Home is where the help is: Childcare and women's residence decisions

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Outline

Introduction

Simulation: Childcare dynamics

Fieldwork: Empirical test among the Twe

Who leaves home and when?

Household exogamy

Postmarital residence

Dispersal

Explaining variation

- cross-cultural vs. local

Flexible Residence of Foragers

Modal forager residence pattern is “flexible” (Alvarez 2004, Marlowe 2004)

Even when listed as “strict” residence, may not be accurate (Hill et al. 2011)

Without strict residence, group-level explanation don’t help

Patterning of the flexibility

Delayed female dispersal:

- Matri-patrilocality (SCCS)
- Hadza (Blurton Jones 2005)
- Ache and !Kung (Hill et al. 2011)
- Twe

How can this pattern be explained?

- Women seeking childcare assistance

Who cares?

Key features:

- Female
- Matrilateral kin (Natal camp)
- Non-fertile (Grandma!)

Grandma and residence

Who cares?

Babysitters:

- Not available early in career
- Ages 6+
- Direct care
- Positive effects (fertility, survival, leisure)
- Tied to mom rather than natal camp

Who cares? Among the Twe

Relationship	Holder	Available	Percentage
Older sister	15	80	18.8%
Mat. Grandma	7	51	13.7%
Mat. Cousin	8	90	8.9%
Father	8	124	6.5%
Pat. Aunt	1	16	6.2%
Mat. Aunt	10	320	3.1%

See Kramer (2010) for cross-cultural review

Anecdote 1

Anecdote 2

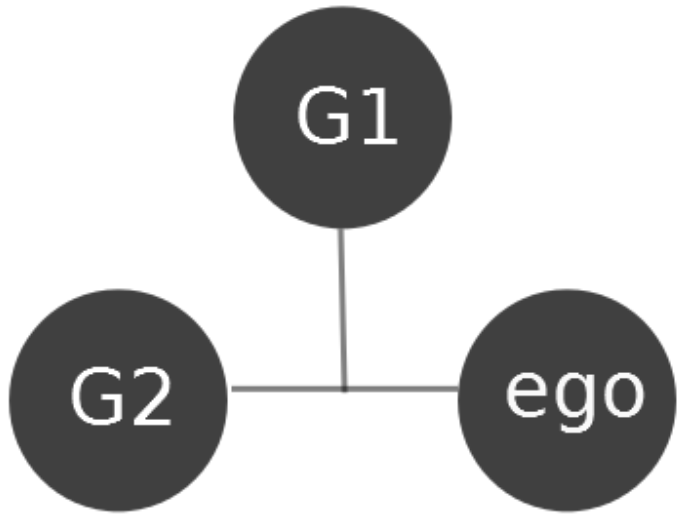
Outline

Simulation design

Female kin group:

- *Ego*
- *G1 (post-repro mom)*
- *G2 (same-aged sister)*

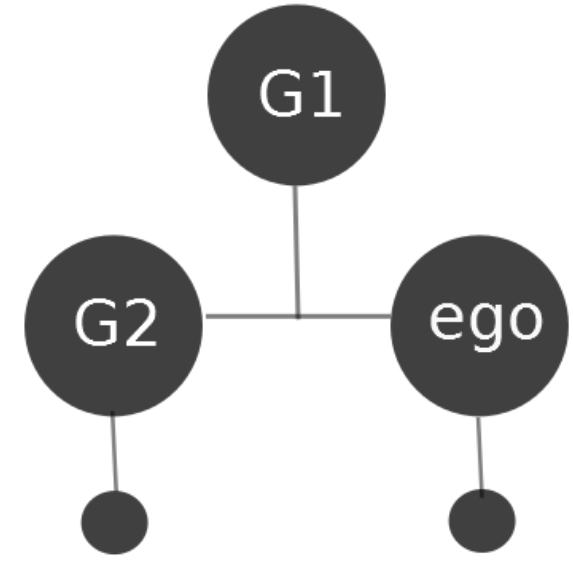
Track across 20 years

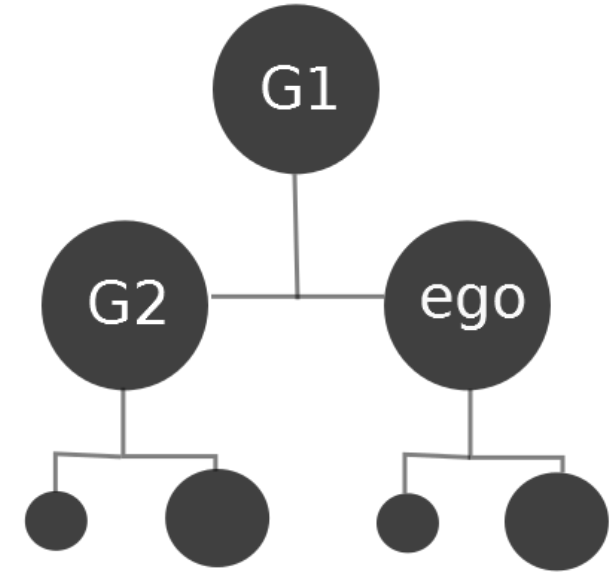


Simulation design

Each year:

