The Theory of Uncertainty Reduction Revisited: Does Parenthood Provide Certainty?
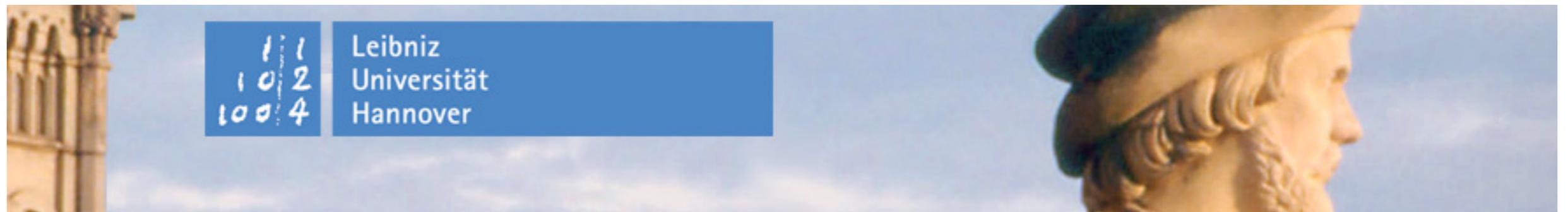
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Motivation

- Theory of Values of Children
  - Fertility is motivated by instrumental and immanent values
  - Criticism: child-related values are defined in an ad hoc manner
  - Suggestion: Human behavior is motivated by a small number of general values
    - Children as social production functions for material well-being and social approval
    - Children as a mean to reduce uncertainty in life

- Reception of the theory of uncertainty reduction in research on fertility
  - Alternative to neoclassical household economics
  - Mix of empirical support and rejection
  - Core arguments were never empirically tested
    - Perception of children as a source of uncertainty reduction
    - Expected reduction of uncertainty due to children motivates fertility

Reduction of Uncertainty

- Rational actors avoid uncertain situations
  - Uncertainty: no probabilities of desired or undesired consequences of different courses of action are known => no decision possible
  - Risk: probabilities are known => insurance possible

- Strategies under uncertainty
  - Collection of additional information
  - "Do nothing"
  - Decision for a goal with long-term commitments
    - Long-term commitments are at least partly known
    - No further decisions about what to do in general are needed
    - Only decisions on commitment-related activities have to be made

Reduction of Uncertainty by Children

- Three strategies of long-term uncertainty reduction:
  - Successful occupational career
  - Stable marriage
  - Children
- Children have the most binding consequences
- Individuals become motivated to have children, if alternative strategies of uncertainty reduction are blocked or are not promising

- Marriage
  - Prospect of marriage or a stable marriage increase certainty and reduce fertility
  - Counter-arguments:
    - Stable marriages support marriage-specific investments
    - Norms of marital fertility
  - Mixed empirical support
  - Support from African-Americans

Reduction of Uncertainty by Children

- Occupational career
  - ▸ Favorable occupational prospects increase certainty and reduce fertility
  - ▸ Counter-argument:
    - Income hypothesis
  - ▸ Mixed empirical support
  - ▸ Empirical support by unemployed women in Europe

Reduction of Uncertainty by Children

- Shortcomings
  - Criticism primarily under a perspective of costs
  - Uncertainty is measured via proxy variables
    - Proxies for uncertainty: heterogeneity of marriage partners, risk of divorce, low educational qualifications, unemployment
    - Uncertainty is assumed, if people miss marital or occupational standards
    - No unambiguous empirical tests possible. For example: Female unemployment supports motherhood
      - Confirmation of uncertainty reduction theory
      - Confirmation of substitution hypothesis (low opportunity costs)
  - Uncertainty as a subjective perception/evaluation of situations is not considered
    - Subjective perceptions to what extent an occupational situation or marriage is uncertain
    - Subjective perceptions to what extent a first or another child would increase or decrease uncertainty in life

Research Questions

- Influences on the perception that children reduce uncertainty in life
  - ‣ Number of children (transition to parenthood)
  - ‣ Age (biographical uncertainty)
  - ‣ Gender (societally accepted role model)
  - ‣ Partnership status (degrees of institutionalization)
  - ‣ Partnership quality (indicator for partnership certainty)
  - ‣ Occupational situation (proxies for occupational certainty)
  - ‣ Occupational certainty

