

Reproductive Decision-Making in Transitional Contexts

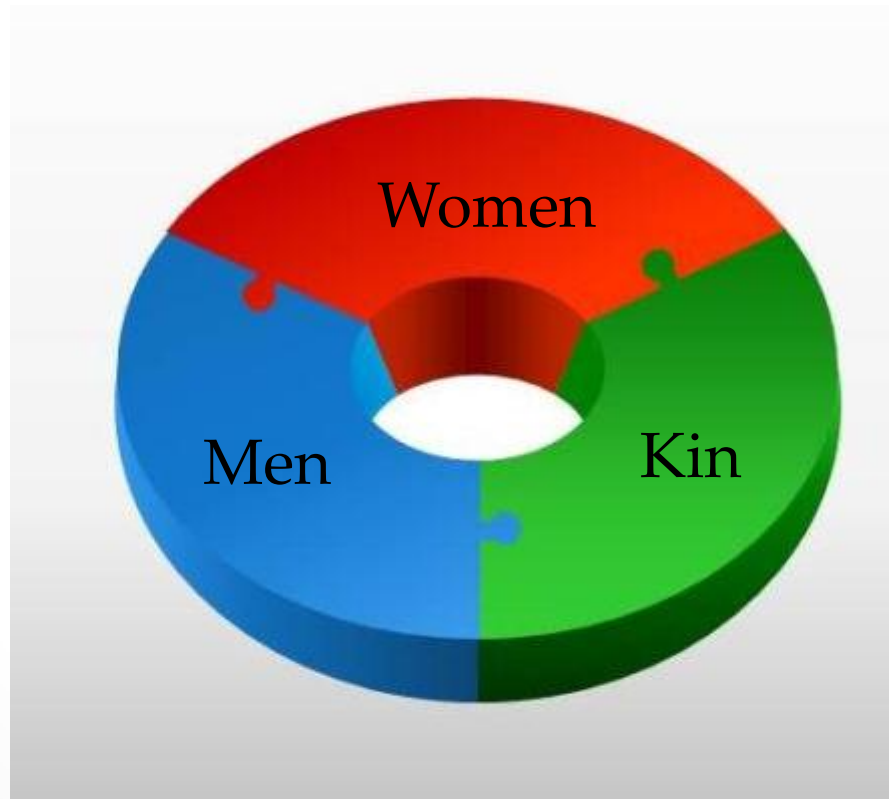
Kristin Snopkowski
Boise State University



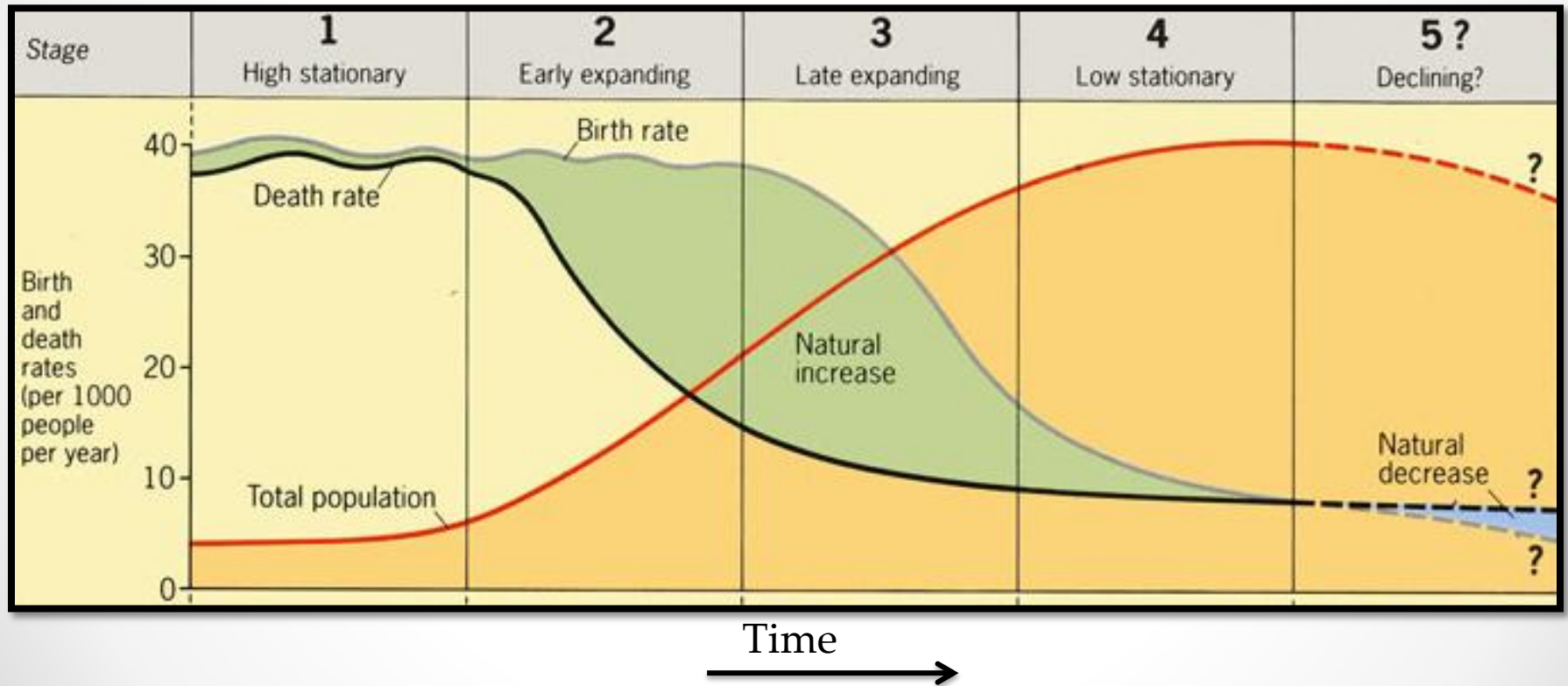
Reproductive Decision-Making



Understanding the Reproductive Puzzle



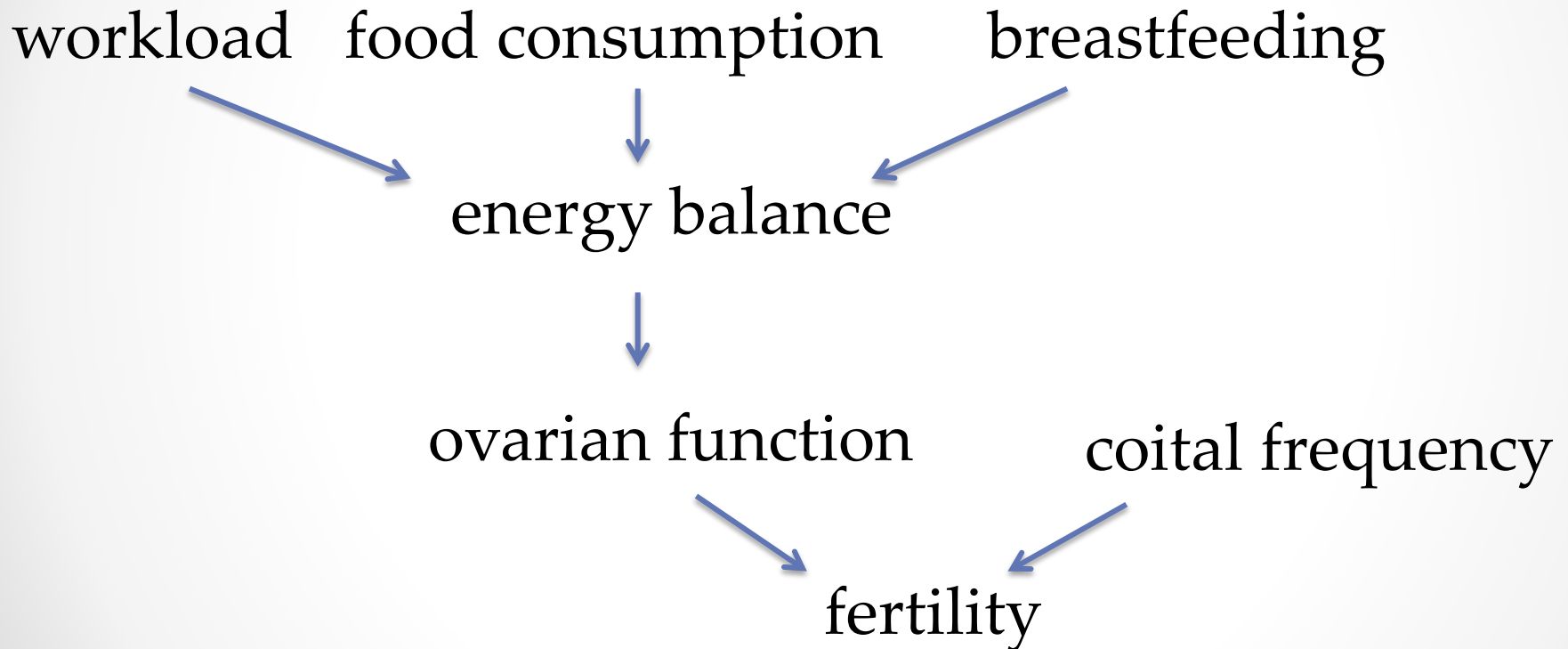
Demographic Transition



Research Questions

- 1) How do women decide how many children to have?
- 2) How does exposure to kin influence fertility decisions?
- 3) What role do men have in reproductive decision making?

