



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

Recommended literature for this session: Perkins, J. M., Subramanian, S. V., & Christakis, N. A. (2015). Social networks and health: a systematic review of sociocentric network studies in low- and middle-income countries. *Social Science & Medicine*, 125, 60-78. doi: <https://doi.org/10.1016/j.socscimed.2014.08.019>

Health-related social networks in LMICs



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.

Network type	Text of name generators
Kinship	<ol style="list-style-type: none"> 1. Asked to name all other households in the hamlet to whom they were related (either through blood or marriage). 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. 3. "With which households do your family members have kinship relationships?" 4. "Can you tell me about people who are close to you and are kin or faux kin?" 5. Asked to name five relatives respondent speaks with most frequently. 6. "Name any close relatives, aside from those in this household, who also live in this village. Plus people in those same households." 7. "Have any of your household members married members of other households?" [Direction was indicated and Names given as response]. 8. Asked to name siblings (no other criteria). 9. Asked to name spouse (no other criteria).
Sex partners	<ol style="list-style-type: none"> 10. Asked to name with sexual partners within the past five years. 11. Asked to name five most recent sexual partners in the past three years.
Friends: general	<ol style="list-style-type: none"> 12. "Name up to five other women/men [same-sex as respondent] with whom you talk most and perceive as among your best friends." 13. Asked to name up to five women in the village with whom they talked most and perceived as their best friends. 14. Asked to name five friends speak with most frequently. 15. Asked to name four closest friends on the island. 16. "Who are your closest friends in the village?"

Network sampling: name generators



Perkins, J. M., Subramanian, S. V., & Christakis, N. A. (2015). Social networks and health: a systematic review of sociocentric network studies in low- and middle-income countries. *Social Science & Medicine*, 125, 60-78. doi: <https://doi.org/10.1016/j.socscimed.2014.08.019>

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Slide 3
3 July 2018

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



Source: Campanelli, P (2017). Cognitive interviewing for testing survey questions.
Photo: Lao team member interviewing a villager in Salavan
Photo credit: Amphayvone Thepkhamkong

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**Slide 4
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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

Cognitive interview – a comment



Lao team members practicing interview using questionnaire
Photo credit: Nutch Charoenboon

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Slide 6
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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

Behaviour: What is problematic behaviour, and is it common?

Knowledge: Will “desirable” knowledge spread in villages?

Indicators: Can we detect problematic behaviour easily?


Project overview



Exhibition at Doi Tung, Thailand
Photo credit: Marco J Haenssger

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Slide 7
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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?



Villagers drawing village map to illustrate landmarks and important locations
Photo credit: Marco J Haenssger

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**Slide 8
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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



Mountain village
Photo credit: Patchapoom Uthong

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Slide 10
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A photograph of a traditional Thai dinner table. The table is covered with a patterned cloth and set with several bowls of food, including rice, soups, and vegetables. A single lit candle provides the primary light source, creating a warm, intimate atmosphere. The text is overlaid on the center of the image.

Is there anybody in your household with whom
you talk about health and well-being?

Our question – Who III



Dinner table where family members meet at the end of the day
Photo credit: Thai survey team

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**Slide 11
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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

Contacting family/friends

Providing medicine

Lending/
granting money

Helping with children/housework

Providing healthcare/attending

Transportation/
Lending vehicle

Providing food

Helping with jobs/agriculture work (feeding animals/tending crops/covering shifts, etc.)

Our question – Who IV



"Guasa," a traditional treatment villagers perform on each other when sick
Photo: Tales of Treatment; Photo credit: Patthanan Thavethanutthanawin

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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