Data and Variables

- Data
  - Generations and Gender Survey of the Czech Republic (2005)
  - Face-to-face interviews of 10,006 individuals
  - 2,433 female respondents aged 18 to 45
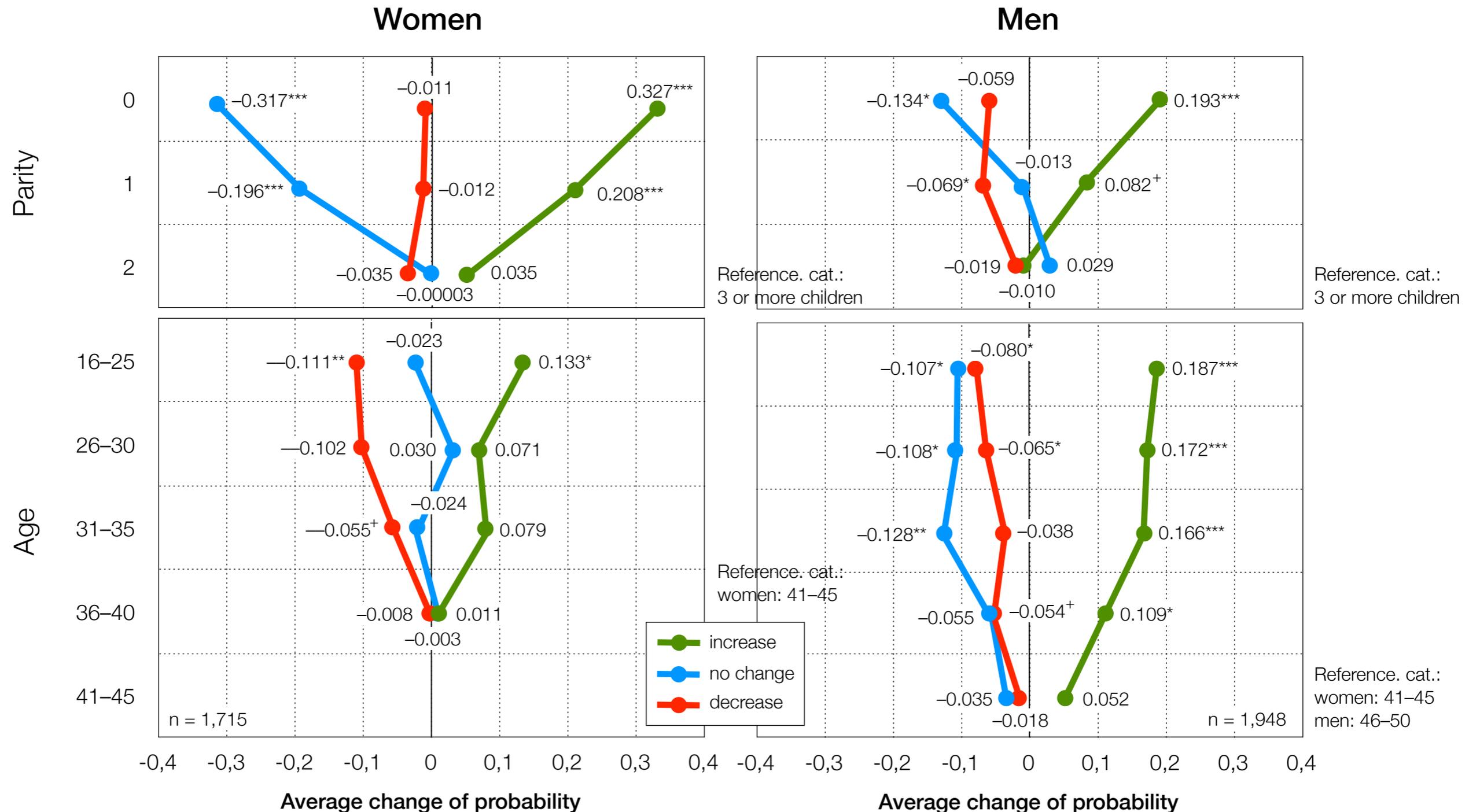 - 2,813 male respondents aged 18 to 50