Fertility regulation in natural-fertility contexts

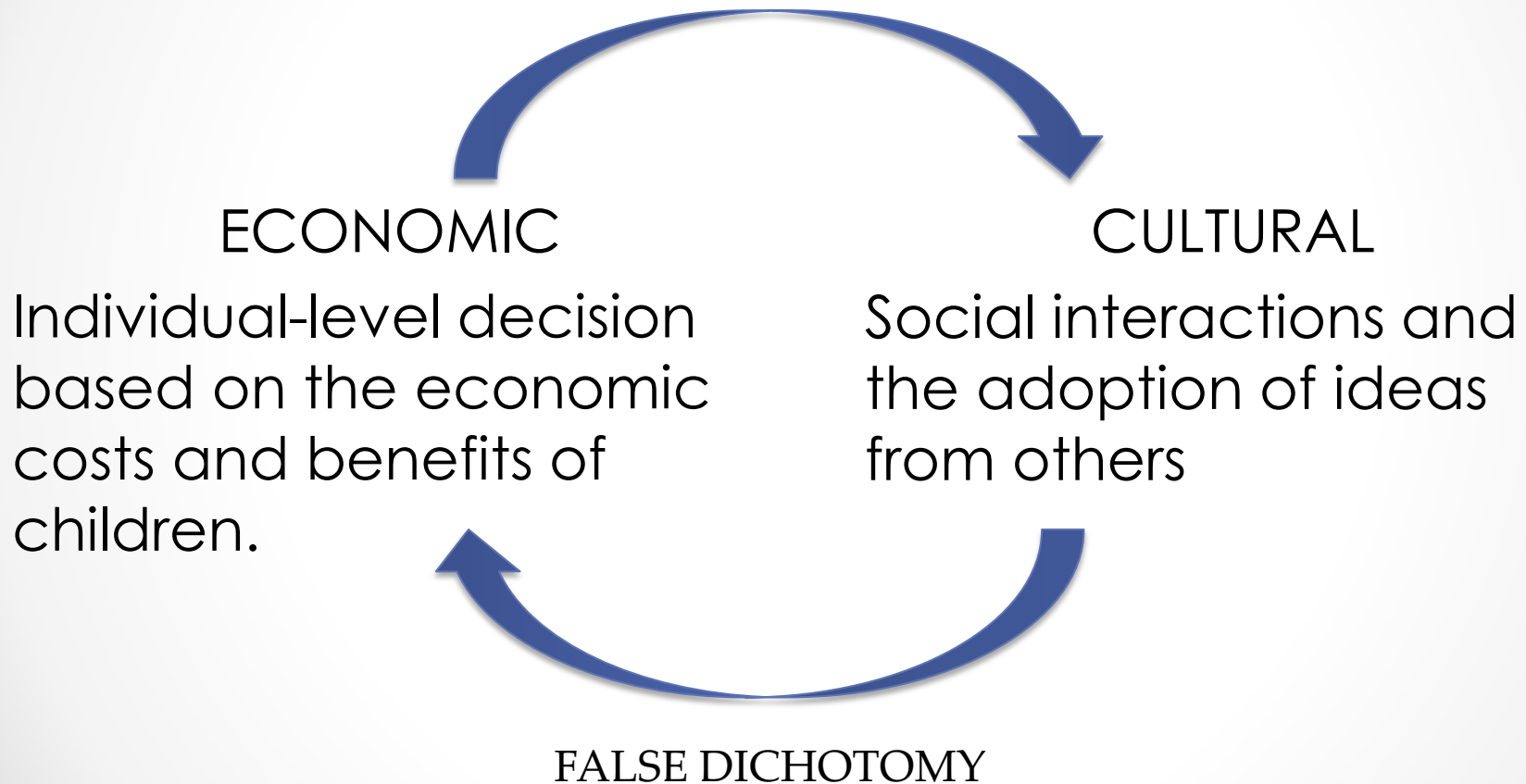


Fertility Transition

Conflict between number of children produced and amount parents wish to invest in children.



Hypotheses of Fertility Transition

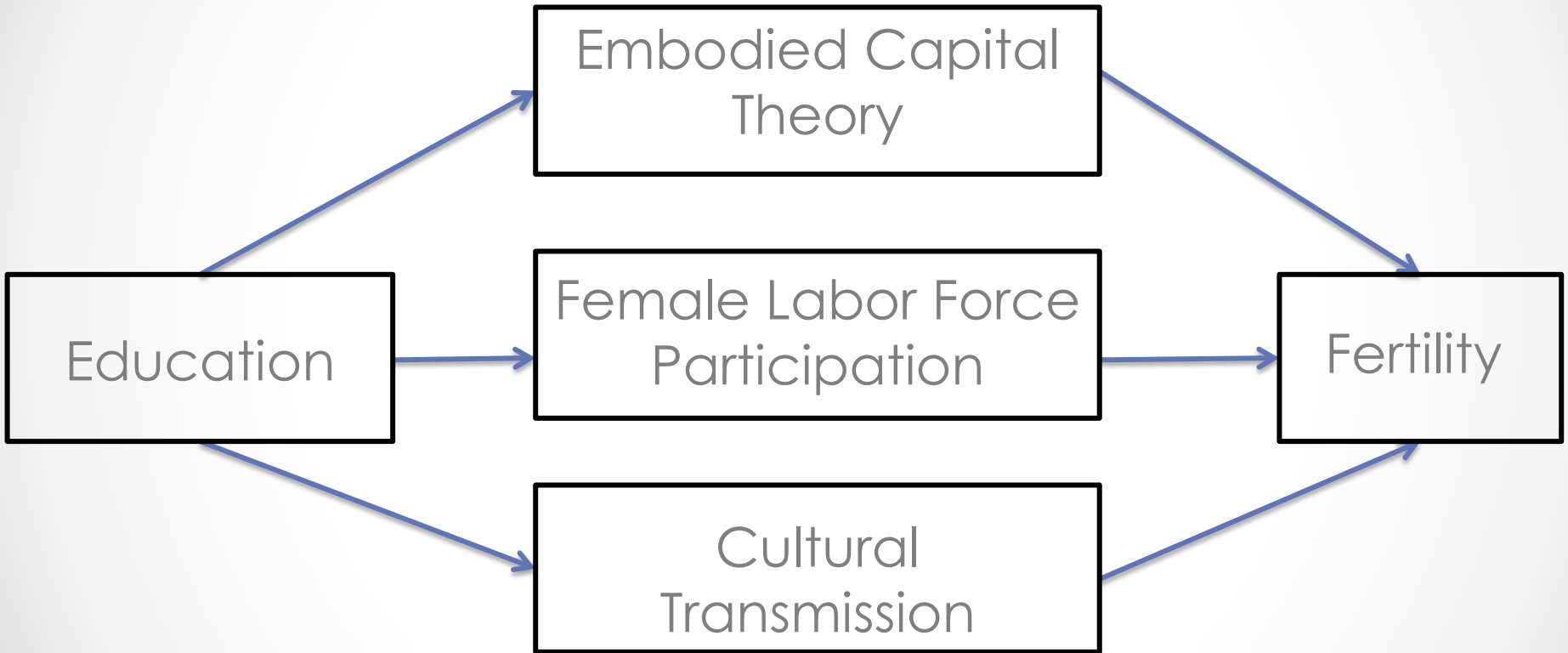


Women's Education

Why does education influence fertility?

Is its effect economic or cultural?

Model of Reproductive Decision-Making



Kaplan (1996) A Theory of Fertility and Parental Investment in Traditional and Modern Human Societies. *Yearbook of Physical Anthropology*. 39:91-135

Aguero & Marks (2008) Motherhood and Female Labor Force Participation: Evidence from Infertility Shocks. *The American Economic Review*. 98: 500-504.

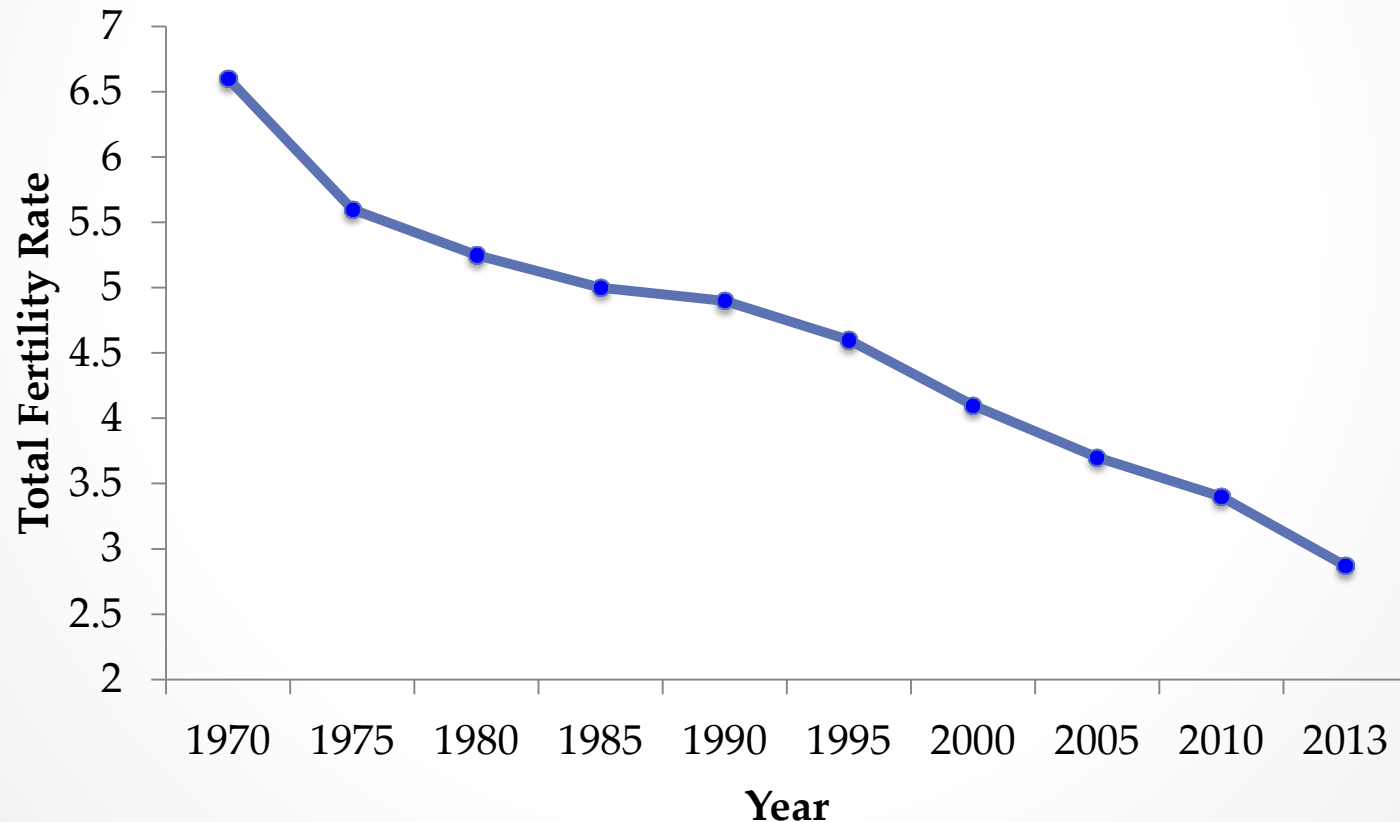
Boyd & Richerson (1985) Culture and the evolutionary process. University of Chicago Press, Chicago.