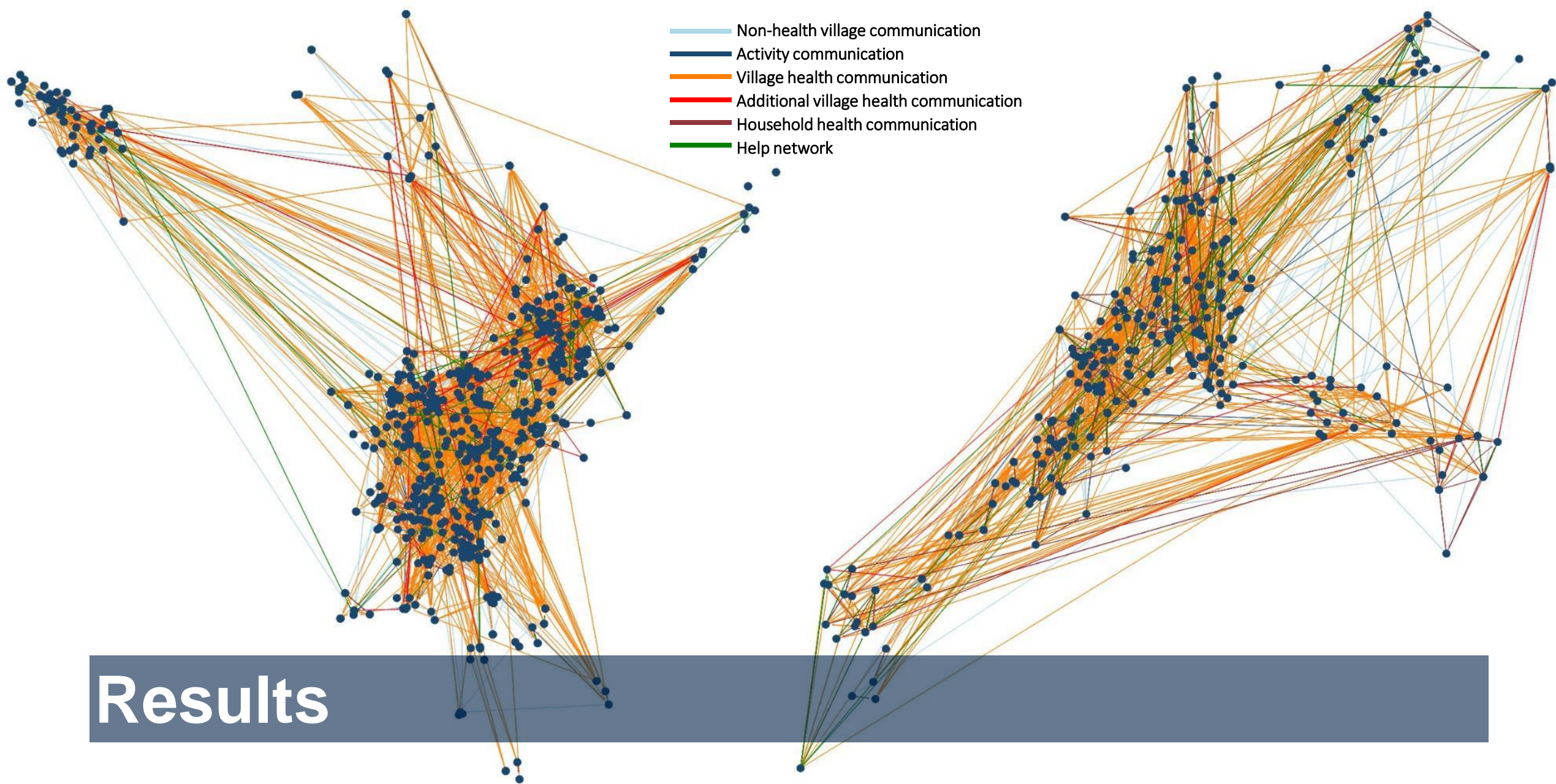
Evolution of questions

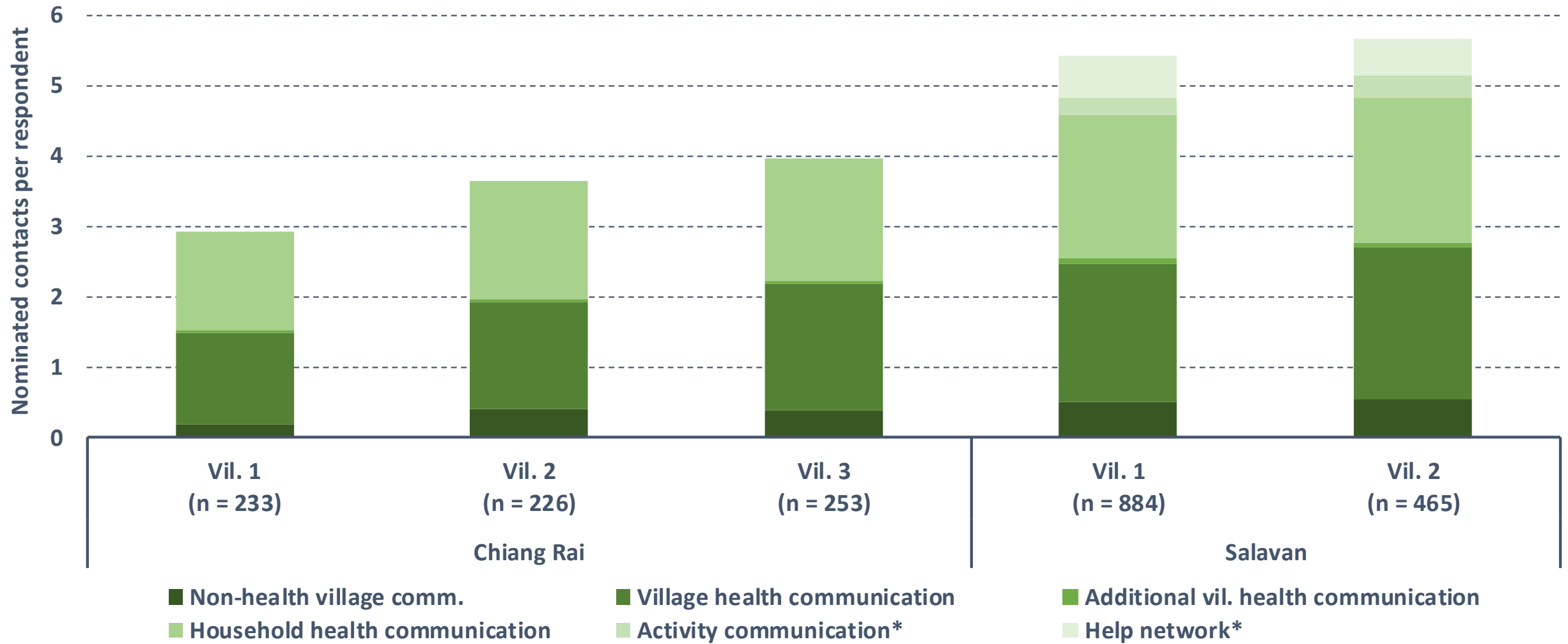


Temple in a network village where team rested during the day
Photo credit: Nutch Charoenboon

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Slide 13
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Results



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



Salavan district map in public health office
Photo credit: Nutch Charoenboon

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Slide 16
3 July 2018



THANK YOU. QUESTIONS?

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Tales of Treatment
Photo credit: Patthanan Thavethanutthanawin

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Slide 17
3 July 2018

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Cognitive interview references



Photo: Salavan temple fair
Photo credit: Nutch Charoenboon

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Networks in Cross-Country Surveys

Slide 18
3 July 2018