



MAX-PLANCK-INSTITUT  
FÜR DEMOGRAFISCHE  
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RESEARCH

# *Emotion and Fertility Intentions in Times of Disaster: Conceptualizing Fertility Responses to the COVID-19 Pandemic and Beyond*

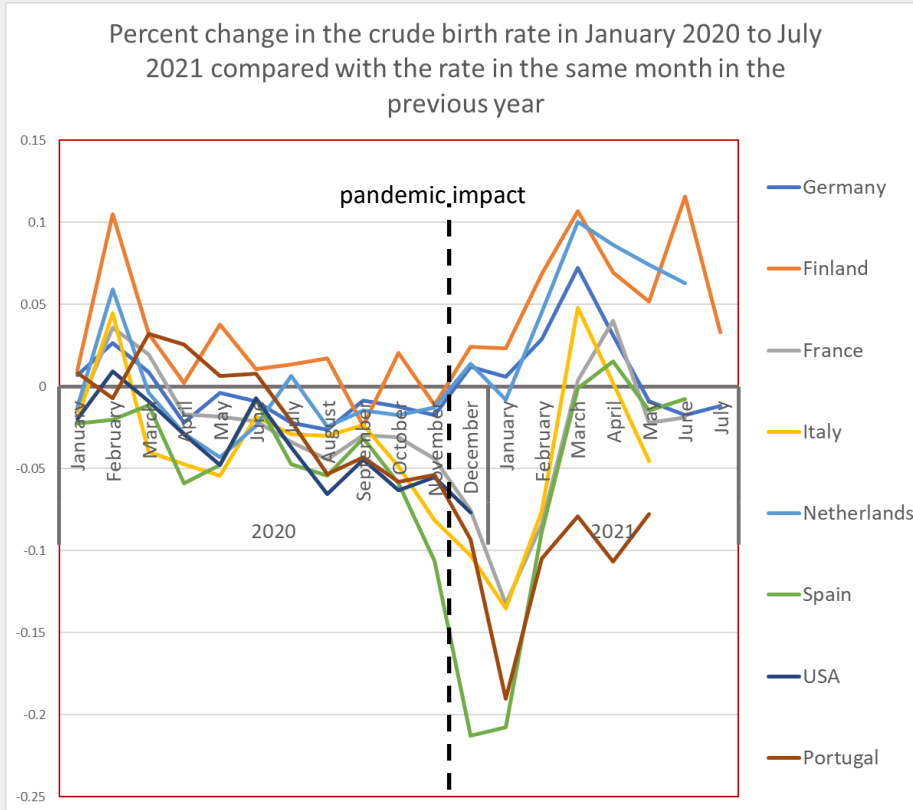
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Pandemic Babies? Conference



# Fertility Response to Disasters



Source: STFF Database, own calculations

Why does it vary?

Which factors drive the disaster impact on fertility preferences and behavior?



# Fertility Response to Disasters—Previous Demographic Explanations

## Replacement-, Physiological-, Insurance- & Hoarding:

- Mortality of own child or expectations of future mortality trigger childbearing (Lloyd and Ivanov 1988; Nobles 2016; Nobles, Frankenberg, and Thomas 2015)

## (Economic) Uncertainty:

- Unemployment, increased job insecurity, and reduced income affect childbearing-decisions (Ayllón 2019; Kreyenfeld 2016; Sobotka et al. 2011; Vignoli, Mencarini, and Alderotti 2020)

## Rapid Attitudinal and Cultural Change:

- Sociopolitical shocks (e.g. break down of Soviet Union) and community level disasters (e.g. Oklahoma bombing) lead to value shifts which affect childbearing (Conrad, Lechner and Werner 1996; Rodgers, John and Coleman 2005)



# Fertility Response to Disasters:

## *Shift Focus to Psychological Factors*

### Main Hypothesis:

- **What happens** (e.g. disaster) affects fertility preferences and behaviors systematically via being **channeled** through **how people feel about** it.
- Role of psychological factors **more salient** during crises: **Uncertainty increases importance of affect in decision-making** (Faraji-Rad and Pham 2017)