Field site: San Borja



Bolivia is undergoing a fertility transition

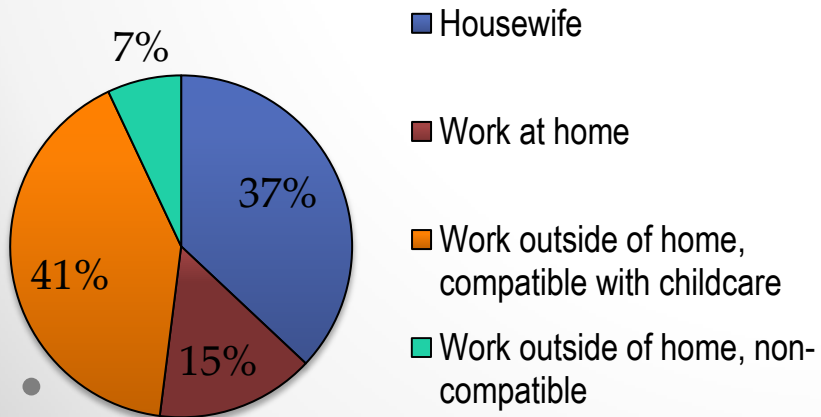
Total Fertility Rate of Bolivia



Industry



Women's Work



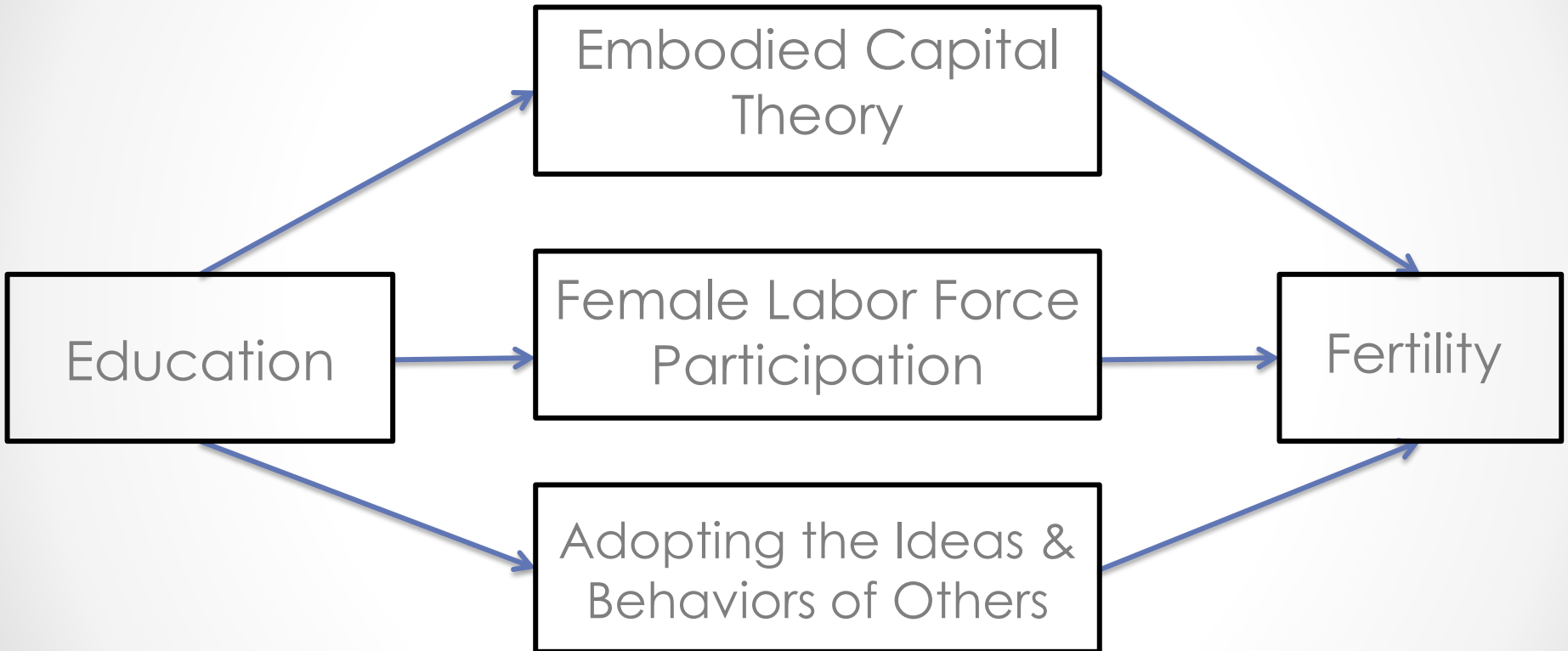
Wealth Inequality



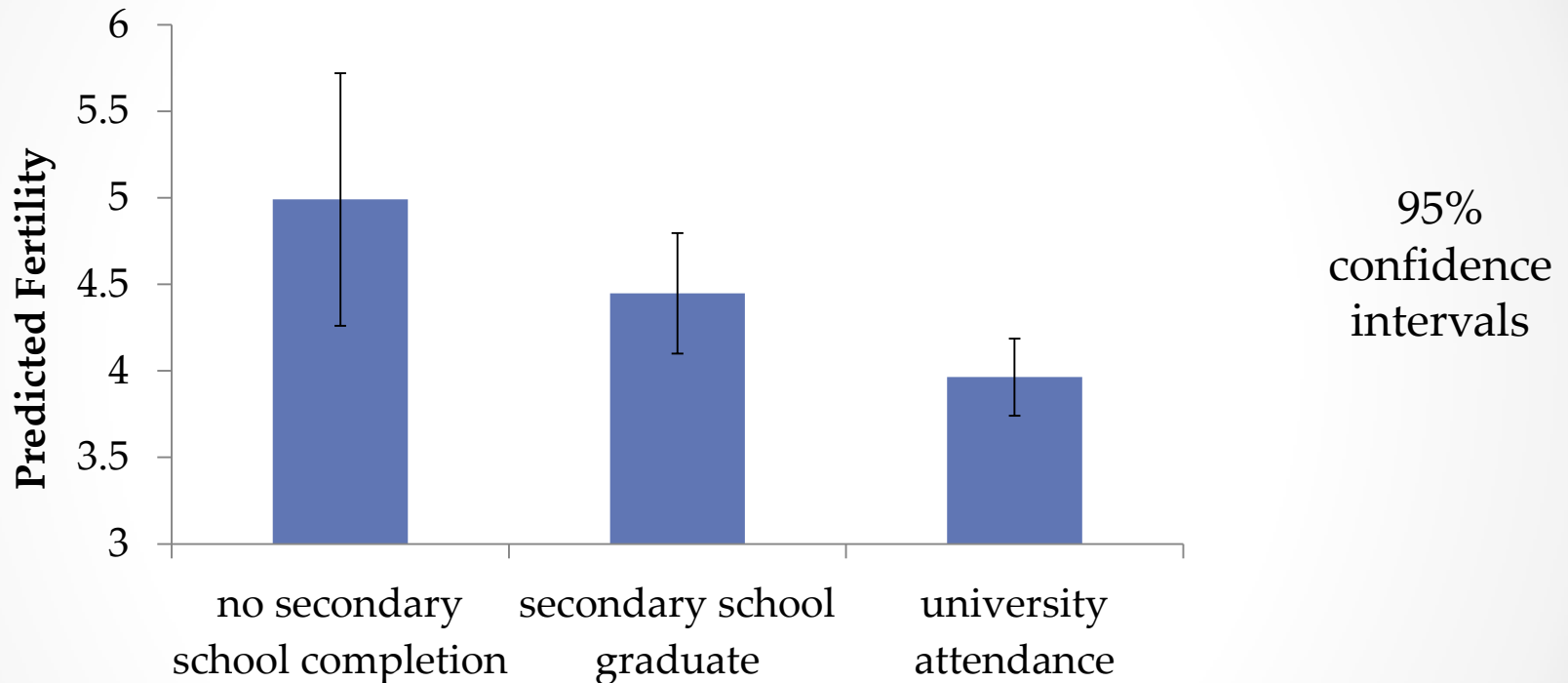
Interviews



Model of Reproductive Decision-Making

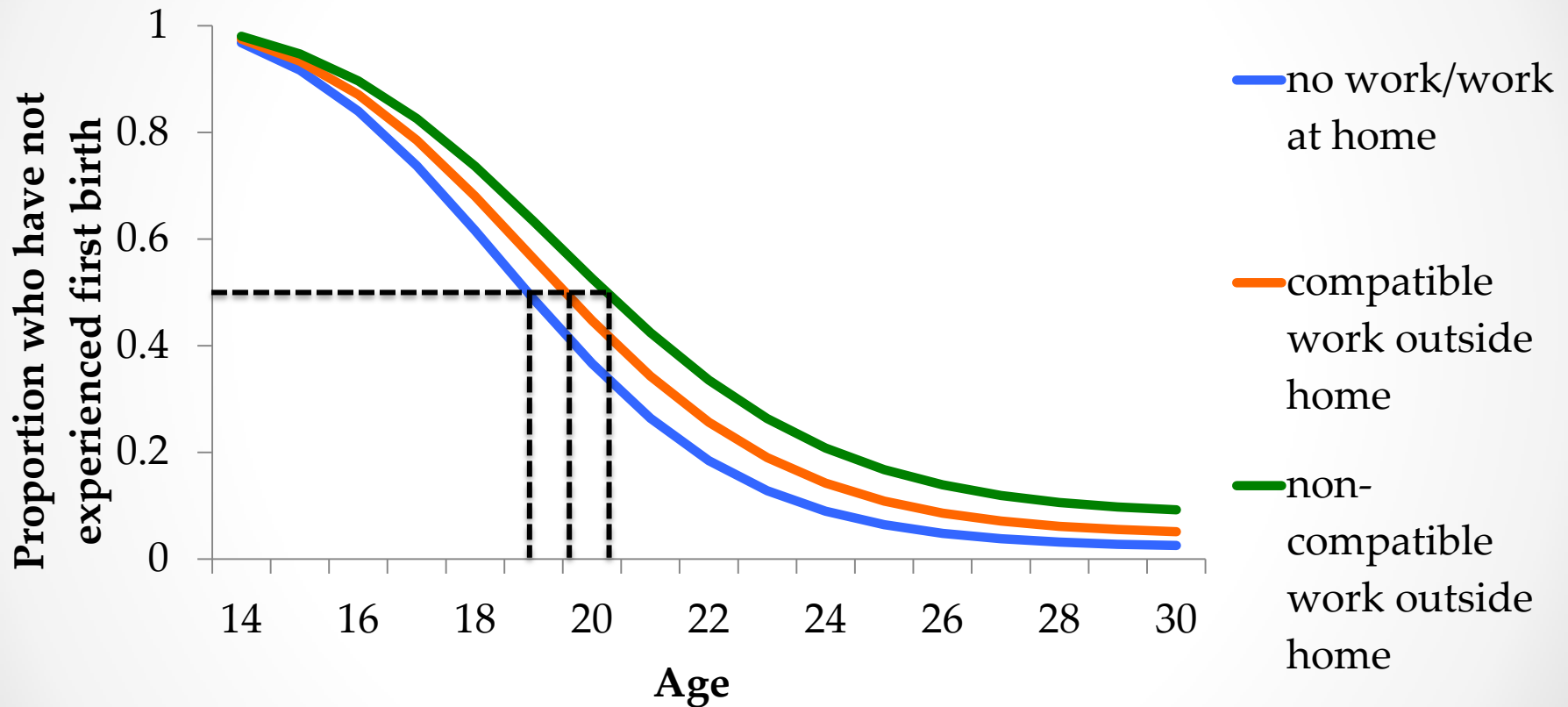


Expected educational achievement of children predicts fertility