- G2 and Ego reproduce with 25% chance
- Age ↑

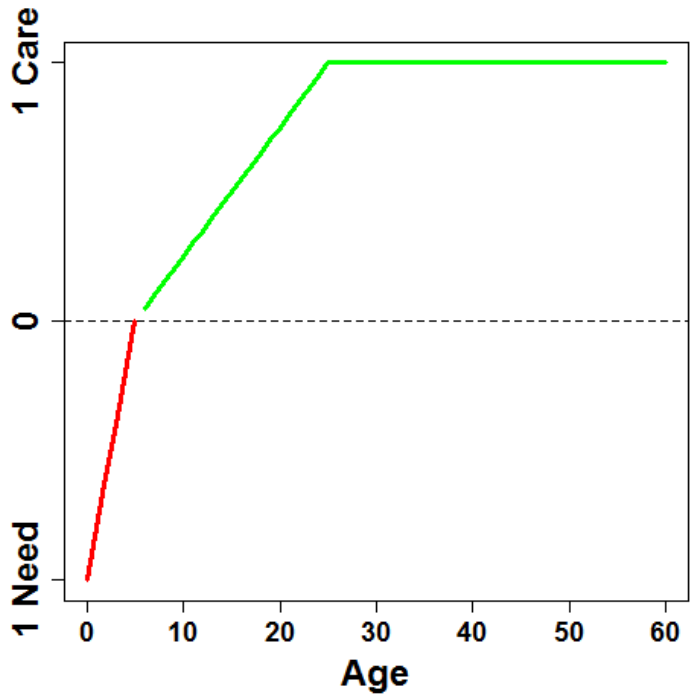




Simulation design

Assign age-based need and care points

Eliminate need with care