- Dependent variable
  - Attitudes on having a first or another child
    - "If you were to have a/another child during the next three years, would it be better or worse for … certainty in your life?"
    - Answer categories: "much better","better", "neither better nor worse", "worse", "much worse"
  - Categories used in the analyses:
    - increase of certainty, no change, decrease of certainty (multinomial logit)
    - increase of certainty vs. no change or decrease of certainty (binary logit)

Data and Variables

- Independent variables
  - ‣ Parity, age, gender
  - ‣ Marital status
  - ‣ Partnership quality
    - Frequency of disagreements
    - Satisfaction with the partnership
    - Considered to break up the partnership
  - ‣ Occupational situation
    - Educational degree
    - Employment situation
  - ‣ Occupational certainty
    - Kind of work contract
    - Satisfaction with job security
    - Control about work situation within the next three years
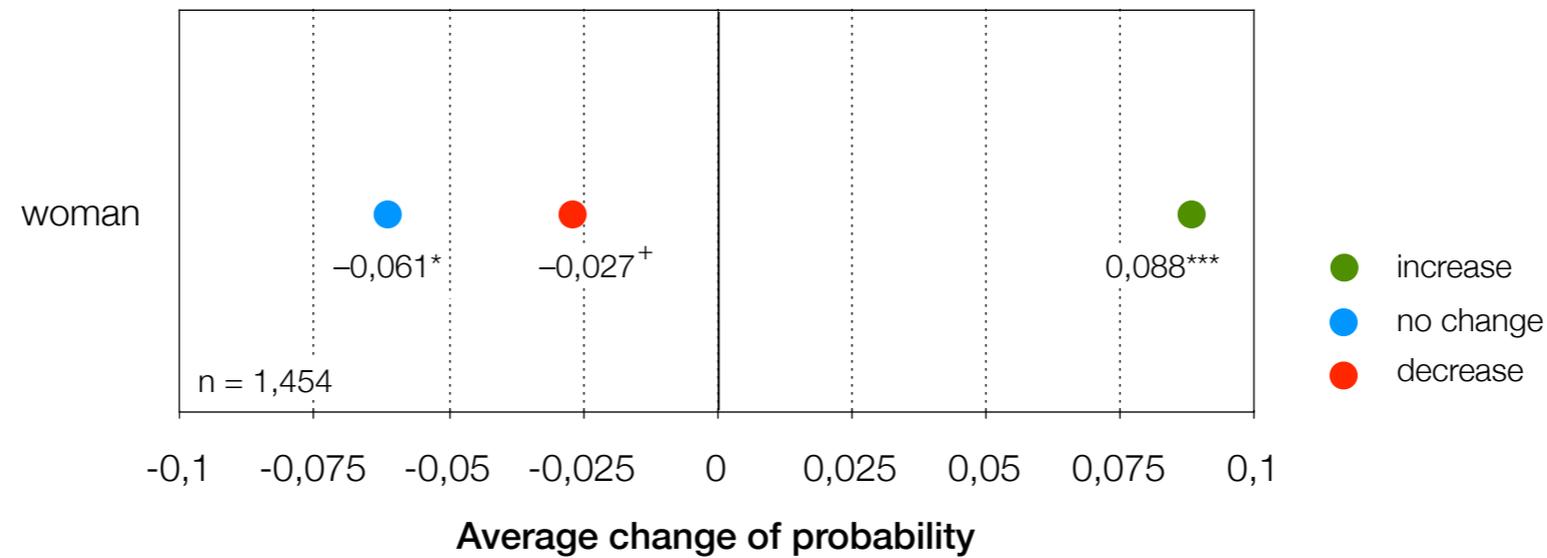
Change of Certainty Due to a Child
Effects of Parity and Age Separated by Gender (multinomial logit)