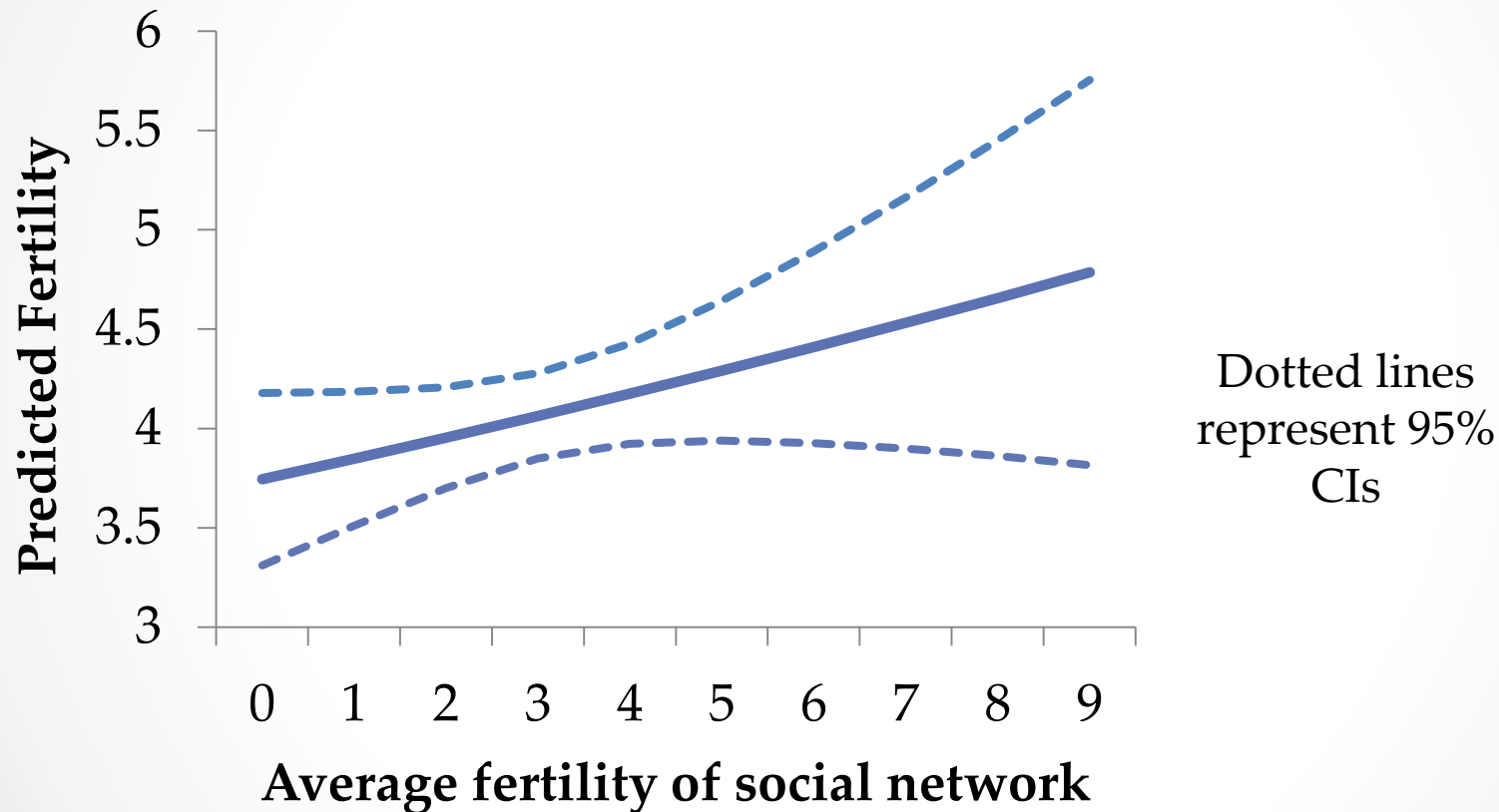
Includes controls for: women's education, ethnic group, household floor type, age, and friend's average fertility

When work is incompatible with childcare, first birth is delayed



Controls for age, age squared, birth cohort, education, ethnicity, sisters' average age at first birth.

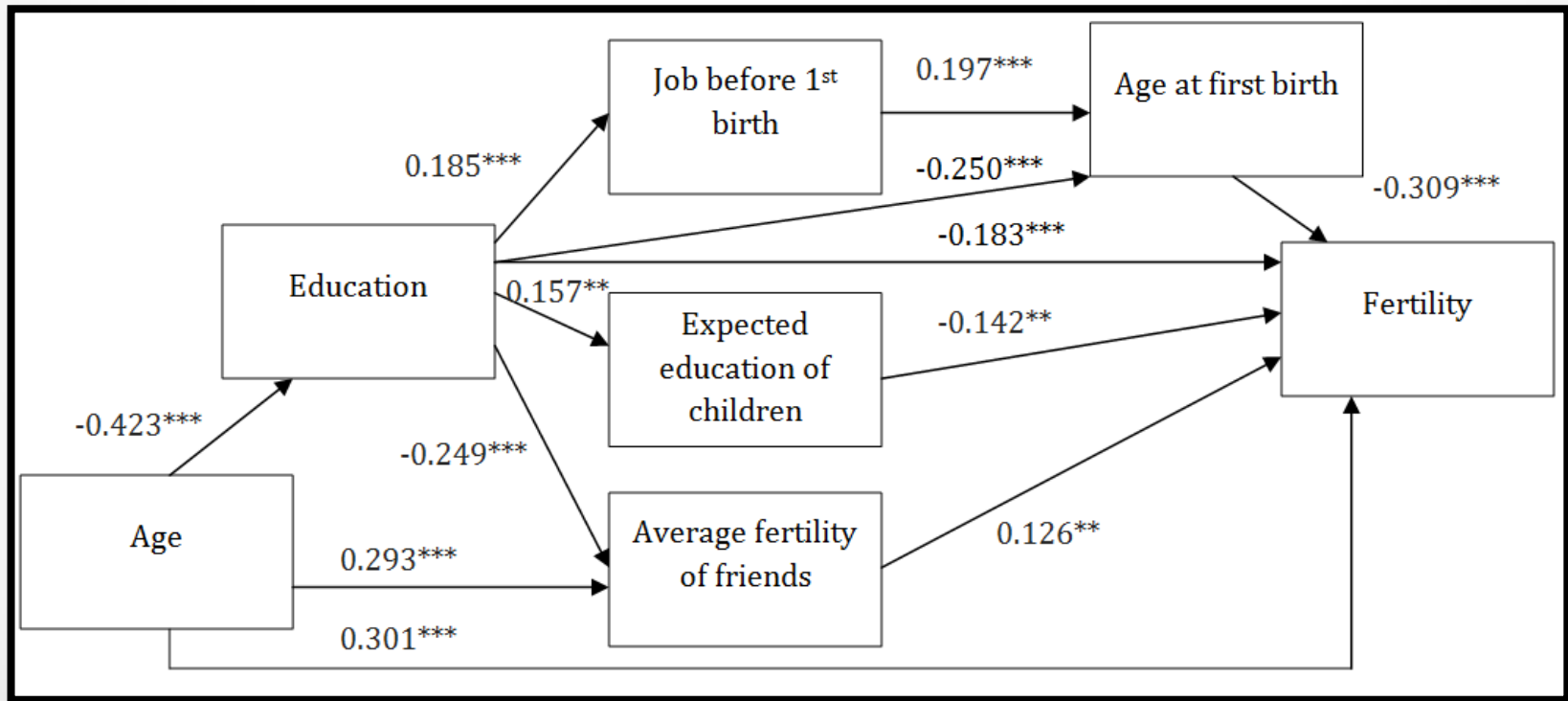
Fertility of one's social network predicts own fertility