# Fertility Response to Disasters:

## *Shift Focus to Psychological Factors & Approaches*

### Terror management theory:

- Feelings of existential terror & death awareness are managed via seeking closeness to others, and by pursuing (first or continued) parenthood to create sense of comfort and immortality (Solomon 2019; Solomon, Greenberg, and Pyszczynski 2000)

### Uncertainty intolerance and worry approach:

- Whether individuals worry about the future in 'uncertain' circumstances is contingent on their uncertainty tolerance (Dugas, Gosselin and Ladouceru 2001, Miceli and Castelfranchi 2005, Buhr and Duas 2009)
- In extension, not uncertainty per se but perceived uncertainty and worry reduce childbearing desires & intentions and fertility



# Research Question

*Are anxiety, anger, loneliness and worries about health and finances felt during the first Covid-19 wave associated with changes in fertility preferences?*



# Hypotheses & Measures

## TM: Terror Management

***General fear and negative emotion*** (anxiety, loneliness, anger) and ***health worries*** triggered by 'threat' will ***intensify desire to reproduce***

General anxiety, loneliness, threat to health perception ↑ fertility (desires/intentions)

## UM: Uncertainty Perception Model

***Worries related to economic conditions, health & social stability*** will lead to ***decline*** in fertility ***desires / intentions / conceptions***

Specific worry and anxiety about economic situation, health, social stability ↓ fertility (desires/intentions)



# Data



## Wave 1

Partner  
(N=3,743)

Anchor  
(N=12,402)

2008/09

## Wave 2

Partner  
(N=2,688)

Anchor  
(N=9,069)

Children  
(N=862)

Parents  
(N=5,015)

2009/10

## Wave 3

Partner  
(N=2,362)

Anchor  
(N=7,901)

Children  
(N=987)

Parents  
(N=3,946)

2010/11

## Wave 4

Partner  
(N=2,182)

Anchor  
(N=6,999)

Children  
(N=1,084)

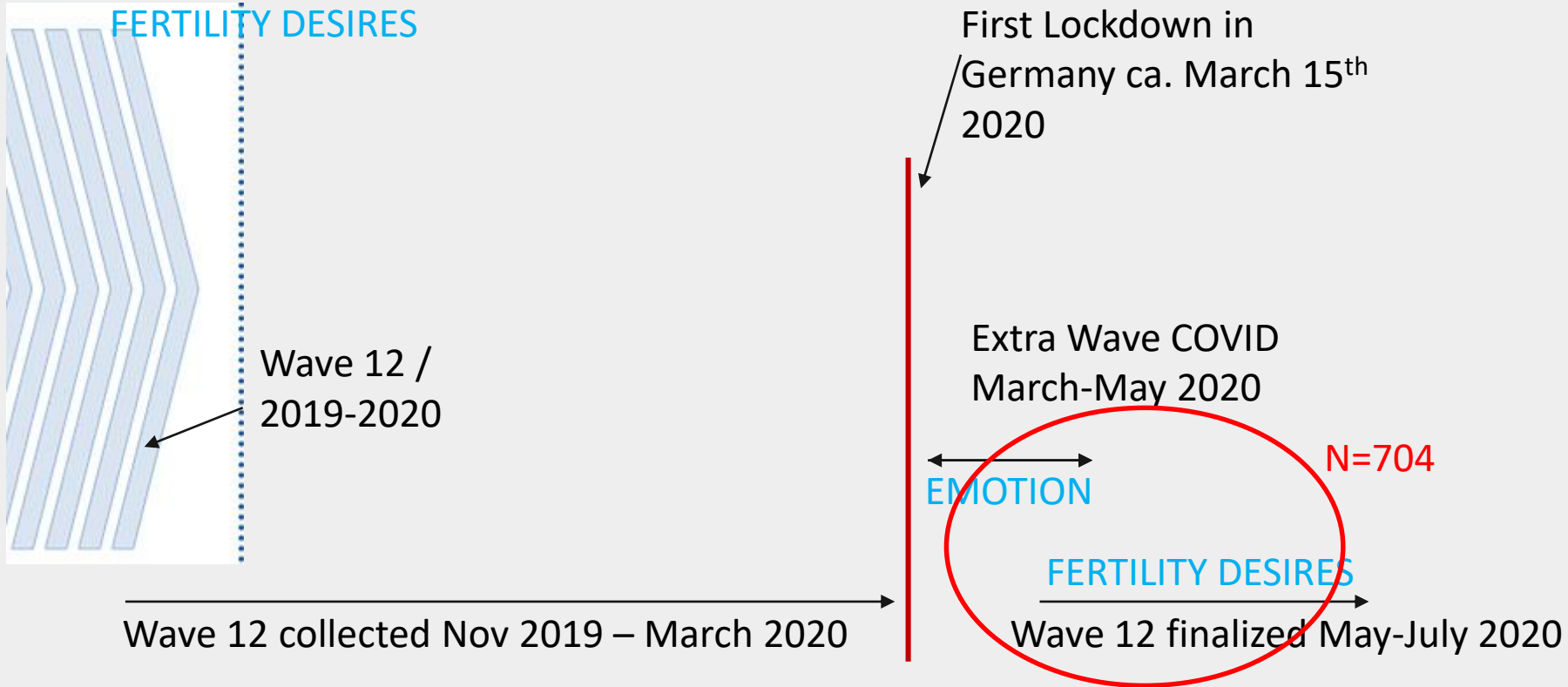
Parents  
(N=3,350)

