive experience with tools for implementing ISA (e.g. EIA), capacity building activities (i.e. provide an opportunity to practice and use HIA) ensure a greater willingness to buy-in and apply tools for HiAP implementation (e.g., HIA) because of the recognition of existing expert capacity (i.e., perceived feasibility), which in turn increases the perceived acceptability of HiAP.

Skill Building Session Two (cont'd)

Key informant interview data relevant to prior experience theme

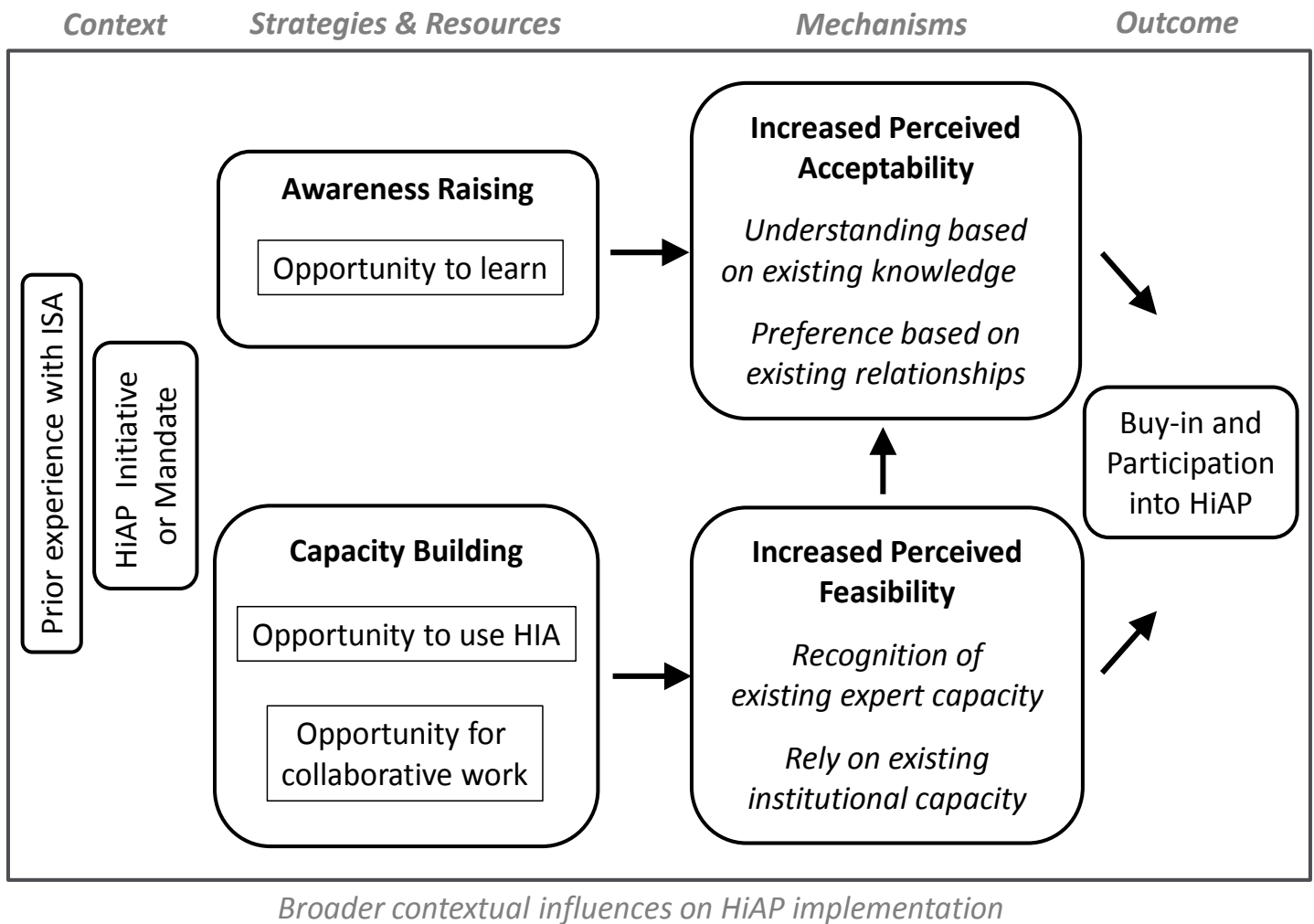
"On the whole, what is important to have in mind is that, when something new needs to be introduced, one needs to start from what is already in place and work within the mechanisms and processes that are already in place within that sector. Then, from that place, one must try to introduce a Public Health perspective with the goal of adding as little disturbance and new workload as possible. This, with the aim for the sector not to have the impression that something totally new is coming into the picture. For instance, with the "health impact assessments" (HKB, hälsa konsekvenser bedömningar), instead of suggesting to the environmental sector to write a specific report, the SNIPH suggested the sector to add additional information about health related social differences to an already existing evaluation process/report series."