Includes controls for: women's education, ethnic group, household floor type, age, and expected education of children

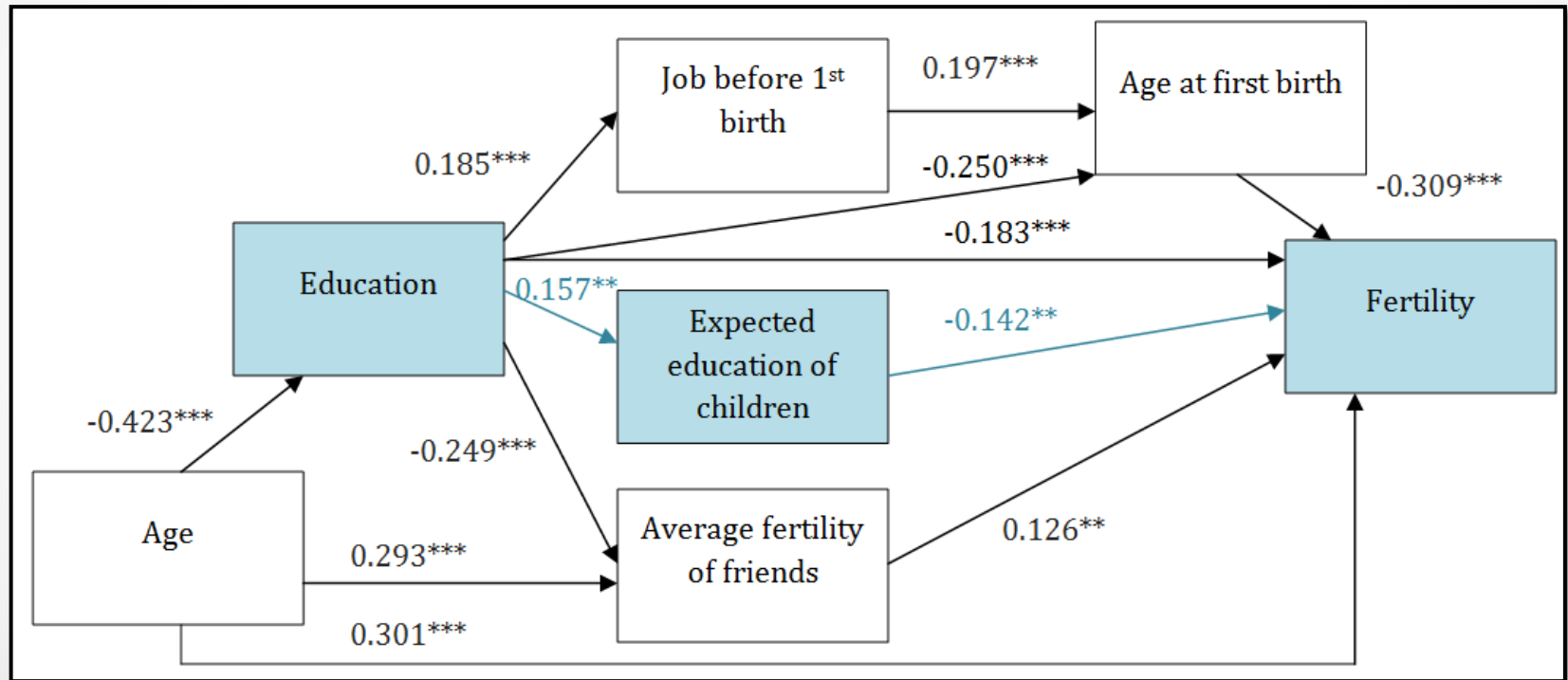
Snopkowski & Kaplan (2014) American Journal of Physical Anthropology

Model of Reproductive Decision-Making



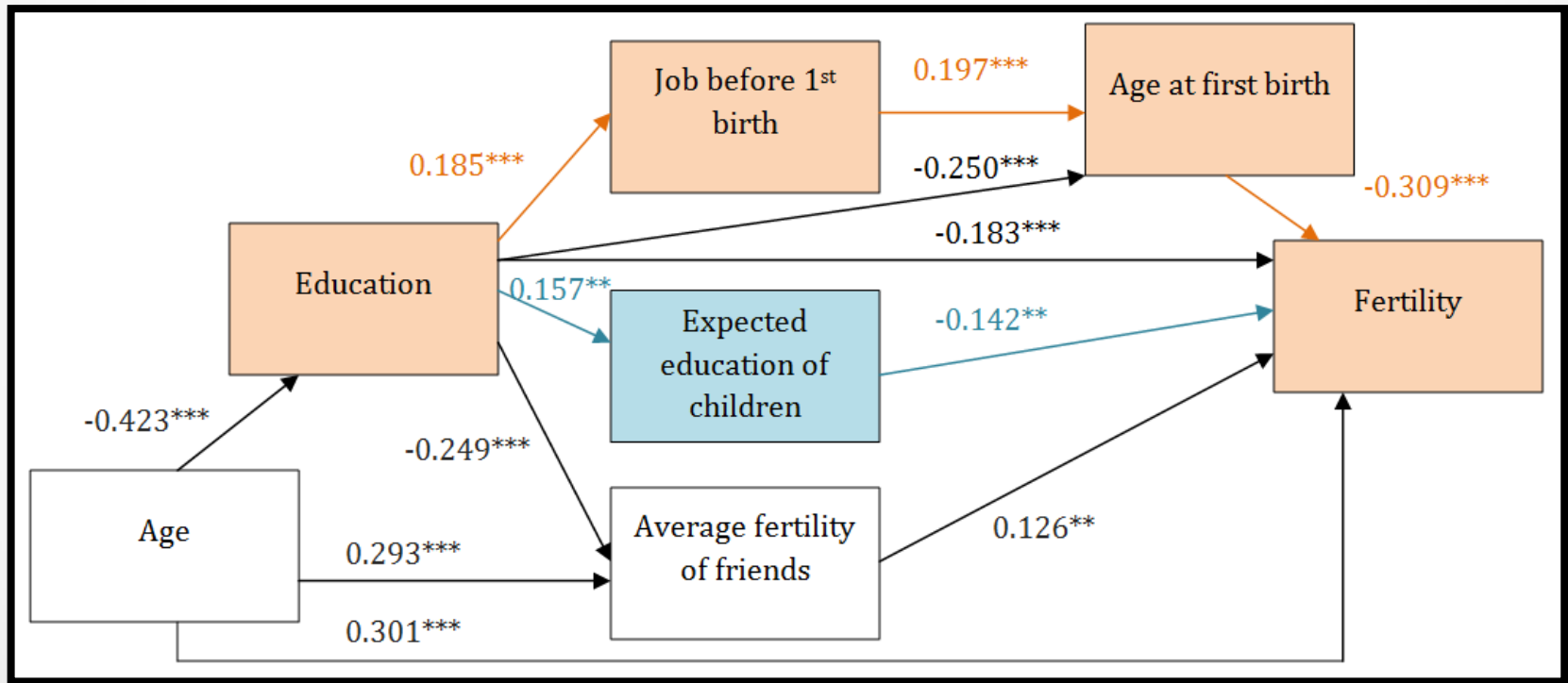
* $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$

Model of Reproductive Decision-Making



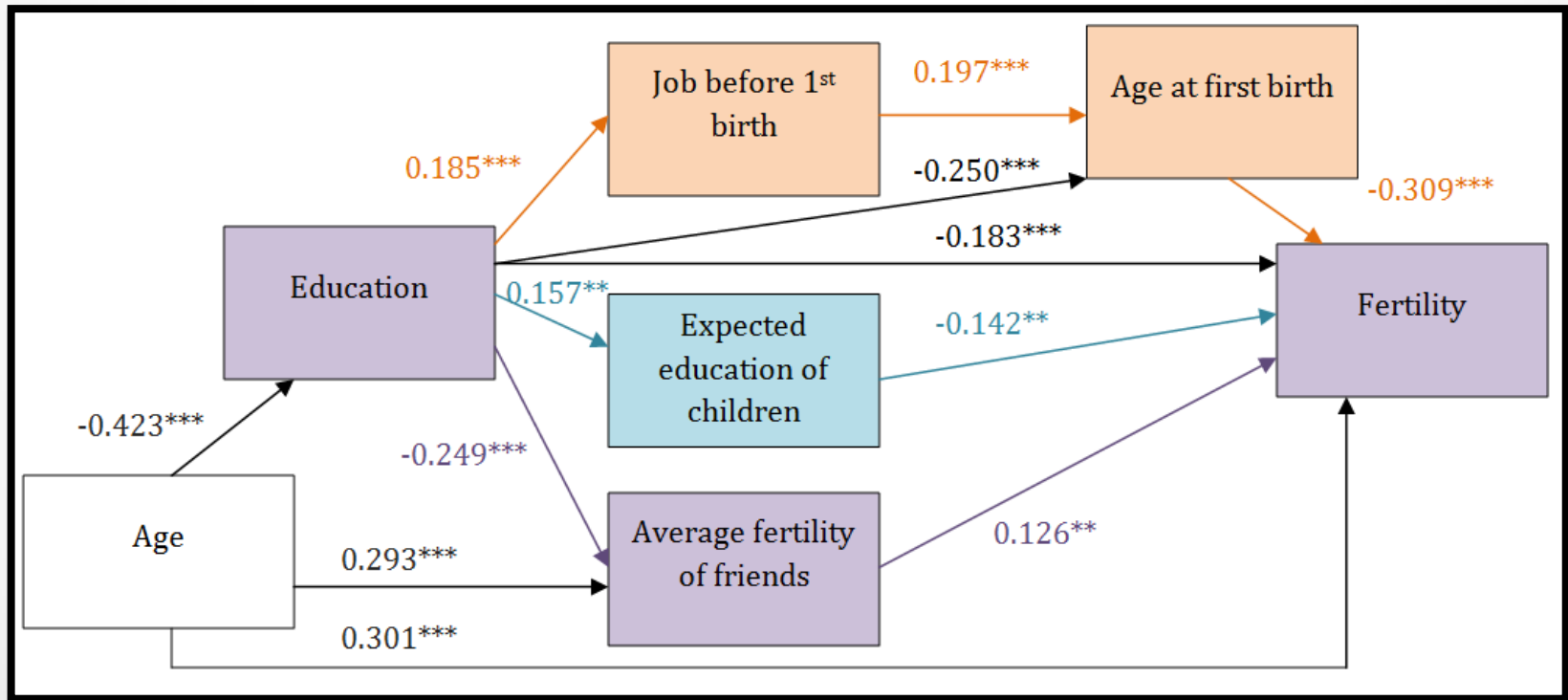
* $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$