2011/12





# Data Collection Timing





# Dependent Measure and Model

*“Disregarding constraints, how many kids would you ideally like to have?” (coded as 0-4+)*

## Outcome Variable:

Change in fertility desires from wave 11 (2018/19) to wave 12 (late spring/summer 2020)

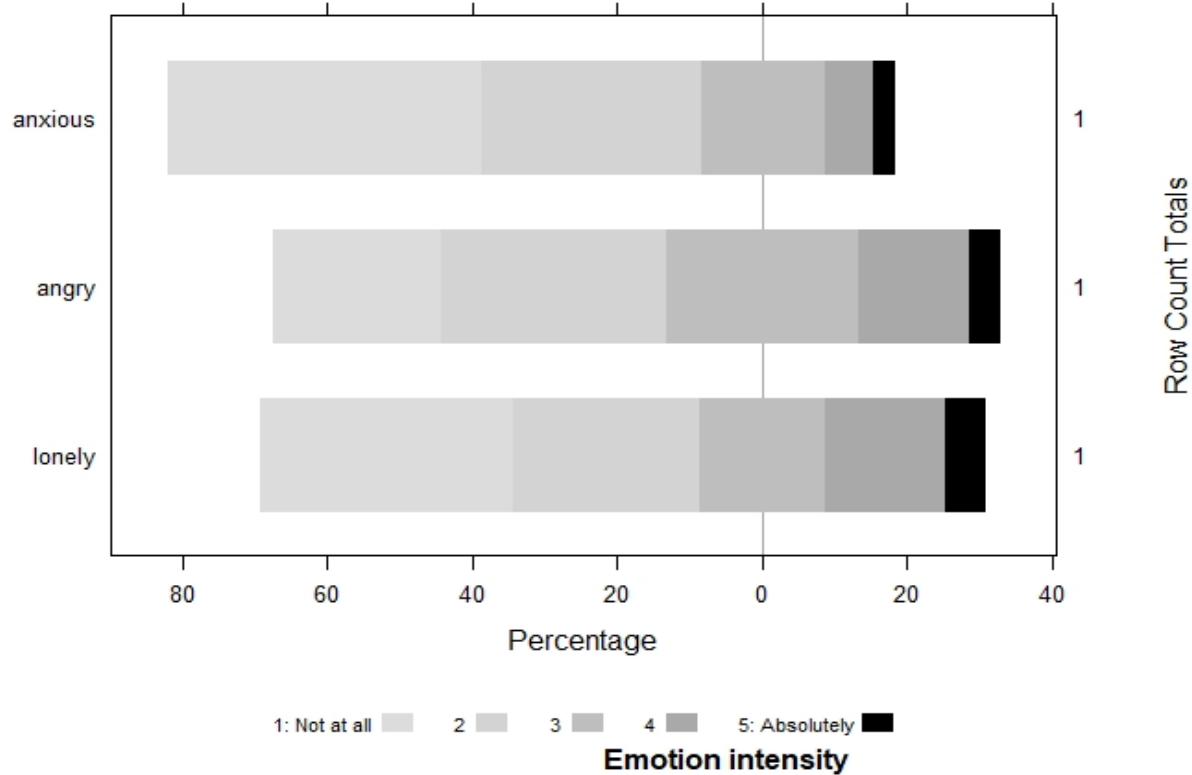
Multinomial model: 1) stayed the same, 2) increased, 3) decreased