- Key informant from Swedish public health sector

Notes:

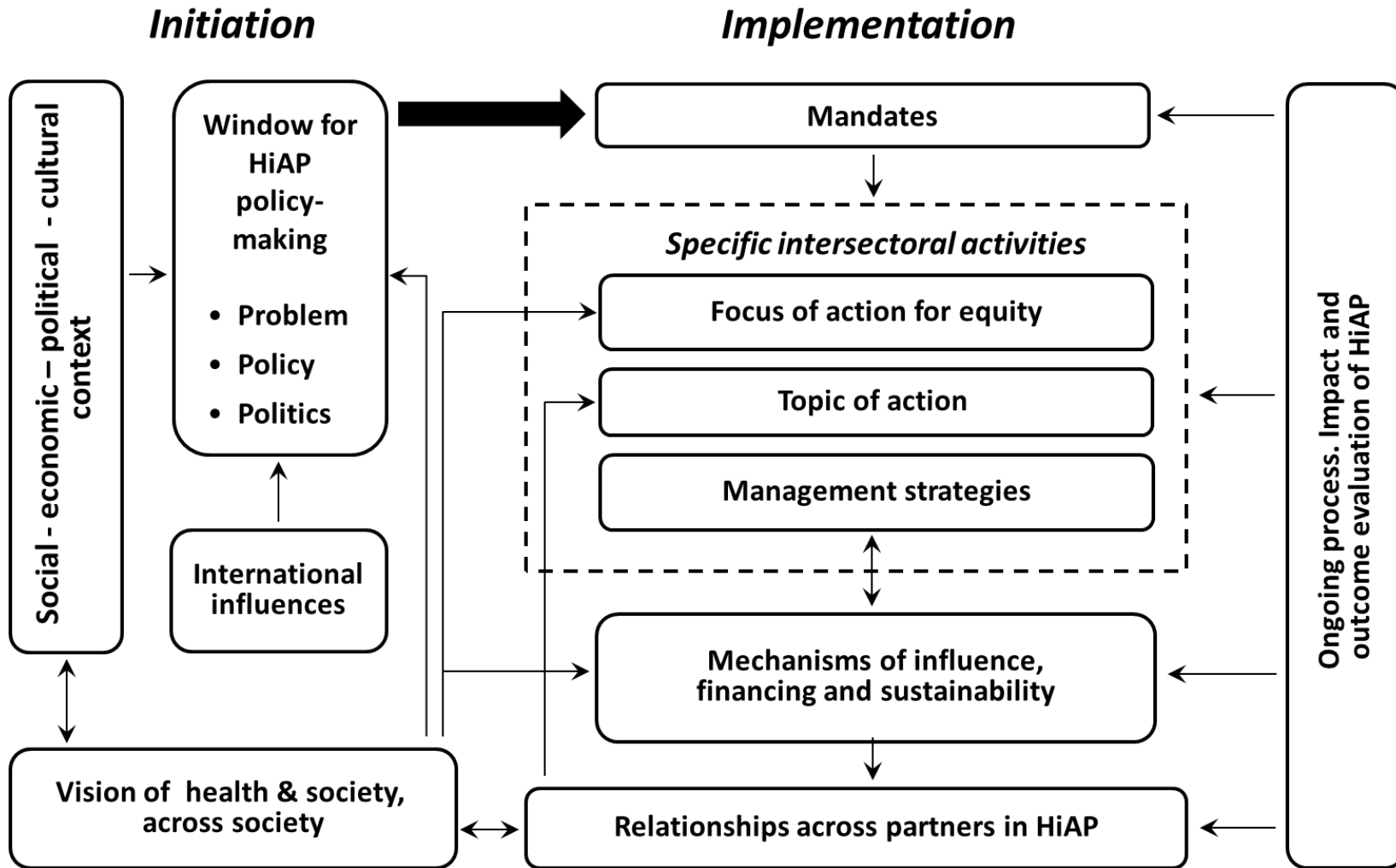
Skill Building Session Two (cont'd)

Refined conceptual framework for relevance of prior experience with ISA for HiAP implementation



Skill Building Session Two (cont'd)

Systems view of factors relevant to the implementation of HiAP



(Adapted from Shankardass et al 2011)

Discussion

Notes:

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