Sampling Health-Related Social Networks in Cross-Country Surveys

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NCRM Research Methods Festival 2018
Bath, 3 July 2018
Health behaviour and treatment seeking do not take place in isolation

Policy relevance for health education and intervention targeting

Calls for more health-related network data and deeper analysis

Recurrent issues

- Decision on network level (individual, household, community, village)
- Boundary definition of catchment areas (physical, social)
- Choice of name generator questions
- Enumeration of network participants (e.g. manual, census data)
- Tie identification

Table 3
A catalog of 105 ‘Name Generators’ (survey questions employed to elicit social ties) sorted by network type, which were collected from 37 social network studies conducted in low- and middle-income countries.

<table>
<thead>
<tr>
<th>Network type</th>
<th>Text of name generators</th>
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<tbody>
<tr>
<td>Kinship</td>
<td>1. Asked to name all other households in the hamlet to whom they were related (either through blood or marriage).</td>
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<td></td>
<td>2. “Does this person have other siblings besides the ones [living in the household] that are still living?” If so, then name and contact’s location were recorded.</td>
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<td>3. “With which households do your family members have kinship relationships?”</td>
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<td></td>
<td>4. “Can you tell me about people who are close to you and are kin or faux kin?”</td>
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<td>5. Asked to name five relatives respondent speaks with most frequently.</td>
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<td></td>
<td>6. “Name any close relatives, aside from those in this household, who also live in this village. Plus people in those same households.”</td>
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<td></td>
<td>7. “Have any of your household members married members of other households?” [Direction was indicated and Names given as response].</td>
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<td></td>
<td>8. Asked to name siblings (no other criteria).</td>
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<td></td>
<td>9. Asked to name spouse (no other criteria).</td>
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<td>Sex partners</td>
<td>10. Asked to name with sexual partners within the past five years.</td>
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<td></td>
<td>11. Asked to name five most recent sexual partners in the past three years.</td>
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<td>Friends: general</td>
<td>12. “Name up to five other women/men [same-sex as respondent] with whom you talk most and perceive as among your best friends.”</td>
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<td></td>
<td>13. Asked to name up to five women in the village with whom they talked most and perceived as their best friends.</td>
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<td></td>
<td>14. Asked to name five friends speak with most frequently.</td>
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<td></td>
<td>15. Asked to name four closest friends on the island.</td>
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<td></td>
<td>16. “Who are your closest friends in the village?”</td>
</tr>
</tbody>
</table>
Semi-structured qualitative technique to inform survey research

**Purpose**
- Questionnaire testing & development
- Interpretation of survey responses
- Contextualising & triangulating survey data

**Methods**
- **Think aloud**
- Probing
- Observation
- Paraphrasing
- Rating tasks
- Response latency
- Free-sort and dimensional-sort classification tasks

**Training**
- NCRM course “Cognitive interviewing for testing survey questions,” P. Campanelli

**Cognitive interview**
Cross-cultural applications of cognitive interviews
(Farrall et al., 2012; Miller et al., 2011; Pan, 2004; Sopromadze & Moorosi, 2017; Sha & Pan, 2013; Taylor et al., 2016; Thrasher et al., 2011)

Respondent characteristics influence cognitive interview responses
(Miller et al., 2011; Park et al., 2016)

Intrinsic assumptions and cultural adaptation of cognitive interview instruments
(Martin et al., 2017)

Cognitive interview: literature and issues
I think the questions to get to this kind of information [cognitive interview questions] might be too high, or [pause] in another level. If the respondents, say the villagers… villagers in the lower level would not be able to answer clearly. Sometimes they know [the answer], they do, but they cannot answer straightforwardly. […] Sometimes it’s, you know, too high of a question. It’s out our power to [laughed] explain, or seek for more things or better things to be an answer.

- Villager, 66 y/o, retired teacher
Research Sites | Thailand (Chiang Rai) – Lao PDR (Salavan)

Approach | Mixed-methods research to understand antibiotic use in context of broader treatment-seeking behaviour

- Cross-council initiative to Tackle Antimicrobial Resistance
- Representative district survey: 134 villages in 60 PSUs – 2,141 villagers
- Social network census: 5 villages – 3,744 interviews during 2 rounds
- Cognitive interviewing: 50 villagers

Themes | Antibiotic use in context of marginalisation

Behavior: What is problematic behaviour, and is it common?
Knowledge: Will “desirable” knowledge spread in villages?
Indicators: Can we detect problematic behaviour easily?

Project overview
Where do you spend most of your time interacting with other people from your village?

a) Field: ___
b) Temple: ___
c) Local store: ___
d) Market: ___
e) Children’s schools: ___
f) Home: ______
g) Workplace: ___
h) Village event/s: ______
i) Other site: ___

Our question – Where?
Outside your household, with whom do you interact on a regular basis?

a) What are the names of the person?
b) How is this person related to you?
c) What is the sex of this person?
d) Where does this person live?
e) What is the name of the household head of this person?
f) How often do you interact with this person?
g) How do you interact with this person?
h) Do your conversations relate to health and well-being?

Our question – Who I
Now if you think again, is there anyone else with whom you talk about health?

a) What are the names of the person?
b) How is this person related to you?
c) What is the sex of this person?
d) Where does this person live?
e) What is the name of the household head of this person?
f) How often do you interact with this person?
g) How do you interact with this person?

Our question – Who II
Is there anybody in your household with whom you talk about health and well-being?

Our question – Who III
Was anybody of your personal relationships involved in providing advice or help during the illness?

a) What is the name of the person?
b) How are these people related to you?
b) What kind of support did they provide?

- Providing advice
- Providing medicine
- Contacting family/friends
- Lending/granting money
- Providing healthcare/attending
- Transportation/Lending vehicle
- Providing food
- Helping with children/housework
- Helping with jobs/agriculture work (feeding animals/tending crops/covering shifts, etc.)
- Helping with work (feeding animals/tending crops/covering shifts, etc.)

Our question – Who IV
Our gain | NOT people’s cognitive process
Lessons about local context and appropriateness
Understanding of local language and interpretations
Answers for specific interests

Application | Experiences and observations benefit data collection for field investigators and data analysis for analysis team

Improvements | Changes in survey instrument

- Questions added: health network, family network
- Questions dropped: health conversation topic
- Sequence of questions: where comes before who, e.g.
- Adjustments of answer categories: frequency of health conversation
- Prioritization of answer categories: asking generic questions before details

Evolution of questions
Results

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Slide 14
3 July 2018
Results

- Vil. 1 (n = 233)
- Vil. 2 (n = 226)
- Vil. 3 (n = 253)
- Vil. 1 (n = 884)
- Vil. 2 (n = 465)

Non-health village comm.
Village health communication
Additional vil. health communication
Household health communication
Activity communication*
Help network*

Sampling Health-Related Social Networks in Cross-Country Surveys
Role of social network in behavior
Social network helps gain deeper understanding of behaviour but further research is required

Role of qualitative methods in social network
Cognitive and/or in-depth interviews complement social network sampling and can help improve data collection and interpretation

Role of context in social research
Cognitive interviews as well as social network surveys have intrinsic assumptions that may be violated in rural non-Western contexts

Conclusion
THANK YOU.
QUESTIONS?
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Cognitive interview references