Change of Certainty Due to a First Child
Effect of Gender (multinomial logit, childless respondents, aged 18 – 35)

woman

−0,061*   −0,027⁺   0,088***

- increase
- no change
- decrease

n = 1,454

-0,1   -0,075   -0,05   -0,025   0   0,025   0,05   0,075   0,1

Average change of probability
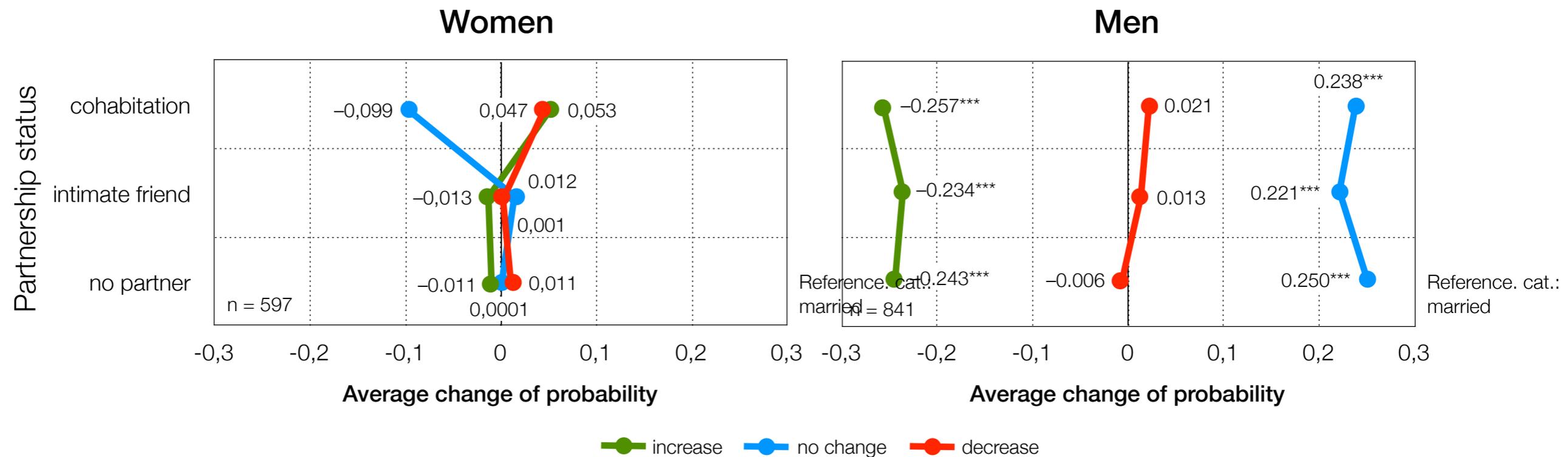
Control variables: age, marital status, employment situation, level of education.
Levels of significance: ⁺ ≤ 0.1, * ≤ 0.05, ** ≤ 0.01, *** ≤ 0.001.

Change of Certainty Due to a First Child

Effects of Partnership Status Separated by Gender
(multinomial logit, childless respondents, aged 18 – 35)

Women

Men

Partnership status

- cohabitation
- intimate friend
- no partner

Women panel values:
- cohabitation: −0,099, 0,047, 0,053
- intimate friend: −0,013, 0,012, 0,001
- no partner: −0,011, 0,011, 0,0001
- n = 597

Men panel values:
- cohabitation: −0.257***, 0.021, 0.238***
- intimate friend: −0.234***, 0.013, 0.221***
- no partner: −0.243***, −0.006, 0.250***
- Reference. cat.: married, n = 841
- Reference. cat.: married

