Meta-analysis as a qualitative approach to case comparison

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case study “dilemma” in planning

The good:
Case studies produce rich, in-depth data
Ideal for investigating complex questions—well used method in planning research and practice

The bad:
Case studies often done in isolation
Qualitative research in particular suffers from a lack of “summing up” and synthesis; cases don’t learn from each other
Time-consuming research means replication is unlikely
It’s difficult to generalize from a single-case study, reducing potential for policy direction
Context matters
Synthesizing case study findings can be valuable in knowledge development (Sandelowski 1997, Dixon-Woods 2005) and building theories

Cross-case techniques (Miles and Huberman 1994) can be used to enhance generalizability, deepen understanding and explanation, construct larger narratives or general theories

  e.g. Anderson et al. (2002) found that only through systematic comparison was it possible to say anything definitive about the characteristics and types of cases they studied
  e.g. Baaijens and Nijkamp (2000) wrote that meta-analysis “is particularly suitable in cases where research outcomes are to be judged or compared (or even transferred to other situations), when there are no controlled conditions”

Can use completed case studies (a major advantage in planning), reducing time and expense
Meta-analysis is one approach to case comparison and synthesis that addresses some of the weaknesses of single-case studies, and can integrate different methods.

**Meta-matrices:** identifying commonalities and differences between cases (Miles and Huberman 1994)

Can integrate as few as 5 or as many as 25 cases (can be sub-grouped by type of case)

Can conduct case-oriented or variable-oriented analysis

Easy to use method, spreadsheet software (Excel or equivalent)

**Other methods:** narrative summary, thematic analysis, qualitative metasynthesis, content analysis (quantitative: rough set analysis, meta-regression, etc.)
TOD can be described as land use and transportation planning that makes walking, cycling, and transit use convenient and desirable, and that maximizes the efficiency of existing transit services by focusing development around transit stations, stops, and exchanges. TOD can be seen as part of a broader approach to urban development. Successful TOD can be defined as implementation of this type of development at a regional scale.
Phase 1 (2012-2013) meta analysis (meta-matrices, rough set analysis) to determine policies, actors, and institutions influential in implementation

Phase 2 (2013-2014) workshops with planners
Created coded case reports, summarized reports in a meta-matrix, noted within-case and cross-case patterns using 5 codes:

- policy consistency
- actors/roles
- land use-transport connections
- specific tools and policies
- barriers to TOD

Identified possible critical success/failure factors for each case
critical success factors

Plans and Policies
Consistency in planning policy supporting TOD over time
Vision stability
Support of higher levels of government
Political stability: national
Political stability: local

Implementation
Use of site-specific planning tools
Corridor-level planning
Certainty for developers
Willingness to experiment

Actors
Relationships between actors
Presence of a regional transport-land use planning body
Level of competition among municipalities
Presence of interdisciplinary teams
Public participation
Public acceptance
Presence of key visionaries
findings & policy applications

Identification of 16 CSFs or transferable policy lessons: more generalizable results than single-case study

Municipalities can use the policy lessons to determine their own strengths and weaknesses, and as inspiration for policy development, e.g. using workshops or exercises

Meta-matrix findings can be used to inform other methods within a meta-analysis
Discussion

Strengths:

Meta-analysis can be used in many planning contexts, ideal as the first stage of research
- Comparing policies on affordable housing
- Synthesizing studies, e.g. immigrants’ experiences with service provision
- Environmental scan/jurisdictional review in a policy context

Allows “decontextualized” policy ideas to be transferred and adapted to different contexts

Weaknesses:

Can only be used with similar cases

Difficult to visualize entire meta-matrix

If multiple researchers are involved, it’s critical to decide on case-oriented vs. variable-oriented analysis and clarify coding through an iterative process