Control variables: age, education, sex, partnered, parenthood status



# Measures: Emotion

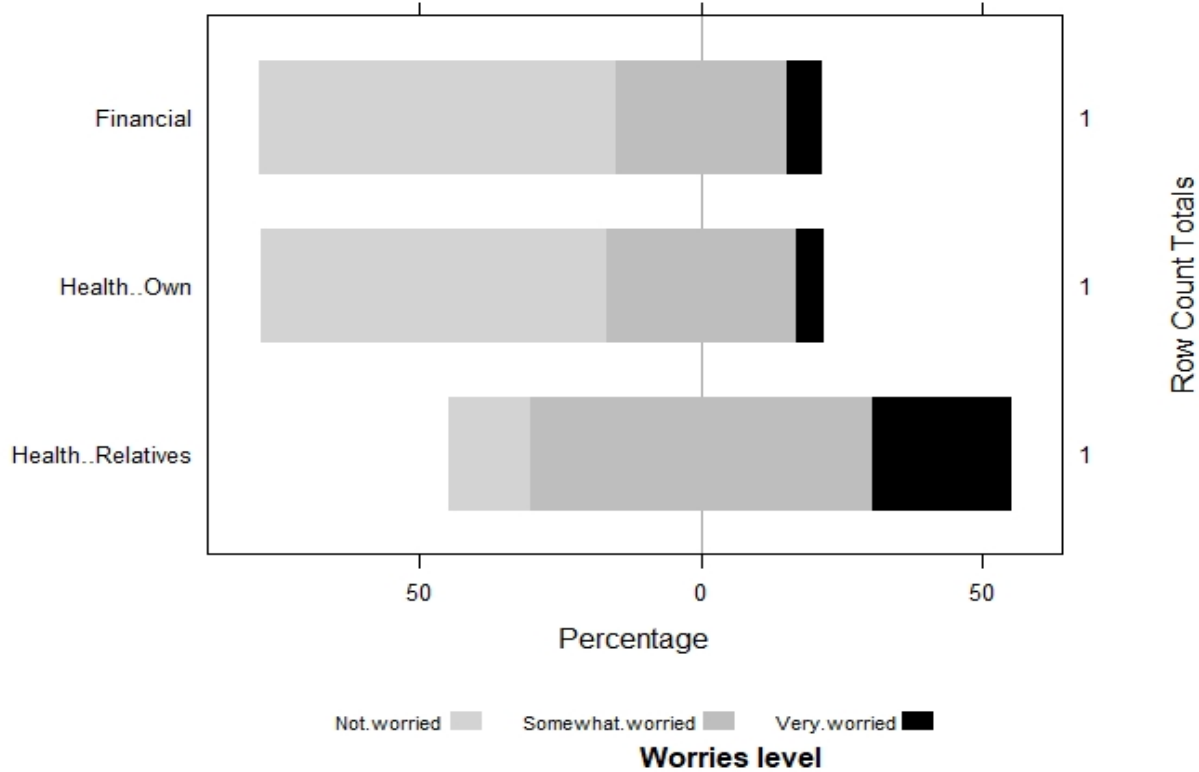
Have you felt over the past 4 weeks...