Average change of probability

X-axis: -0,3 -0,2 -0,1 0 0,1 0,2 0,3

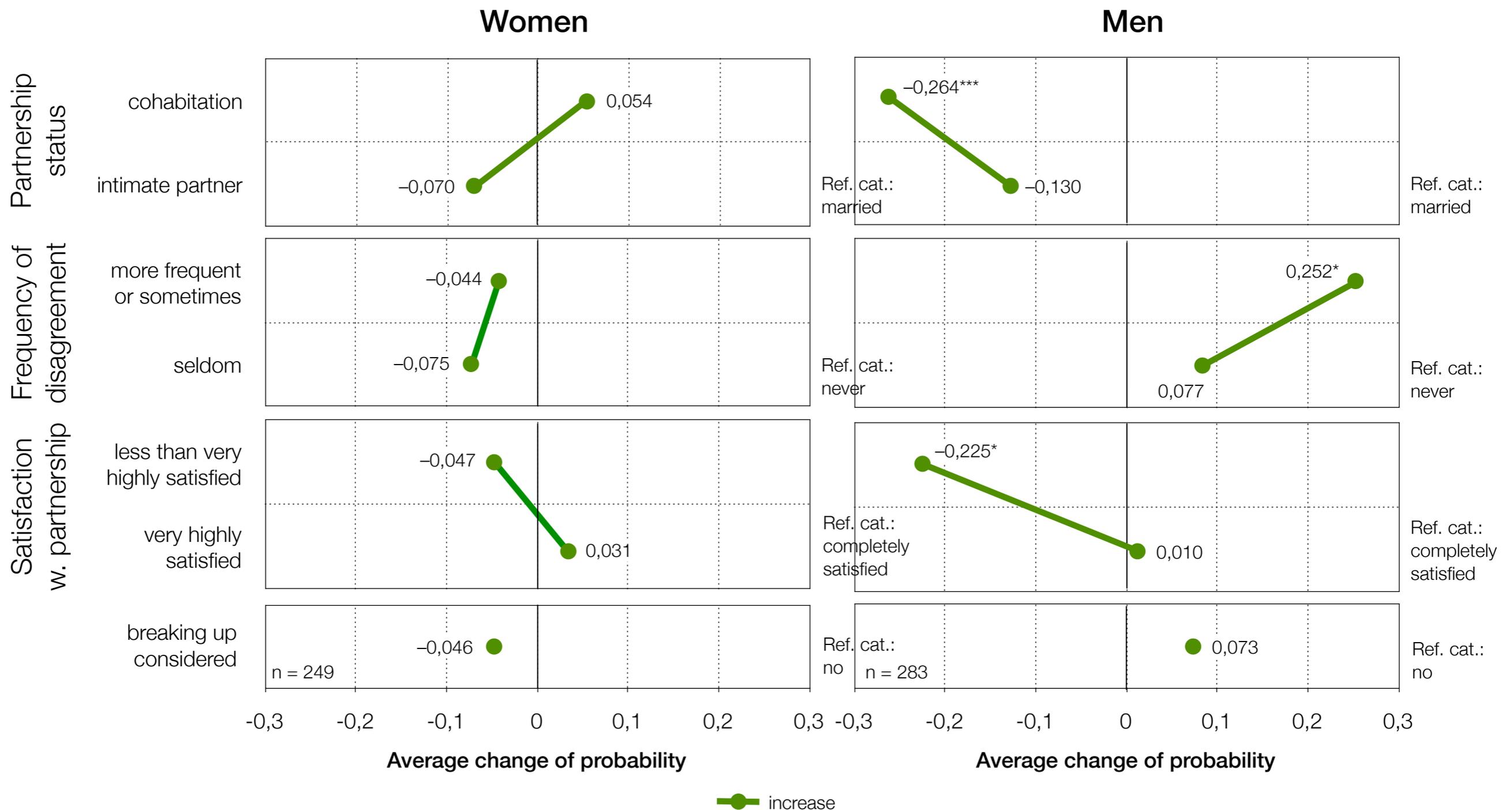Legend: ●— increase ●— no change ●— decrease

Control variables: age, employment situation, level of education.
Levels of significance: + ≤ 0.1, * ≤ 0.05, ** ≤ 0.01, *** ≤ 0.001.

Change of Certainty Due to a First Child
Effects of Partnership Quality Separated by Gender
(binary logit, childless respondents with a partner, aged 18 – 35)

Women

Men

Partnership status

cohabitation — 0,054
intimate partner — −0,070

−0,264*** — cohabitation
−0,130 — intimate partner
Ref. cat.: married

Frequency of disagreement

more frequent or sometimes — −0,044
seldom — −0,075

more frequent or sometimes — 0,252*
seldom — 0,077
Ref. cat.: never

Satisfaction w. partnership

less than very highly satisfied — −0,047
very highly satisfied — 0,031

less than very highly satisfied — −0,225*
very highly satisfied — 0,010
Ref. cat.: completely satisfied

breaking up considered — −0,046
n = 249

breaking up considered — 0,073
n = 283
Ref. cat.: no

Average change of probability

increase

Control variables: age, employment situation, level of education.
Levels of significance: + ≤ 0.1, * ≤ 0.05, ** ≤ 0.01, *** ≤ 0.001.