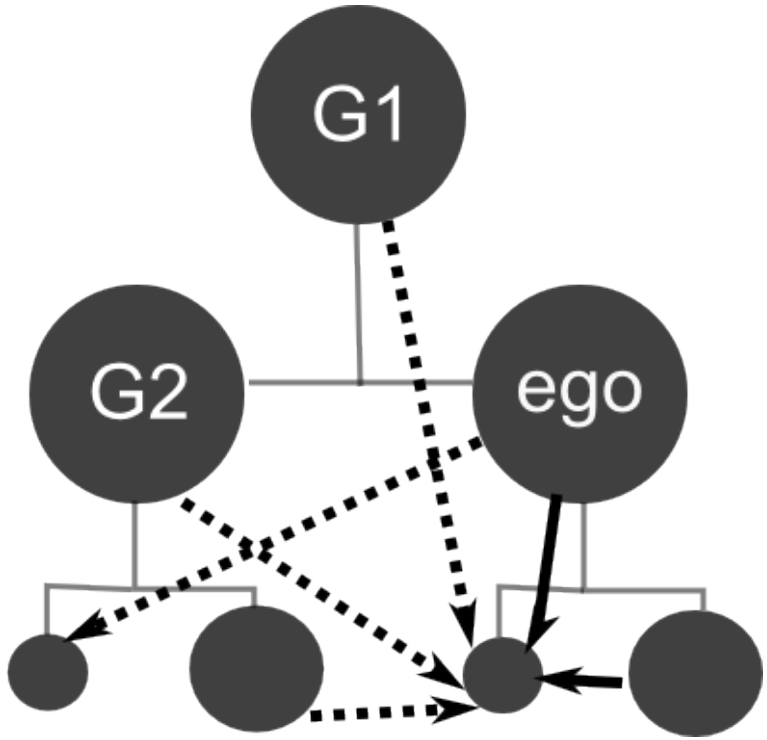


Simulation design

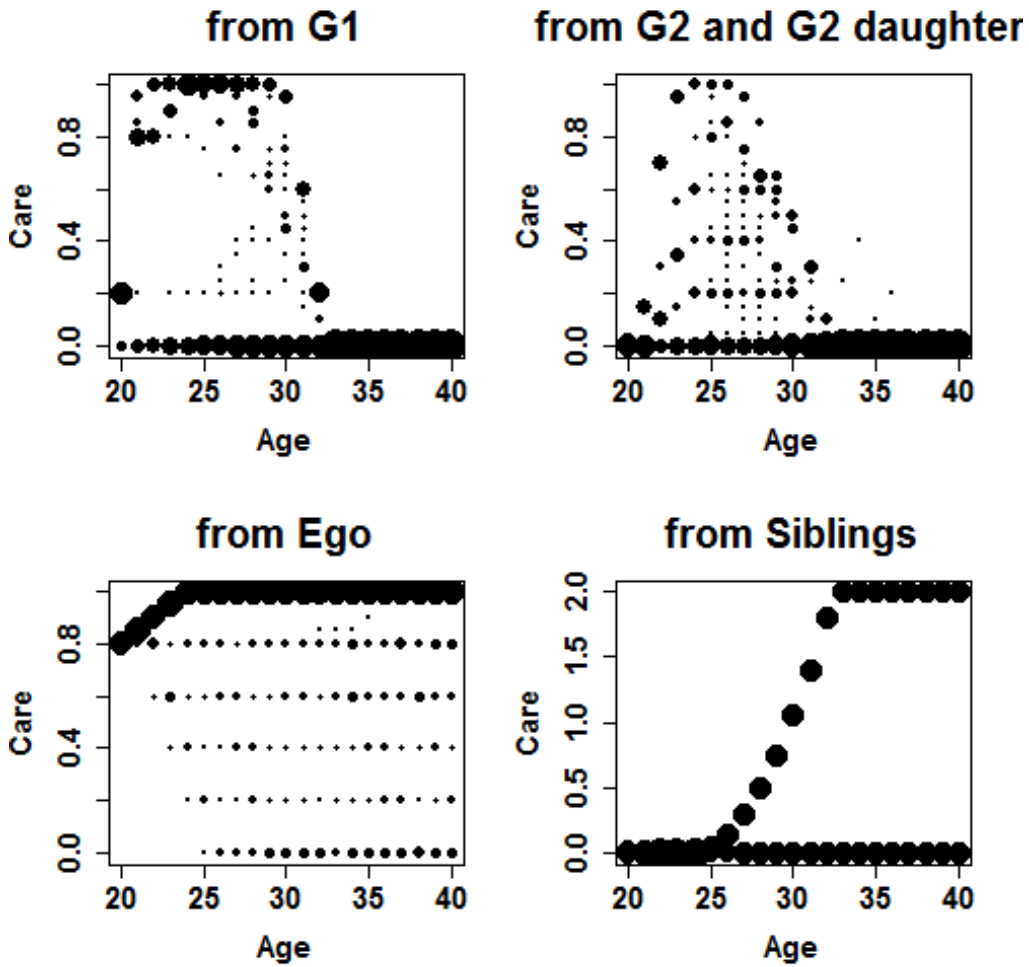
Carer-caree interactions ranked by: relatedness, need, reserves

