

# SOCIAL ENGAGEMENT AND COGNITIVE HEALTH

## A POPULATION-BASED STUDY OF OLDER MEN AND WOMEN IN RURAL SOUTH AFRICA

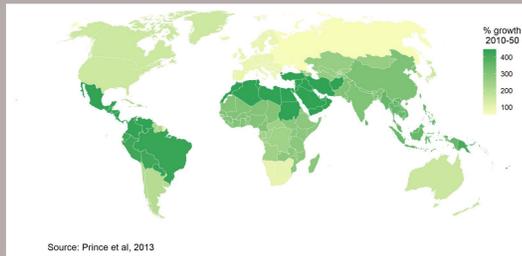
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### STUDY AIM

We evaluated how the social networks of individuals with cognitive impairment differed from those of non-impaired people in a cohort of older adults in rural South Africa.

### BACKGROUND

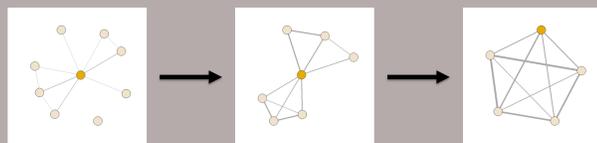


Source: Prince et al., 2013

*Dementia is increasing fastest in middle and lower-income countries*

Social connectedness is closely tied to cognitive decline:

1. Social stimulation may reduce onset & progression, and even reverse effects
2. Cognitive impairment (both actual & self-perceived) leads to social dis-engagement
3. Cognitive decline can lead to more receipt of care-related support



*Theory suggests social networks will become smaller and denser as cognitive decline progresses*

Evidence on social engagement & cognitive impairment is limited to date to high-education cohorts, except:

- A Spanish cohort educated pre-1939 (Zunzunegui et al., 2003)
- A Nigerian study of over-65s (Gureje et al., 2011)

Both found social disengagement associated with subsequent cognitive decline

### METHODS

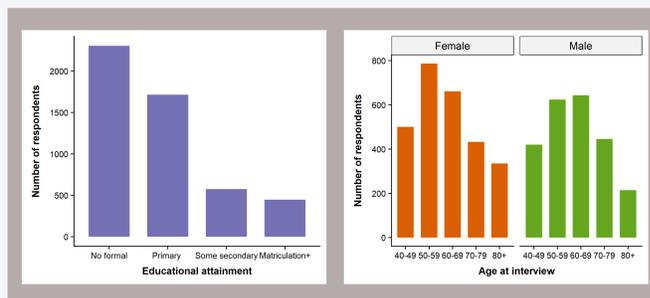
#### Sample

- Health and Aging in Africa: A Longitudinal Study of an INDEPTH Community in South Africa (HAALSI)
- Population-representative sample: 5059 adults age ≥40



Agincourt Health & Demographic Surveillance System site

- 30% refugees born in Mozambique
- Sub-district among the poorest in province & nation
- Employment rate ~15% in area & in HAALSI sample



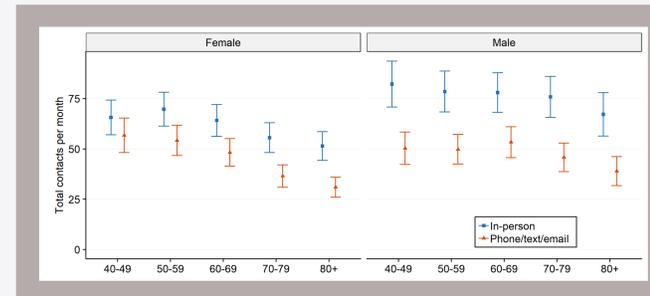
#### Measures

**Social engagement:** Please name up to 6 adults you have communicated with in person or by phone/internet in the past 6 months, starting with the most important to you

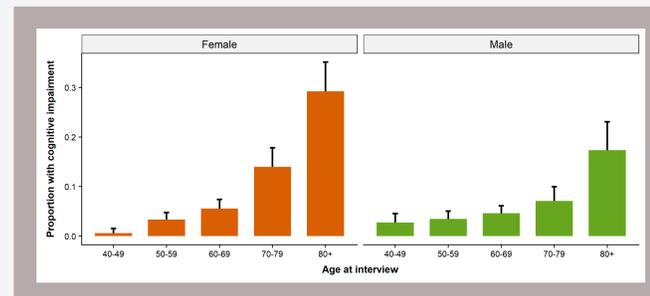
**Cognitive impairment:** ≤1.5 SD below mean for sum of Orientation in time & Immediate/delayed word recall, or proxy respondent reports fair/poor memory

### RESULTS

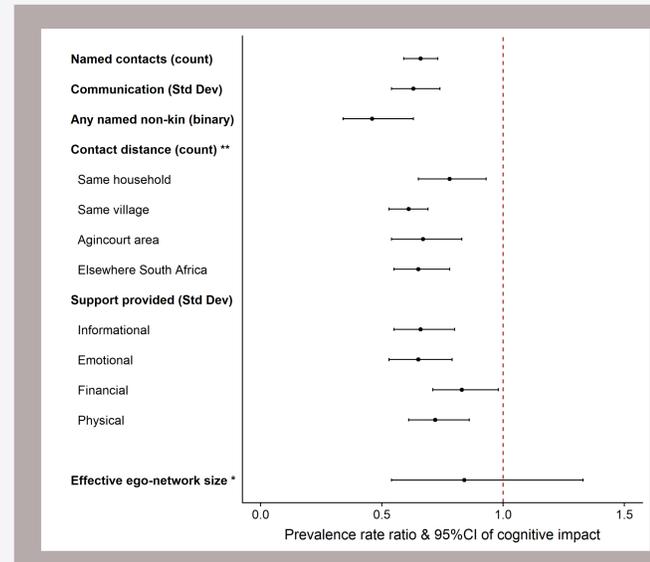
#### Social engagement



#### Cognitive impairment



#### Adjusted regression associations



### KEY FINDINGS

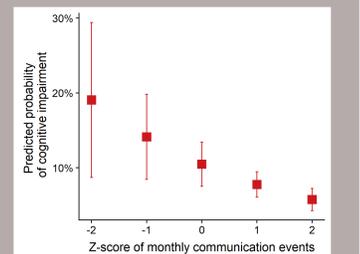
Individuals with cognitive impairment in HAALSI had:

1. Smaller networks & less communication
2. Less support from non-kin, despite being less-often married
3. Less engagement beyond their household
4. Less support, particularly informational/emotional

- Differences in social engagement across cognitive status were greater for younger individuals
  - But not by gender or household size

- We found very similar results using a continuous measure of cognitive impairment

*There was an almost 5-fold higher rate of cognitive impairment at the 5<sup>th</sup> vs 95<sup>th</sup> percentile of the communication frequency distribution, even after adjustment*



### NEXT STEPS

1. Disentangle the casual processes using cohort data
2. Evaluate these patterns in other settings

#### ANALYSIS NOTES

- Coefficients are adjusted prevalence rate ratios associated with a one-unit increase in the variable on the predicted probability of cognitive impairment.
- Each coefficient is from a different regression model, except \*\* where all four variables were included in a single regression.
- All models are hierarchical (individuals nested in interviewers) and are adjusted for age, gender, employment status, household size, household wealth, educational attainment, literacy, marital status, father's occupation, childhood health status and interview month.
- \* Model also adjusted for the number of contacts named. Std Dev: Standard deviation.

### GET IN TOUCH

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