Change of Certainty Due to a First Child

Effects of Education and Employment Situation Separated by Gender
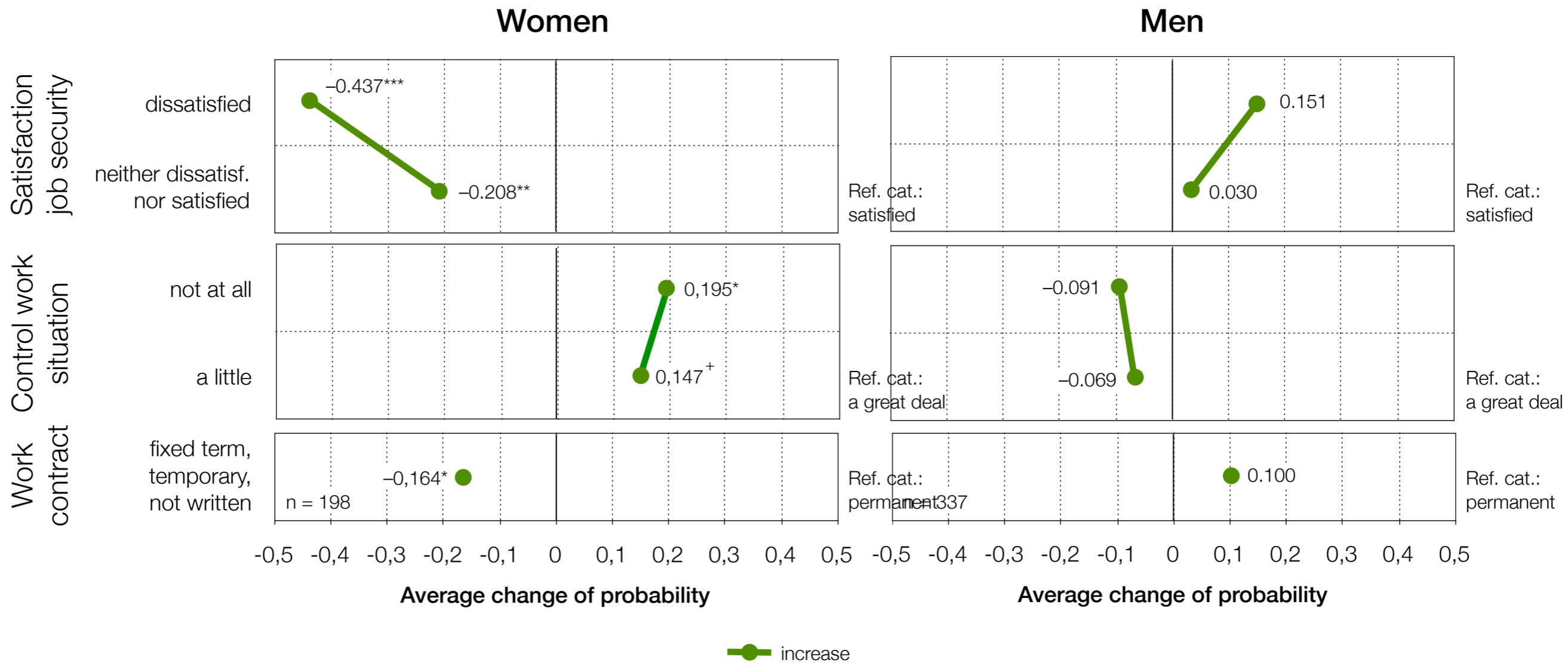(multinomial logit, childless respondents, aged 18 – 35)
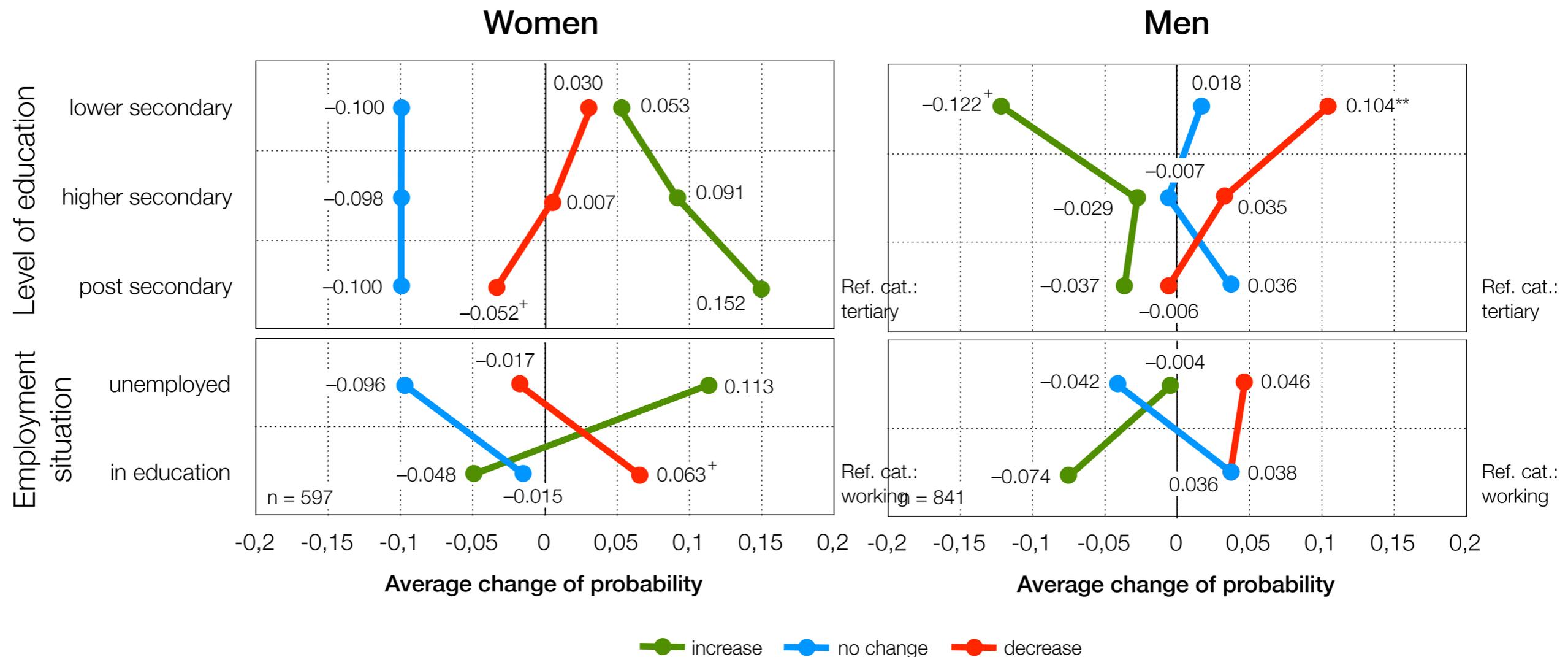
Control variables: age, marital status.
Levels of significance: + ≤ 0.1, * ≤ 0.05, ** ≤ 0.01, *** ≤ 0.001.

Change of Certainty Due to a First Child

Effects of Occupational Certainty Separated by Gender
(binary logit, childless respondents being employed, aged 18 – 35)

Control variables: age, marital status, level of education, income quartiles.
Levels of significance: + ≤ 0.1, * ≤ 0.05, ** ≤ 0.01, *** ≤ 0.001.

Conclusions

- A couple of results are in line with the theory, as a reduction of uncertainty due to children matters …
  - ‣ … for the transition to parenthood
  - ‣ … at beginning of adult life
  - ‣ … more for childless women than for childless men
- Occupational certainty
  - ‣ Women: uncertain current vs. uncertain future situation
- Marital certainty
  - ‣ Men: Children are not sources of certainty in themselves, but means to reduce marital uncertainty