Track *source* of care

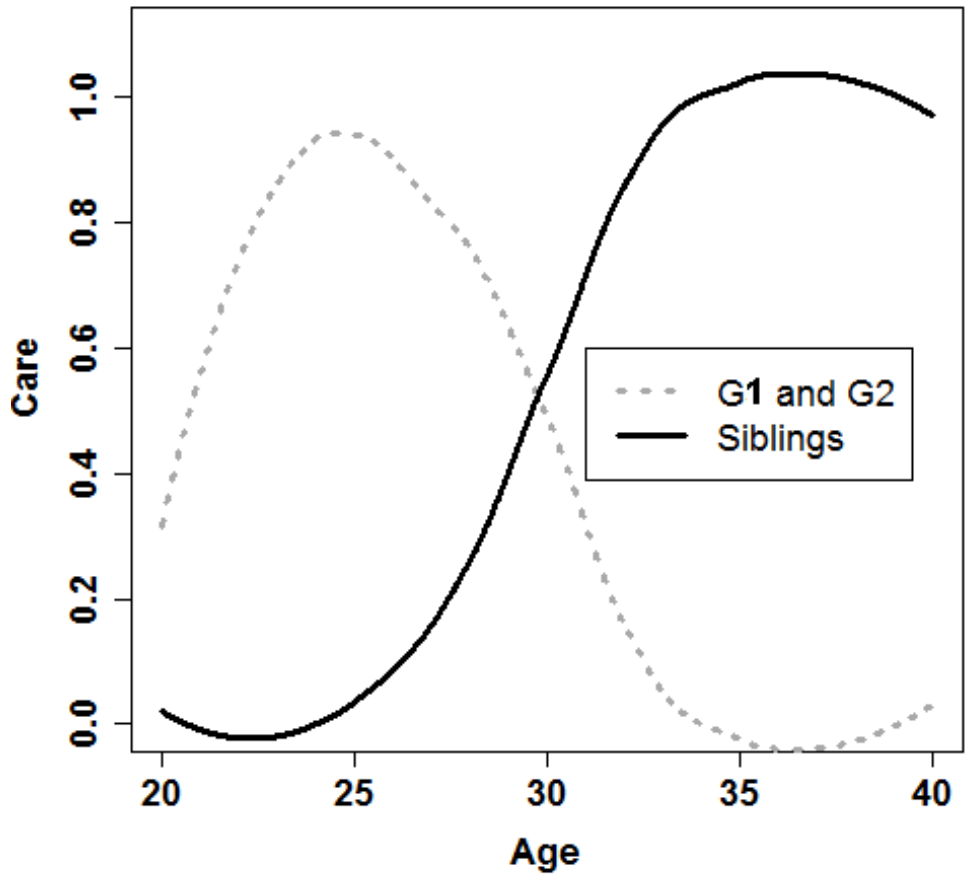
Residence dependent vs. independent



Shifting source of assistance with age



Shifting source of assistance with age



Simulation discussion

Within-offspring care ultimately replaces other sources

Care-based incentive never drops below 0

- Only show that costs of leaving decrease

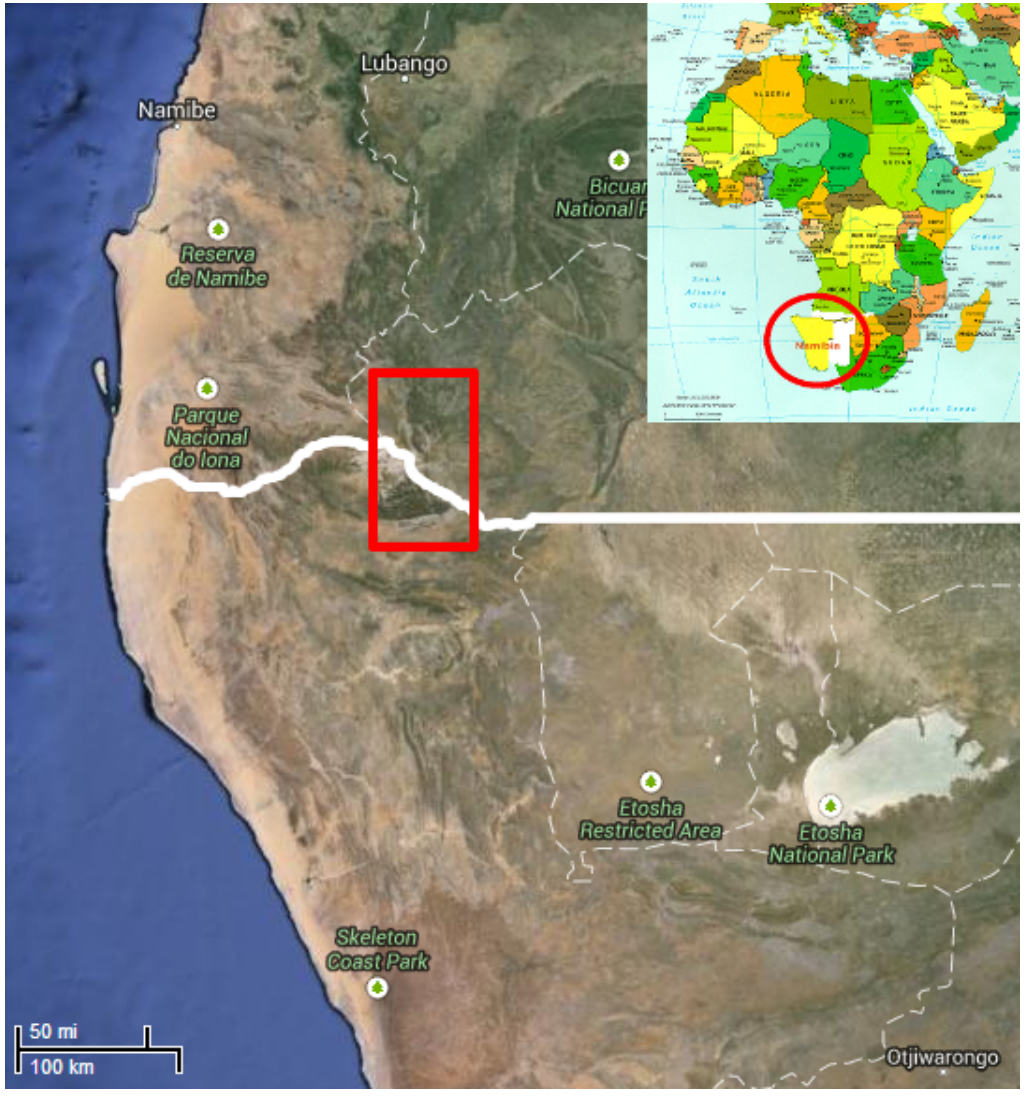
Modifications:

- $\uparrow$ # of sisters
- delay need/care transition

Outline

The Twe

Map


Lubango
Namibe
Reserva de Namibe
Parque Nacional do Iona
Etosha Restricted Area
Etosha National Park
Skeleton Coast Park
Otjiwarongo
50 mi
100 km
Namibia

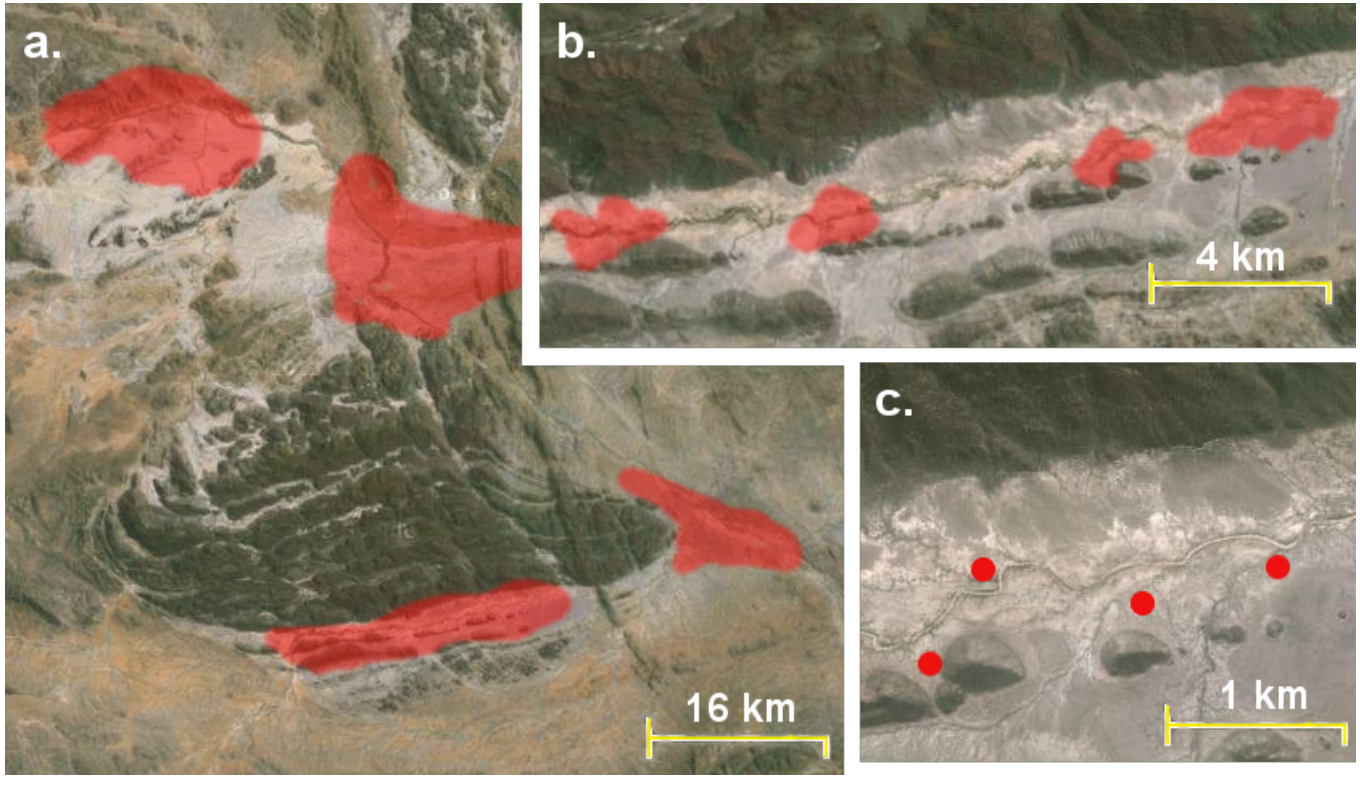
Lower Kunene Region

Wet season

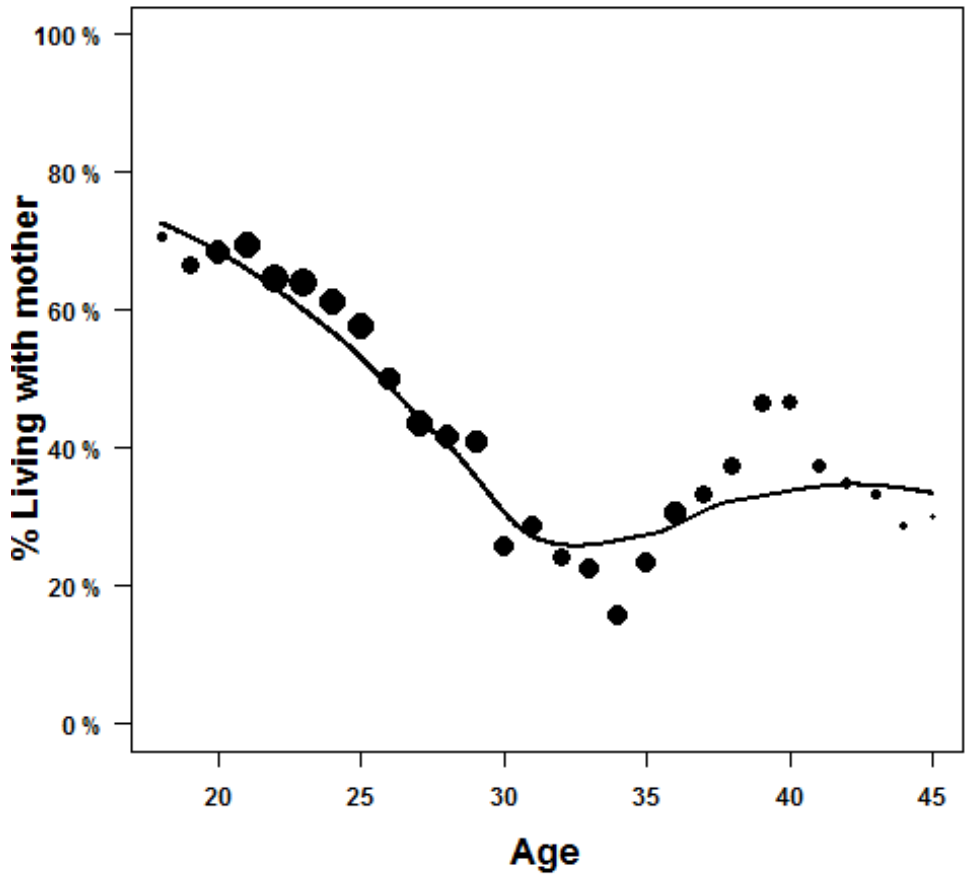
Dry season

Subsistence

Population distribution



Delayed female dispersal



Fieldwork

2008 - Present

Data collection:

- Genealogies
- Reproductive histories
- Residence histories
- Censuses
- Behavioral data

Data

Subset:

- Women
- Complete reproductive, genealogical, and marital data
- Living mothers

88 unique women (195 observations).

Variables

Dependent variable:

- Coresidence with mother
  "1" same household or "0" different households

Key independent variables:

- # of children $<$ 3 years old ("young children")
- # of daughters age 6 to 15 ("babysitters")

Control variables:

- Age
- Marriage

Random effect: by-participant random intercept

Hypotheses

1. **Women with young children are more likely to live with their mothers.**

2. **Women with babysitters are less likely to live with their mothers.**

H1:
Women with young children are more likely to live with their mothers

DV = Coresidence with mother?; x_1 = # young children

$$ln\left(\frac{\hat{p}}{(1-\hat{p})}\right) = -0.73 + 1.03x_1$$

Odds Ratio

IV	Low	Est	Upp
# young children	1.5	2.81	5.24

ICC = .55

H2:
Women with babysitters are less likely to live with their mothers

DV = Coresidence with mother?; x_1 = # young children; x_2 = # babysitters

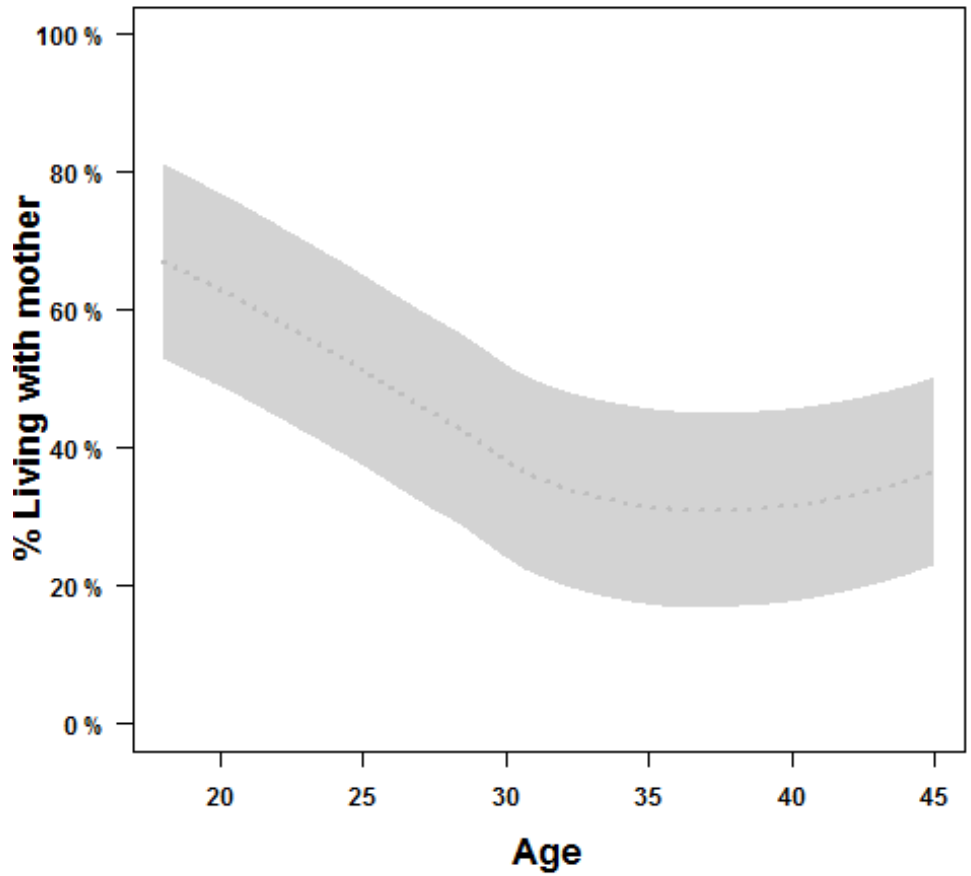
$$ln\left(\frac{\hat{p}}{(1-\hat{p})}\right) = -0.19 + 0.94x_1 - 0.69x_2$$

Odds Ratio

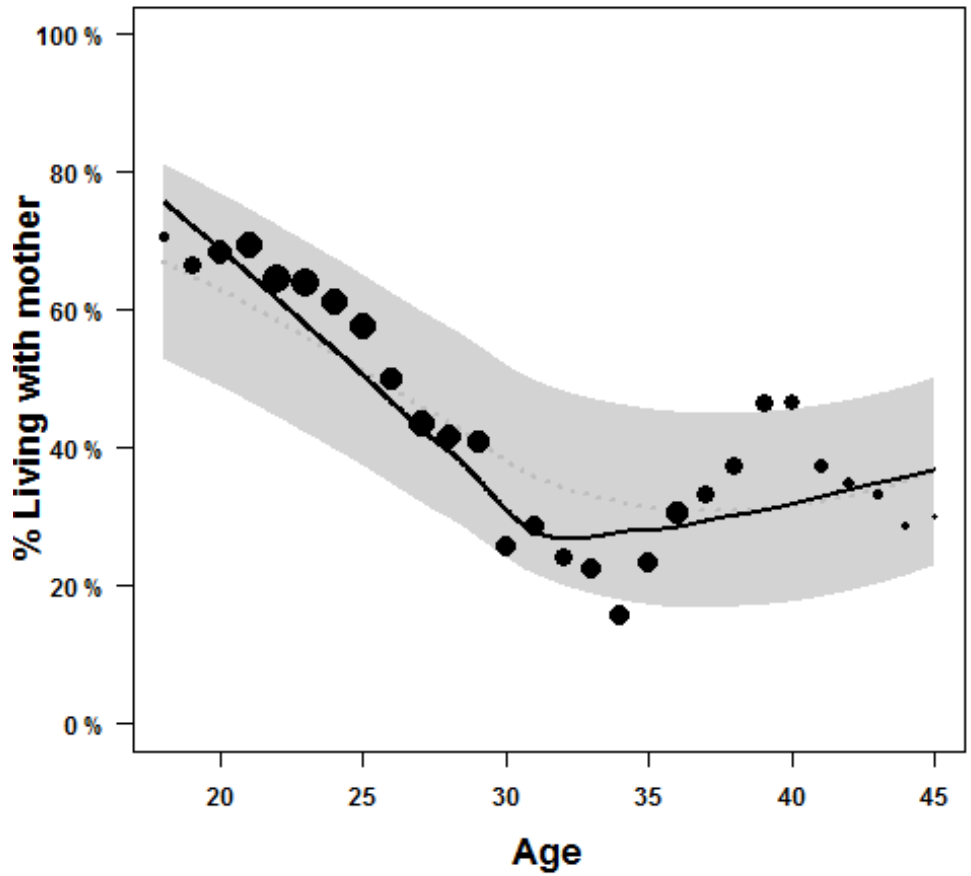
IV	Low	Est	Upp
# young children	1.35	2.56	4.86
# babysitters	0.32	0.5	0.79