Model of Reproductive Decision-Making



* $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$

Model of Reproductive Decision-Making



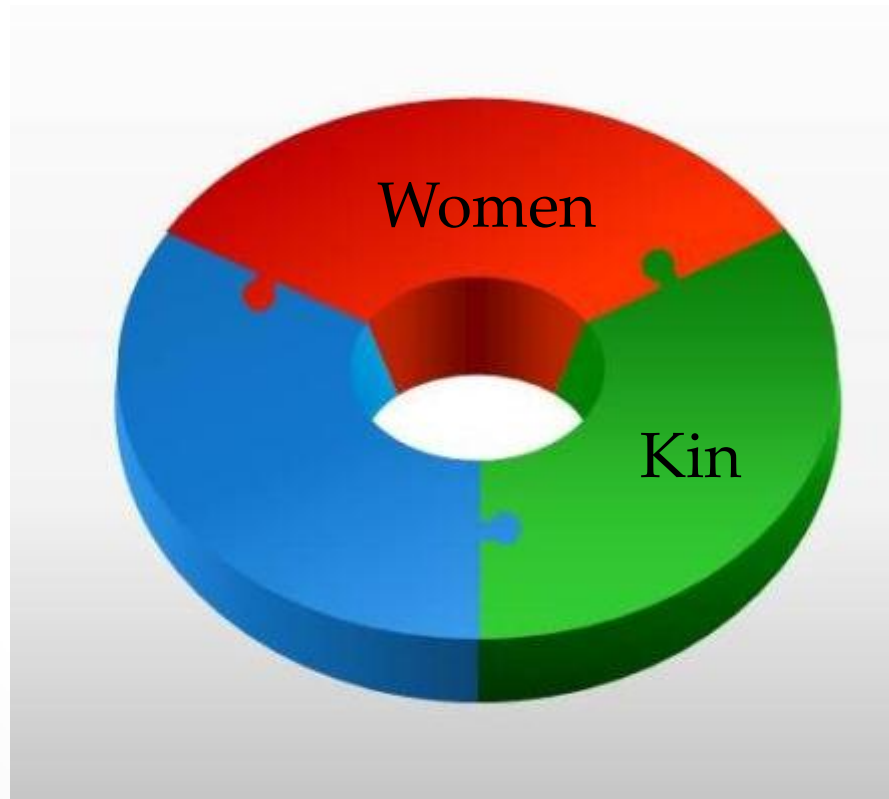
* $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$

Implications for our understanding of reproductive decision-making

- Evidence suggests that fertility decline is multi-causal
- Education is mediated through both cultural & economic pathways.
- Women's labor force participation only affects fertility through its effect on age at first birth.



Understanding the Reproductive Puzzle



How do kin influence reproductive decision-making?

Cooperative Breeding

Grandmother Hypothesis

How do kin influence reproductive decision-making?