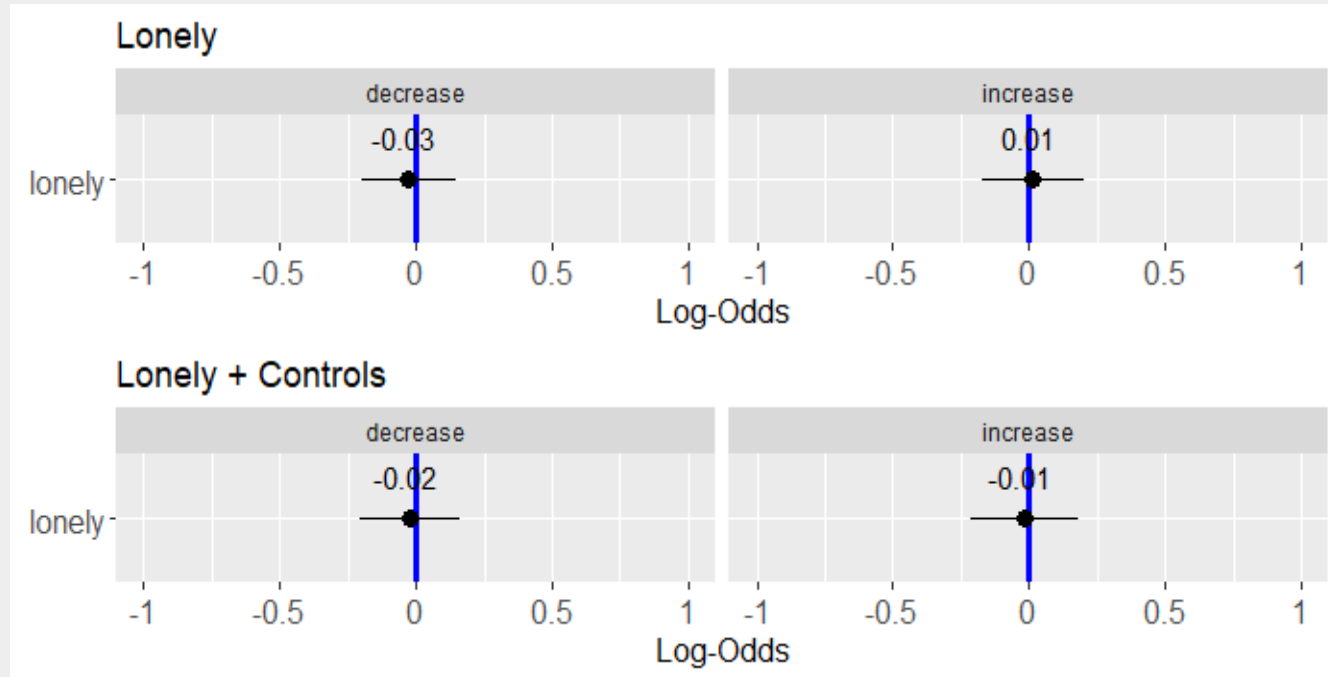
# Measures: Worries

How are you worried about...



