Is childbearing contagious?
Using panel data to disentangle mechanisms of social network influence on fertility decisions

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Mechanisms of Network Influences

- Mechanisms through which networks may influence ego’s childbearing decisions:
  1. Social contagion: Assimilation of novel behaviors from network persons (e.g., via direct influence in interaction)
  2. Social pressure: enforcement of social norms (e.g., concerning timing or spacing of births) throughout the network
  3. Vicarious (social) learning: Assimilation of behavior according to observed (expected) rewards
  4. „Social obligation“ (Bernardi): „child compatibility“ of network relations (e.g., joint leisure activities)
  5. Social support: prospects of receiving external resources (financial support, help with childcare) relaxes ego’s anticipated time budget restrictions after transition to parenthood
Theoretical Background

• What motivates people to take over network members’ attitudes and behaviors?
  – Classical theoretical approach: Theory of Social Comparison Processes (Festinger 1954)
  – Mechanism: Attitudinal congruence generates positive affect, while dissonance may lead to (a) behavioral adaptation (alignment), (b) influence attempts or (c) exclusion of network persons (selection)

• Social Learning Theory (Bandura 1977): observation of observed / expected rewards and costs of parenthood in role models
Previous research

- Qualitative research in Germany and Italy (Bernardi 2003; Bernardi et al. 2007; Keim 2011; Keim et al. 2009): development of a typology of network influences
- Quantitative micro-level studies:
  - Contagion:
    - Inversely u-shaped effect of average number of children per network member on ego’s childbearing intention (Bühler / Fratczak 2007)
    - TIP study (Kopp et al. 2010): birth events in the network increase childbearing intention
    - Lyngstad / Prskawetz (2010): similar timing of first births among 100,000+ sibling pairs
    - Richter et al. (in press): network influence most pronounced for higher-order births
  - Social pressure accelerates the transition to parenthood (Udry 1982, Barber 2001)
- Regional studies (Hank 2003): no context effects on fertility
- Macro studies (e.g., Kohler 2001)
Issues in Previous Research

• Mostly qualitative evidence (especially on contagion) → triangulation necessary
• Mostly cross-sectional studies targeted at childbearing intentions, whereas to date, few studies address actual fertility behavior
• Virtually no findings on mediating mechanisms
• Small sample sizes
Hypotheses

1. Contagion Hypothesis: Number of parents in the network has a positive impact on ego’s transition rate to parenthood.

Intervening mechanisms:

2. Social Learning Hypothesis:
   a) Parents in the network increase the salience of positive family life experiences.
   b) Parents in the network convey a high relative importance of parenthood.

3. Social Obligation Hypothesis: Parents in the network are judged as more „child-compatible“ than childless network persons.

4. Social Pressure Hypothesis: Parents in the network may exert social pressure on ego to start a family.
Sample and Method

- Bamberger Panel Study on Marital and Cohabiting Couples (initially childless respondents from Western Germany, observed across four panel waves: 1988, 1990, 1992, 1994)
- Pooled dataset: n = 1679 couples taking part in at least two waves of the survey
- DV: First births and pregnancies (n = 904 events)
- Analytical approach: discrete-time event history analysis in the framework of path analysis
Measures

- Network definition: “Think of friends, relatives, acquaintances or other important discussion partners with whom you interact regularly”
- Potential for social contagion: Proportion of parents in the interactive network (response categories: none, some, many)
- Social pressure from friends: “Friends exert pressure on us to start a family“ (5-point scale)
- Model learning: Evaluation (positive / negative) of network persons‘ experiences with children (two items combined to a scale)
Measures

- Relative importance of parenthood (difference score), compared to other life domains (work, leisure, wealth)
- Social obligation: „Do you expect to maintain your current social contacts in case you became a parent?“ (3-point scale)
- Several control variables: e.g. network size, network composition (friends, relatives, mixed)
- Variables with substantial intracouple similarity (r > .30) were considered as couple means
Descriptive Results: Potential for Social Contagion

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(International pairfam Conference "Fertility over the Life Course")

Proportion

Age of woman

Low potential for social contagion
Medium potential for social contagion
High potential for social contagion
Results: Size of the Social Contagion Effect across the Fertile Period

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Results: Social Learning Hypothesis (a)

Network: Potential for Social Contagion

Perceived Rewards of Parenthood in the Network

Transition Rate to First Birth

Standardized coefficients: Woman age 26 or younger (27 and older)
Controls: Age, partnership duration
Results: Social Learning Hypothesis (b)

Network: Potential for Social Contagion

- Relative Priority of Parenthood: .18** (.07*)
- Transition Rate to First Birth: .06** (.25**)

Standardized coefficients: Woman age 26 or younger (27 and older)
Controls: Age, partnership duration
Results: Social Obligation Hypothesis

Network: Potential for Social Contagion → Network: „Child Compatibility“ → Transition Rate to First Birth

.07** (.03)
.22** (.06+)
.10** (.01)

Standardized coefficients: Woman age 26 or younger (27 and older)
Controls: Age, partnership duration
Results: Social Pressure Hypothesis

Network: Potential for Social Contagion

Social Pressure from Friends

Transition Rate to First Birth

.04
(.08*)

-.06+
(-.11*)

.23**
(.07+)

Standardized coefficients: Woman age 26 or younger (27 and older)
Controls: Age, partnership duration

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Summary

• Social Contagion Hypothesis was generally confirmed for the transition to parenthood
  – Effect remains significant multivariately
  – Contagion is largely temporary (up to age 27), no effect afterwards
  – Reflecting secondary socialisation by peers

• Support for several bridging hypotheses explaining contagion: number of parents in the network increases
  a) Opportunities for model learning
  b) Relative importance of parenthood
  c) „Child compatibility“ of networks
  d) Social pressure from friends to start a family among older couples (however, this actually decreases the rate of first births)
Discussion and Outlook

• No data on individual network persons, just global network-related assessments

• Potential selection issues: Changes in network composition over time: To properly disentangle contagion and selection, it would be necessary to have data that allows tracing individual network members over time → hard to find!

• General conclusion: study of context effects may extend conventional life course perspective („linked lives“)
Thank you for your attention!
Control variables

• Network-related controls:
  – network size
  – network composition (friends, relatives, mixed)
  – social support (financial, practical and with respect to childcare)
  – social pressure from parents (perceived negative parental evaluation of respondent’s childlessness)

• Other controls:
  – Age of woman
  – partnership duration
  – cohabitation / marriage
  – education
  – couple division of labor
  – partner agreement concerning the timing of parenthood