

Mind-Mapping Environmental Health (MIME): Multi-dimensional Perceptions, Representations and Knowledge in Collaborative Urban Governance

We describe a project proposal to the Academy of Finland on perceptions, representations and communication of urban environmental health and well-being, aiming at novel conceptualizations of environmental health within governance. The project builds a basis for extended international R&I focused on co-production of knowledge on sustainable cities.



Knowledge gaps

- The focus has been on qualities of the environment and of health in physical terms, or on perceptions disconnected from solutions (Finkel 2008, Assmuth et al. 2010).
- Studies of the links between urban ecosystems and human health have addressed specific aspects of the urban structure (Tyrväinen et al. 2014, Van den Berg & al. 2014).
- There is lacking consideration of multi-dimensional experiences and of differing conceptions of health, healthy environments and knowledge (McKenzie et al. 2014).

Research Questions

1. **What kind of perceptions** do people have **of health benefits and risks** in their urban environment? How do they **vary** among groups and settings?
2. **What valuations and world-views** are reflected in these perceptions?
3. How are **representations of environmental health shaped** and communicated? What development needs and opportunities can be discerned in these processes?
4. What role do **notions of knowledge** play in the context of urban planning? Specifically, what mental models help to conceptualize environmental health?

Methodological approaches

- **Literature and document studies** with *content and discourse analysis* (extended to meta-analysis)
- **Semi-structured interviews** with key actors (Greater Helsinki, Oslo, Berlin?)
- Interactive **net surveys and communication experiments** with experts, regulators and stakeholders.
- Comparing physical environmental qualities **recorded by Public Participatory GIS (PPGIS)** with data on perceptions (depending on funding)

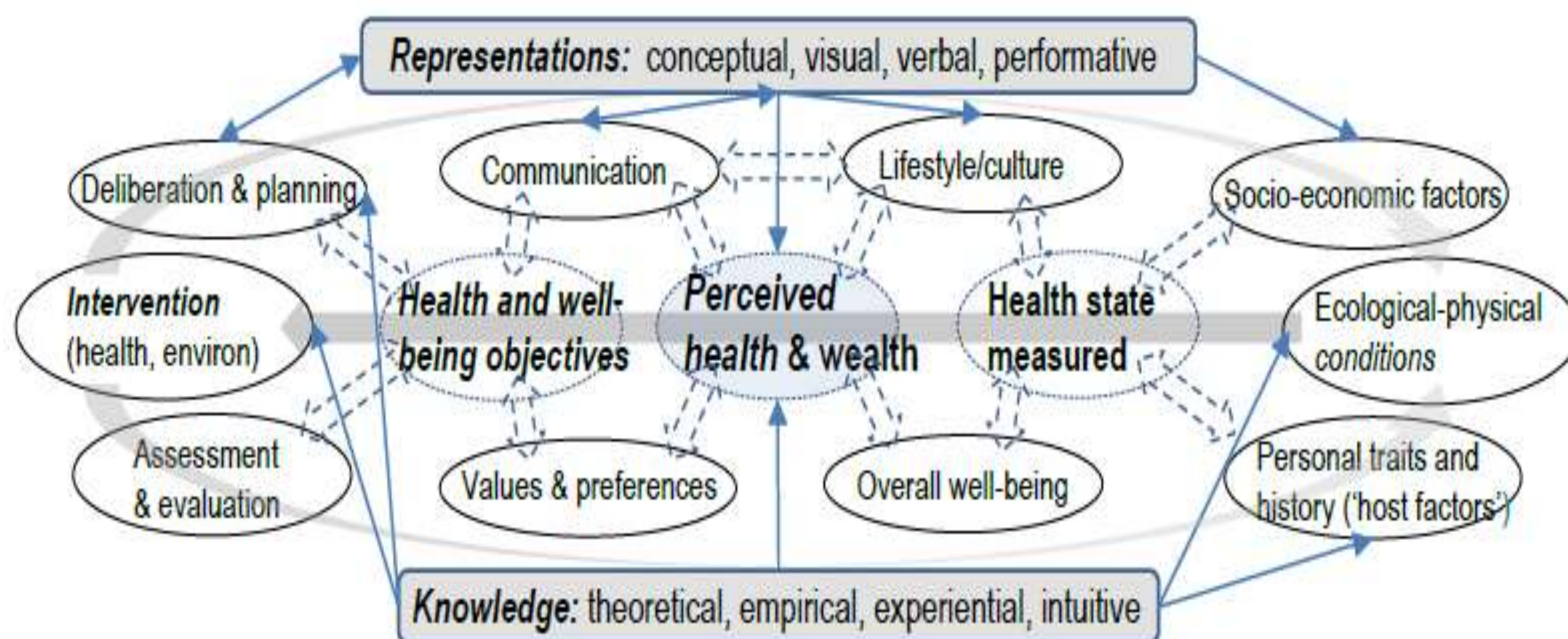


Fig. 1. A simple conceptual model of perceptions and representations of environmental health, their important formative factors including knowledge, and their influences on interventions.

References

- Assmuth T, Hildén M, Benighaus C. 2010. Integrated risk assessment and risk governance as socio-political phenomena: A synthetic view of the challenges. *Sci Total Environ.* 408, 3943–53.
- Faehnle M. 2014. *Collaborative planning of urban green infrastructure – need, quality, evaluation, and design.* Helsinki, Univ Helsinki Dept. Geosci. & Geogr. A26 (2014). PhD thesis. 53 p.
- Finkel A. Perceiving Others' Perceptions of Risk. Still a Task for Sisyphus. *Ann NY Acad Sci.* 1125,121–37.
- McKenzie L. et al. 2014. Understanding the use of ecosystem service knowledge in decision making: Lessons from international experiences of spatial planning. *Environ Planning C* 32, 320–40.
- Tyrväinen L. et al. 2014. The influence of urban green environments on stress relief measures: A field experiment. *J Environ Psychol.* 38, 1-9.
- Van den Berg et al. 2014. Evaluating restoration in urban green spaces: Does setting type make a difference? *Landscape & Urban Planning* 127, 173-81.