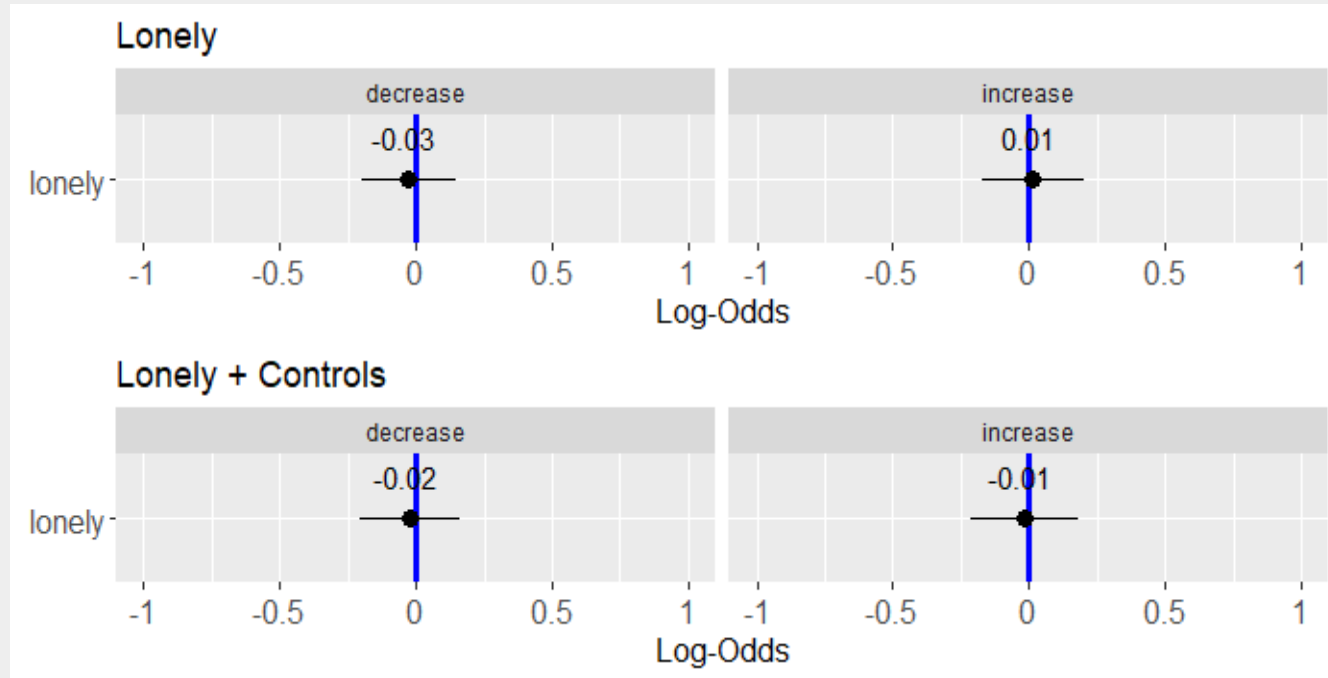


# Results: **TM** / Loneliness



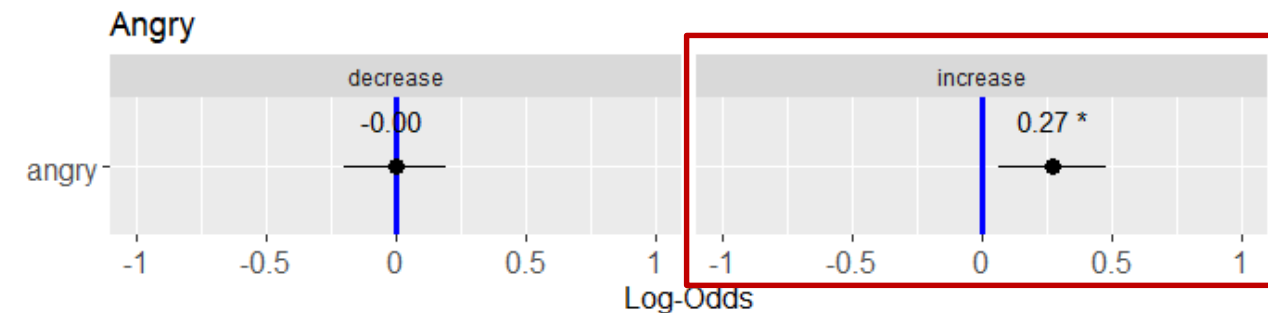
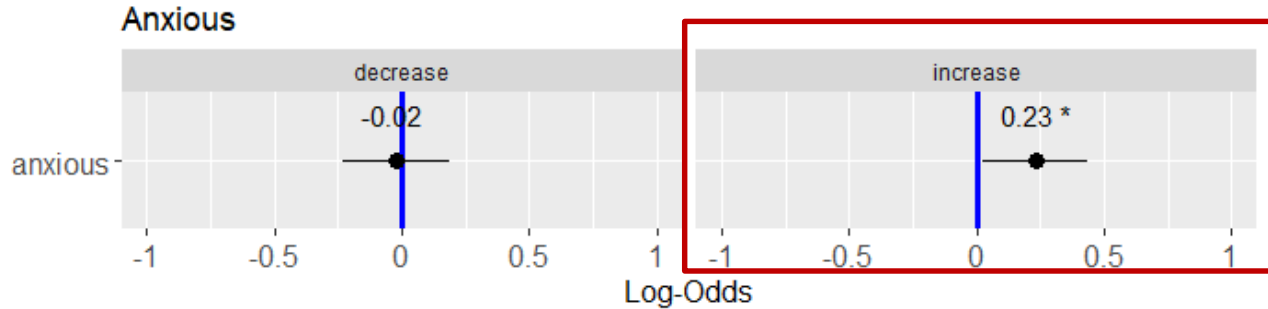