Conflicts of interests

Resource competition

Datasets

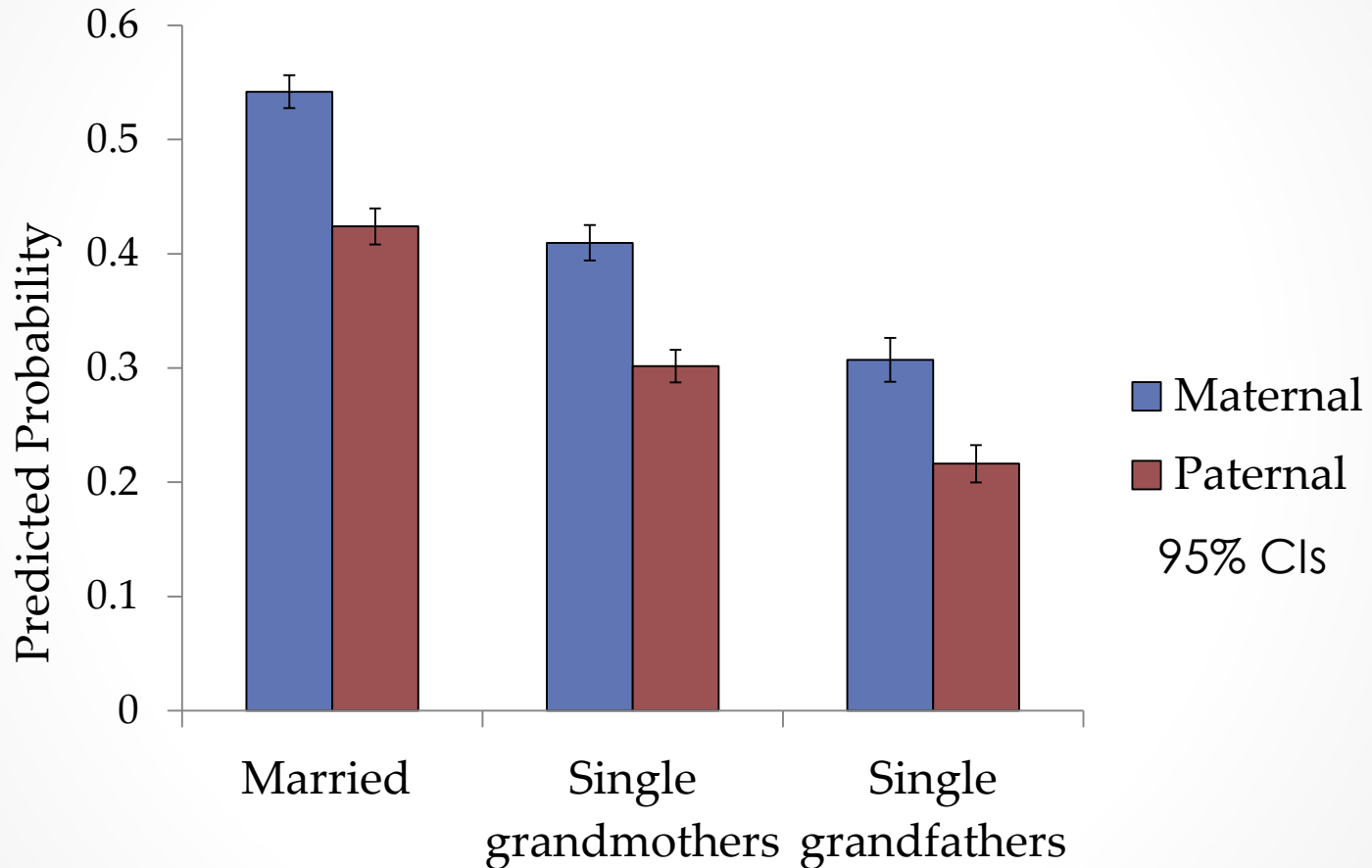
Thailand Demographic and Health Survey

- Cross-sectional - 1987
- 6,775 ever-married women aged 15-49

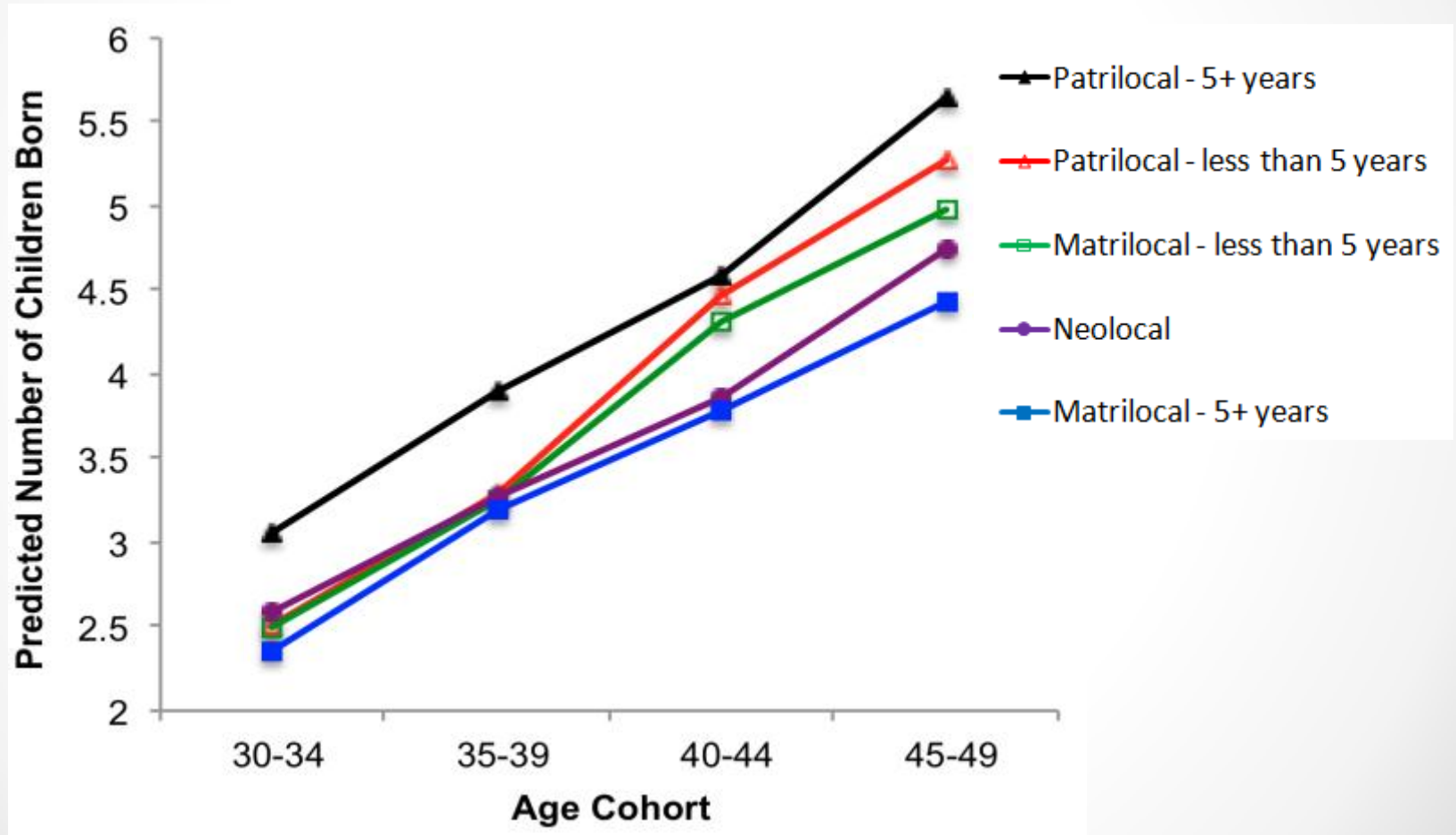
Indonesia Family Life Survey

- Panel – '93, '97, '00, '07
- Data on 9,134 ever-married women

Help from Kin

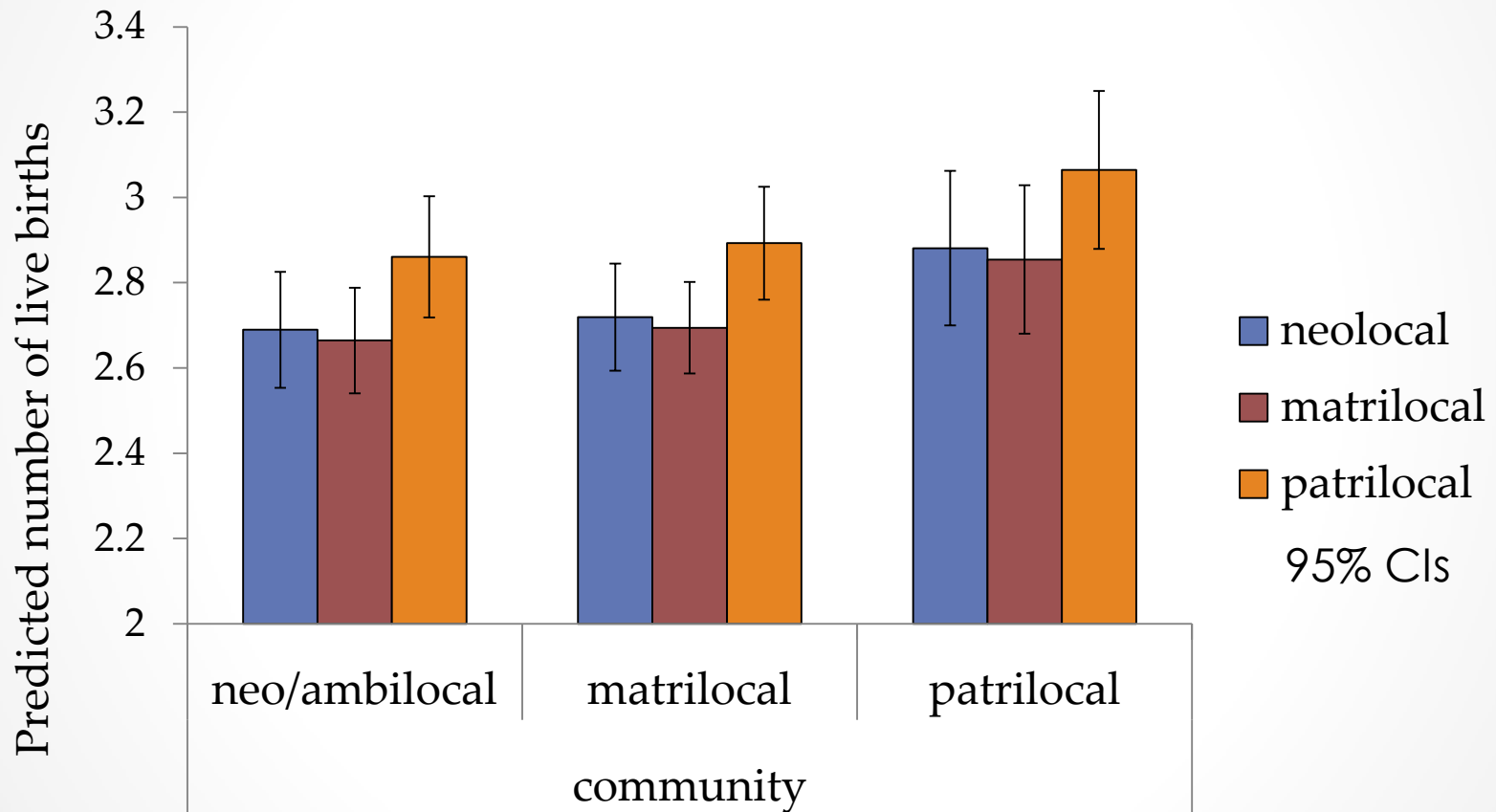


Patrilocal post-marital residence is associated with higher fertility



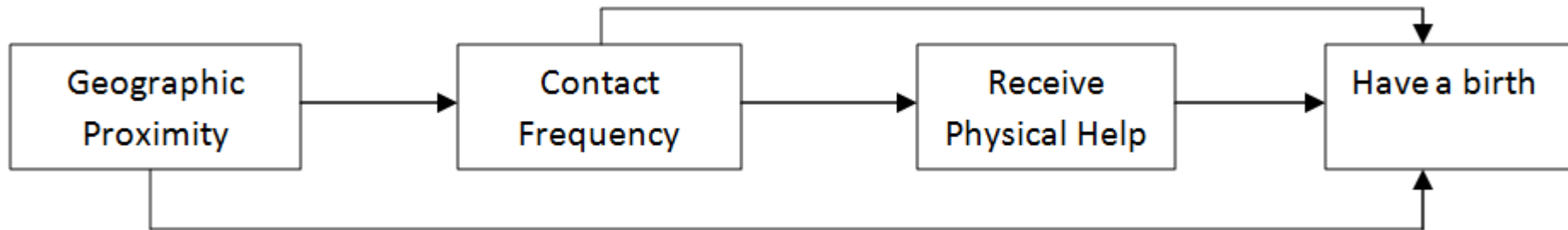
Snopkowski & Sear (2013) Kin influence on fertility in Thailand: Effects and mechanisms. *Evolution and Human Behavior*, 34: 130-138.

Effect is surprisingly consistent



Model controls for: region, religion, urban/rural residence, age, age squared, education, wealth, and age at marriage.

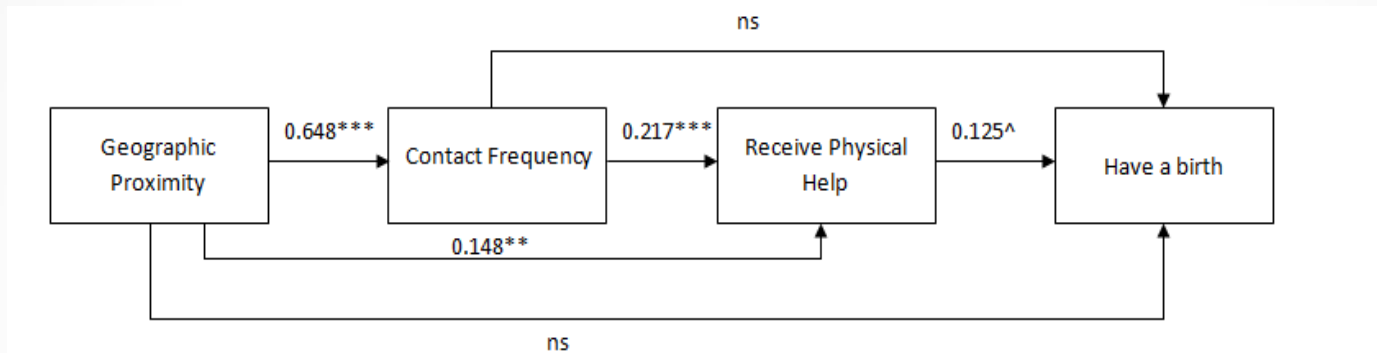
Hypothesized Causal Model



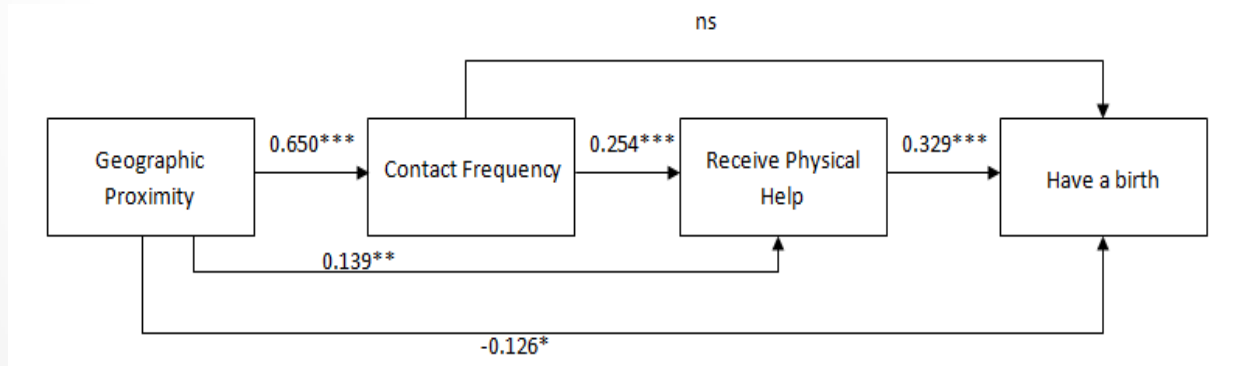
Snopkowski & Sear (in revision) *Demographic Research*

Help from mothers-in-law is predictive of birth

Mothers:



Mothers-in-law:



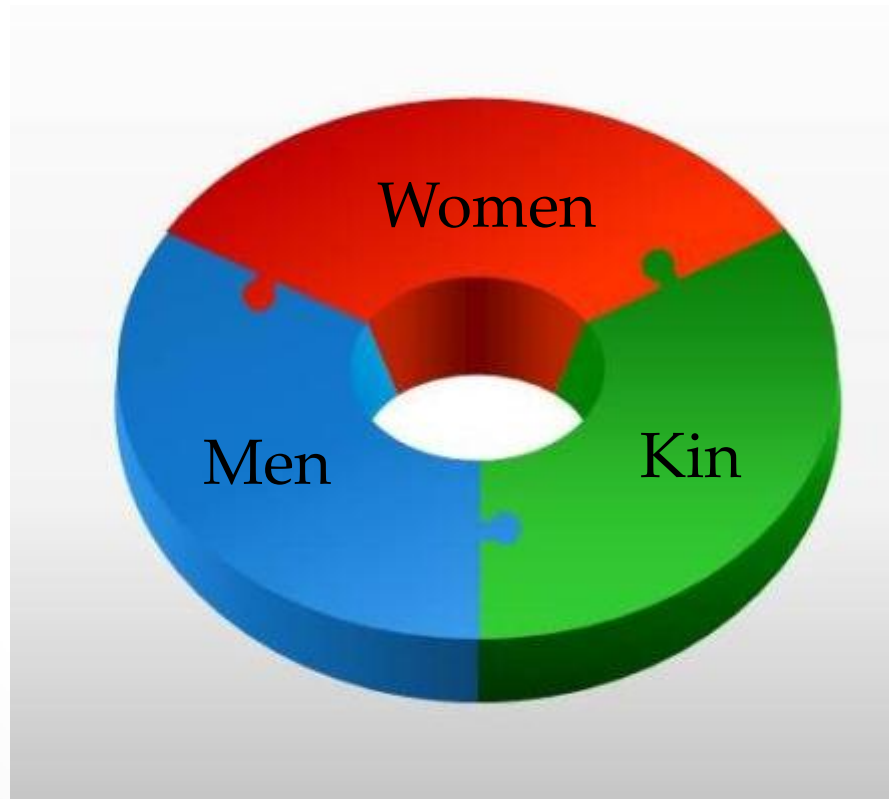
ns $p > 0.10$, ^ $p < 0.10$, * $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$

Snopkowski & Sear (in revision) *Demographic Research*

Implications of kin help on reproductive decision-making

- Even though maternal kin provide more help, paternal kin's help influences birth outcomes.
- Evidence suggests that most of the effect of kin on fertility outcomes can be explained by helping behavior.

Understanding the Reproductive Puzzle

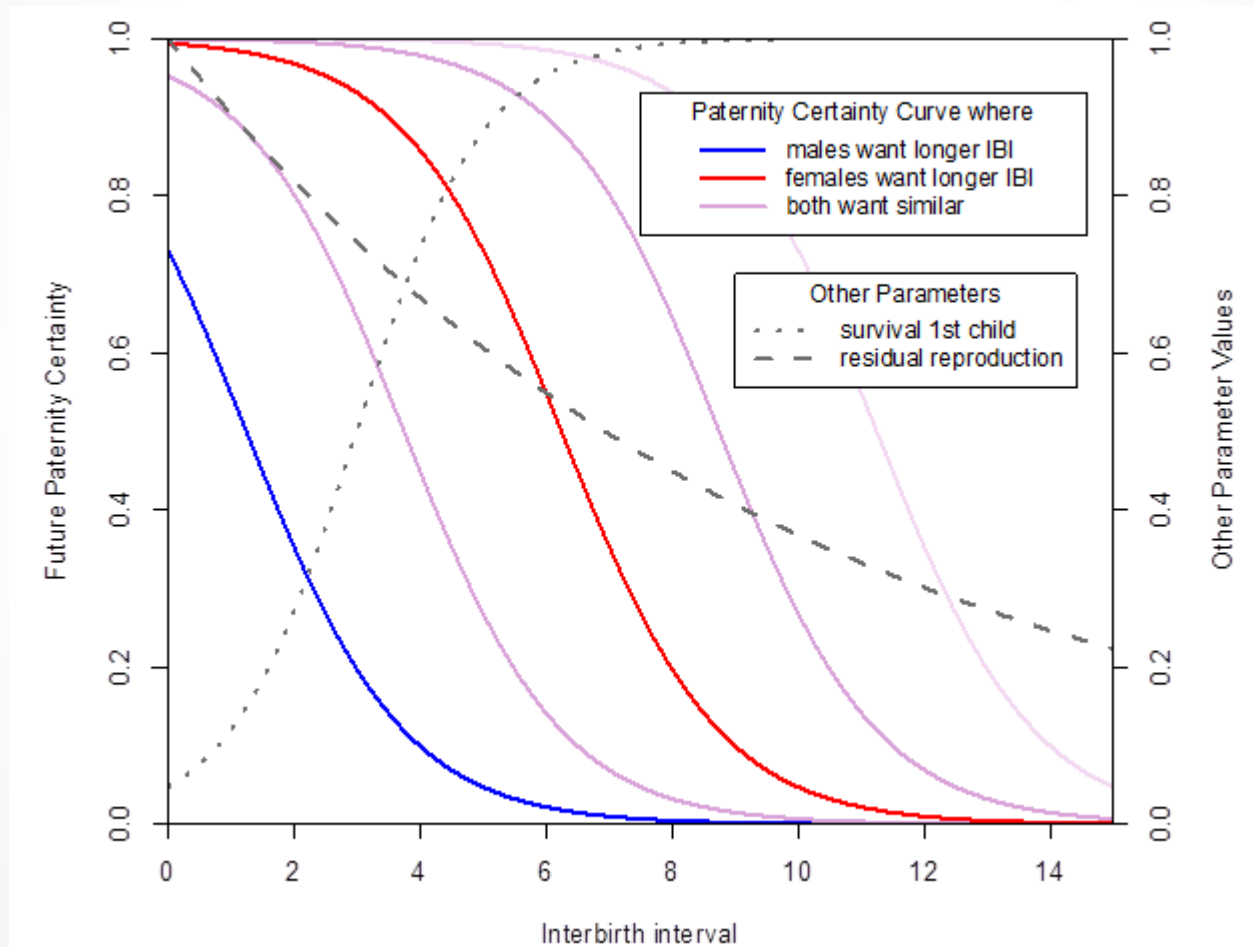


Do men and women have conflicts over family size?

1. Differences in costs
 - Not the right comparison
2. Kin selection
 - One does better by producing own offspring
3. Unlimited Females
 - Humans are male-biased in the fertile ages

Moya, Snopkowski & Sear (under review) Philosophical Transactions

Do men and women have conflicts over family size?



- Moya, Snopkowski & Sear (under review) Philosophical Transactions

Empirical Evidence for Family Size Preference

Three studies comparing desired family size for men and women:

1. No differences in desired fertility of men and women (Mason & Taj 1987).
2. Couples tend to agree on whether to have another child. If they disagree, men are more likely to want additional children (Mason & Smith 2000).
3. Men tend to want more children than their wives and want the next child sooner (Bankole & Singh 1996).

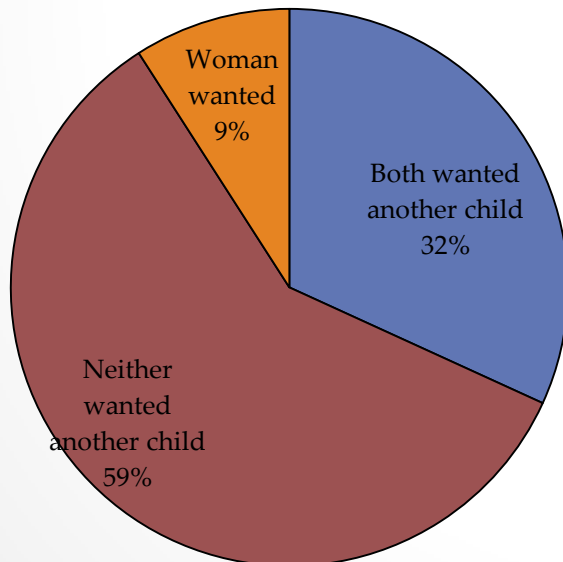
Huatasani, Peru

- Located in the Peruvian Altiplano
- Approximately 3,000 people in the entire district
- Majority of people work as farmers (potatoes) or herders (sheep)

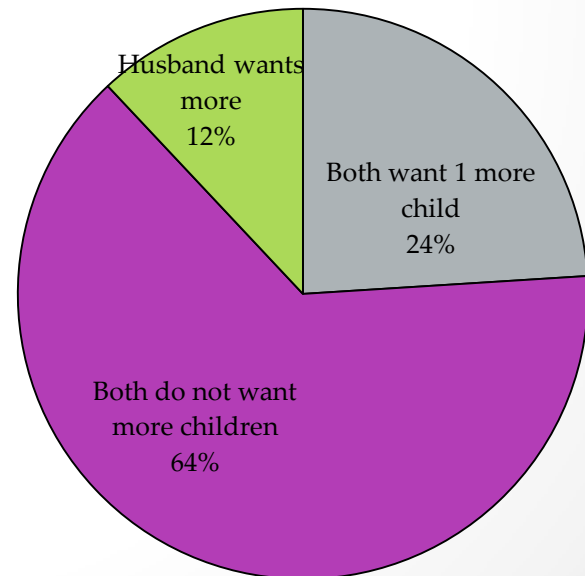


Preliminary Results

Of the 22 couples that responded about their most recent child:



Of the 25 couples that reported whether or not they wanted more children



Implications of Family Size Preference

1. Theoretically, we may not expect men to desire larger family sizes than women for a given couple
2. Empirically, men may report wanting larger families, but it may be because they are imagining their total number of children across multiple women.



Conclusion

Economic effects influence reproductive decisions

BUT...

Ultimately fertility takes place in a social world, and these social interactions, whether they be social information, help received, sexual dynamics, also drive fertility decisions.



Thank you

Sincerest thanks to collaborators, funders, interviewers & respondents. This research would not be possible without their help.



Collaborators:

Cristina Moya, Hillard Kaplan, Rebecca Sear, Paula Sheppard, Heidi Colleran, Susie Schaffnit

