

The development of a model for QCA: experiences from the KNOW2ADAPT research project

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Contents: Steps to design a QCA research

See: Rihoux & Lobe, 2009

Before the ‘analytic moment’

1. Case selection
2. Gaining case knowledge
3. Defining the outcome of interest
4. Model specification: selection of conditions
5. Visualizing/synthesizing cases and models

The ‘analytic moment’: synthesis

6. Dichotomization: threshold-setting

1. Case selection

- Depends on research scope
 - Outcome of interest: learning about climate change adaptation in European cooperation projects
- Requires some ‘thick’ within-case knowledge
 - Own: project manager of an EU INTERREG project.
 - Other: expert interviews, discussions with colleagues who have experience with FP7 projects

1. Case selection (continued)

- Common background features vs. variation
 - Similar: subsidized under INTERREG or FP7, recently completed, theme (climate/water)
 - Variation: activities and outputs (research/practice/policy), duration, partners (number, organization type) and budget
- Unit of analysis – what is ‘a case’?
 - Data collection and analysis at the level of the project AND at the level of a project partner (with the same project as context for diverse project partners)

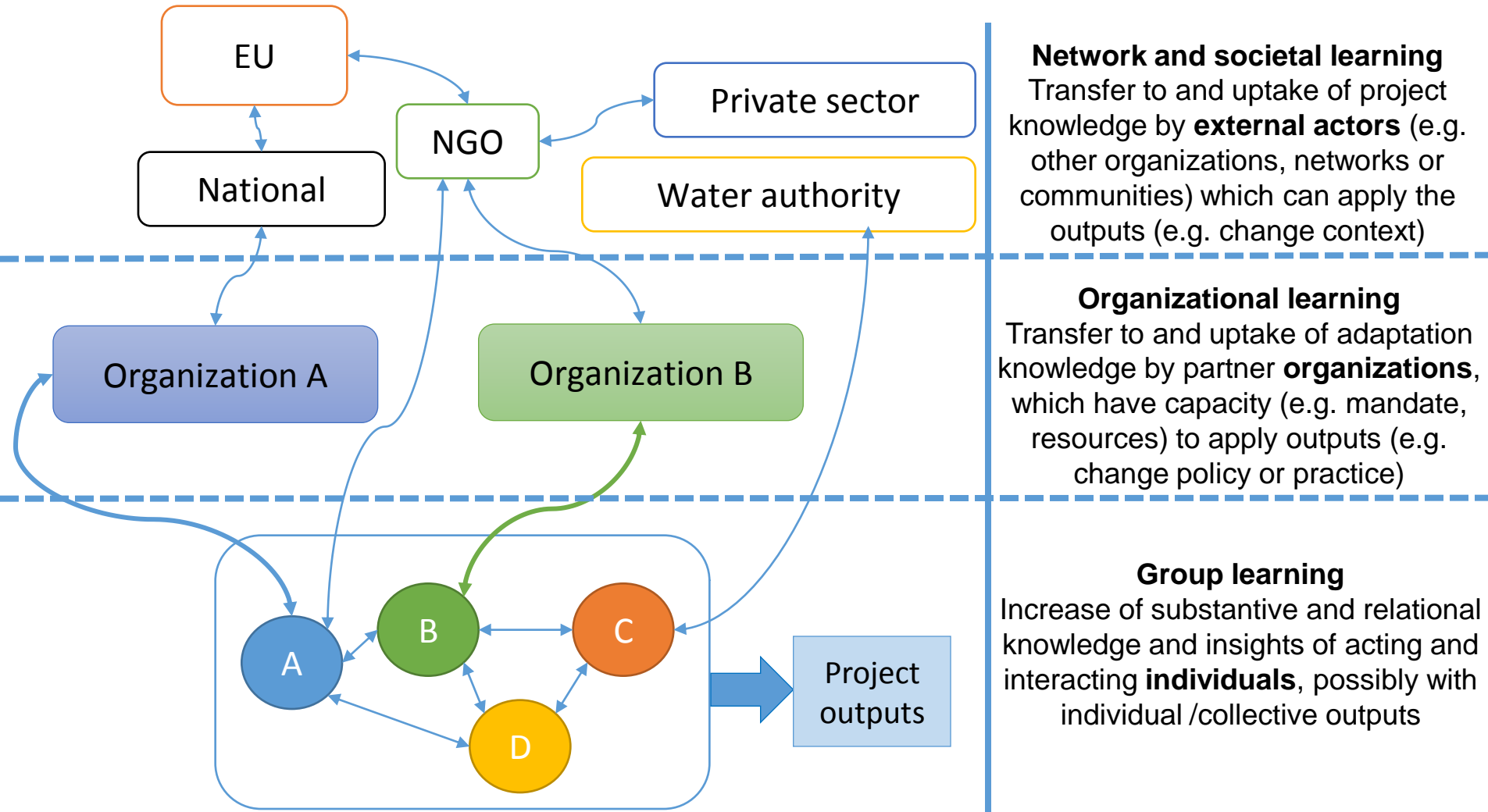
2. Gaining case knowledge

- How many cases and what data collection methods to be used (trade-off between width and depth). Also depends on level of case (macro, meso or micro).
 - Combination of meso-level (project) and micro-level (individual participants).
 - Collection of qualitative data (interviews with participants and document analysis) – rather in-depth for QCA.
 - Undecided as regards the exact number of projects (10-15?) and number of participants (3-5 per project, i.e. 30-75?)