ICC = .54

Predicted prob. w/ age-specific means



Predicted prob. w/ age-specific means



Controlling for age

DV = Coresidence with mother?; x_1 = # young children; x_2 = # babysitters; x_3 = age

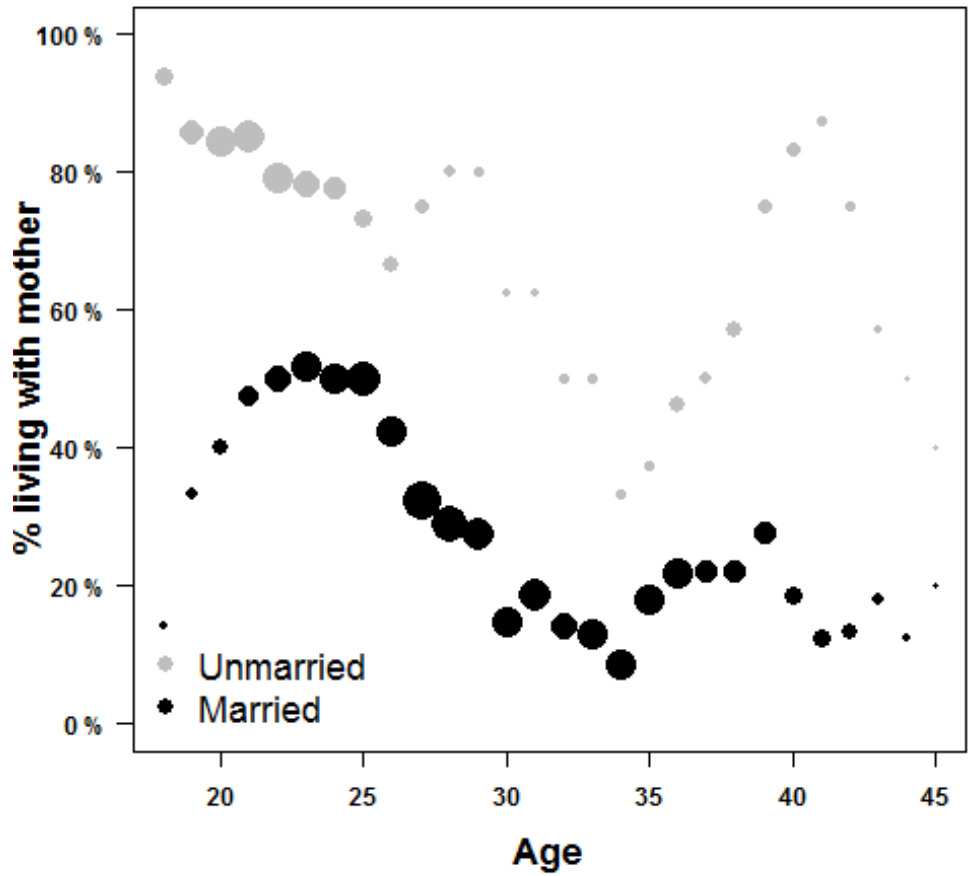
$$ln\left(\frac{\hat{p}}{(1-\hat{p})}\right) = 1.27 + 0.75x_1 - 0.53x_2 - 0.05x_3$$

Odds Ratio

IV	Low	Est	Upp
# young children	1.09	2.11	4.09
# babysitters	0.36	0.59	0.95
age	0.89	0.95	1.02

ICC = .48

Importance of marriage



Controlling for marriage

DV = Coresidence with mother?; x_1 = # young children; x_2 = # babysitters; x_3 = age; x_4 = married?

$$ln\left(\frac{\hat{p}}{(1-\hat{p})}\right) = 2.26 + 0.94x_1 - 0.68x_2 - 0.03x_3 - 2.81x_4$$

Odds Ratio

IV	Low	Est	Upp
# young children	1.22	2.56	5.36
# babysitters	0.30	0.51	0.86
age	0.97	0.9	1.05
married?	0.02	0.06	0.16

ICC = .47

Additional analyses

- Same patterns observed at household and village levels
- Babysitter effect is unique to girls
- Young women delay marriage until they have a babysitter
- Residence effects of sisters, brothers, and fathers

Conclusion

Residence patterns among foragers are highly flexible.

Interesting pattern within flexibility is delayed female dispersal.

Working from perspective of woman mapping onto childcare assistance helps explain pattern:

- Need maternal grandmother early
- Early-born daughters free women to move away

Acknowledgments

NSF

WENNER-GREN FOUNDATION
NEW YORK

The End