3. Defining the outcome of interest

- Informed by cases and theories!
 - Multi-level perspective on learning (derived from the literature on social learning, studies on European projects, own experience) → led to 3 outcomes of interest! One of the outcomes was adjusted during pilot case study.
- Outcome(s) need to vary for cases
 - There may be a need to adjust how the outcomes are defined...

Multi-level perspective on learning



Network and societal learning
 Transfer to and uptake of project knowledge by **external actors** (e.g. other organizations, networks or communities) which can apply the outputs (e.g. change context)

Organizational learning
 Transfer to and uptake of adaptation knowledge by partner **organizations**, which have capacity (e.g. mandate, resources) to apply outputs (e.g. change policy or practice)

Group learning
 Increase of substantive and relational knowledge and insights of acting and interacting **individuals**, possibly with individual /collective outputs

4. Model specification: selection of conditions

- From where? Theory-driven (e.g. when testing theory) or case-driven (e.g. exploratory or building theory)
 - Testing whether existing studies and theories apply, informed by extensive literature review and case knowledge
- How many? Balance between number of cases and number of conditions.
 - 3 outcomes → 3 models (including 2-5 conditions, each of them with circa 3 indicators)
 - Maybe aggregate/separate some conditions later on

5. Visualizing/synthesizing cases and models

- ‘Synthetic case descriptions’ – i.e. timeline displaying changes in outcomes and conditions
 - No data over time but made a timeline of the interaction process (meetings, workshops etc.).
 - Prepared a table for every model synthesizing how cases score on indicators, conditions and outcomes (this requires going through the next step first)

6. Dichotomization: threshold-setting

- How to transform qualitative data into quantitative values? Informed judgement, theory- and case-driven
 - Development of a ‘scoring method’, i.e. matrix defining what kind of ‘case’ should be given what kind of “fuzzy” value (here: 0, 0.3, 0.7 or 1)
 - Scoring method may need to be adapted when cases do not vary sufficiently on outcomes...

Group learning: conditions and outcome (incl. indicators)

	Project	PP1	PP2	PP3	PP4	PP5	PP6
Participant properties	0.83	1	0.57	0.8	0.9	0.9	0.8
Ability	0.85	1	0.7	1	0.7	0.7	1
Motivation	0.78	1	0.3	0.7	1	1	0.7
Oppportunity	0.85	1	0.7	0.7	1	1	0.7
Consortium	0.9						
Balanced cohesiveness	1						
Balanced diversity	0.7						
Complementary knowledge	1						
Interaction process	0.8						
Interactions	1						
Activities	0.7						
Facilitation	0.7						
Group learning	0.75	0.7	1	0.7	0.7	0.7	0.7
Substantive	0.5	0.3	1	0.7	0.7	0.7	0.7
Relational	0.68	0.7	0.3	0.7	0.7	0.3	0.3

Organizational learning: conditions and outcome (incl. indicators)

	Project	PP1	PP2	PP3	PP4	PP5	PP6
Participant properties	0.63	0.7	0.57	0.43	0.8	0.57	0.7
Ability	0.7	0.7	0.7	0.7	0.7	0.7	0.7
Motivation	0.57	0.7	0.7	0.3	0.7	0.3	0.7
Opportunity	0.62	0.7	0.3	0.3	1	0.7	0.7
Partner organization properties	0.58	0.57	0.57	0.8	0.67	0.33	0.57
Prior related knowledge	0.68	0.7	0.7	1	1	0	0.7
Relevance project theme	0.75	0.7	0.7	0.7	0.7	0.7	1
Supportiveness org. context	0.32	0.3	0.3	0.7	0.3	0.3	0
Organizational learning	0.58	0.3	0.6	0.61	0.62	0.56	0.8
Transmit (weight 1)	0.27	0	0	0.3	1	0.3	0
Present (weight 2)	0.15	0.3	0	0	0.3	0	0.3
Interact (weight 3)	0.55	0.3	0.7	0.7	0.3	0.3	1
Adopt (weight 4)	0.68	0.3	0.7	0.7	0.7	0.7	1
Influence (weight 5)	0.75	0.7	0.7	0.7	0.7	0.7	1
Implement (weight 6)	0.58	0	0.7	0.7	0.7	0.7	0.7

Network and societal learning: conditions and outcomes (excl. indicators)

	Project	PP1	PP2	PP3	PP4	PP5	PP6
Participant properties	0.63	0.9	0.3	0.77	0.57	0.33	0.9
Strategic scoping	0.49	0.53	0.4	0.5	0.5	0.33	0.68
External actor properties	0.64	0.85	0.15	1	0.85	0.15	0.85
Communication strategy	0.43						
Project knowledge	0.3						
Network and societal learning	0.32	0.37	0.23	0.36	0.23	0.12	0.59



Thank you!

Questions? Suggestions? Comments?

Conditions relevant to learning