# Results: ~~TM~~ / Loneliness



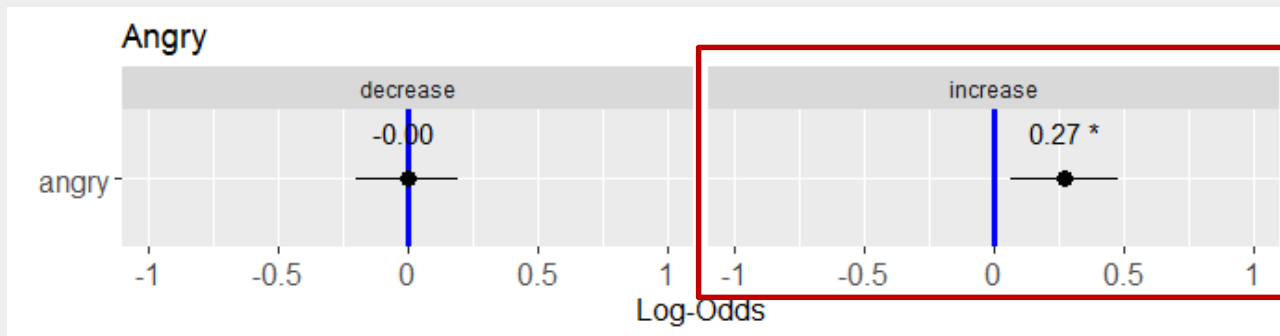
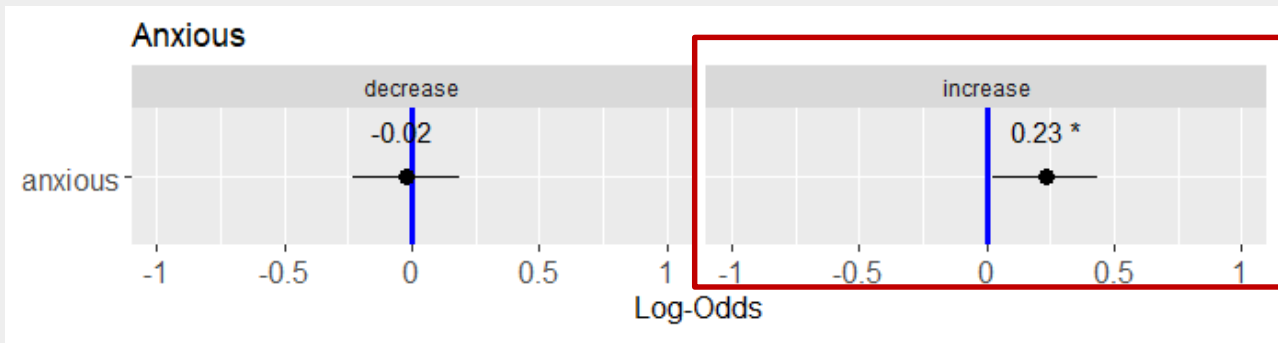


# Results: **TM** / Anxiety, Anger





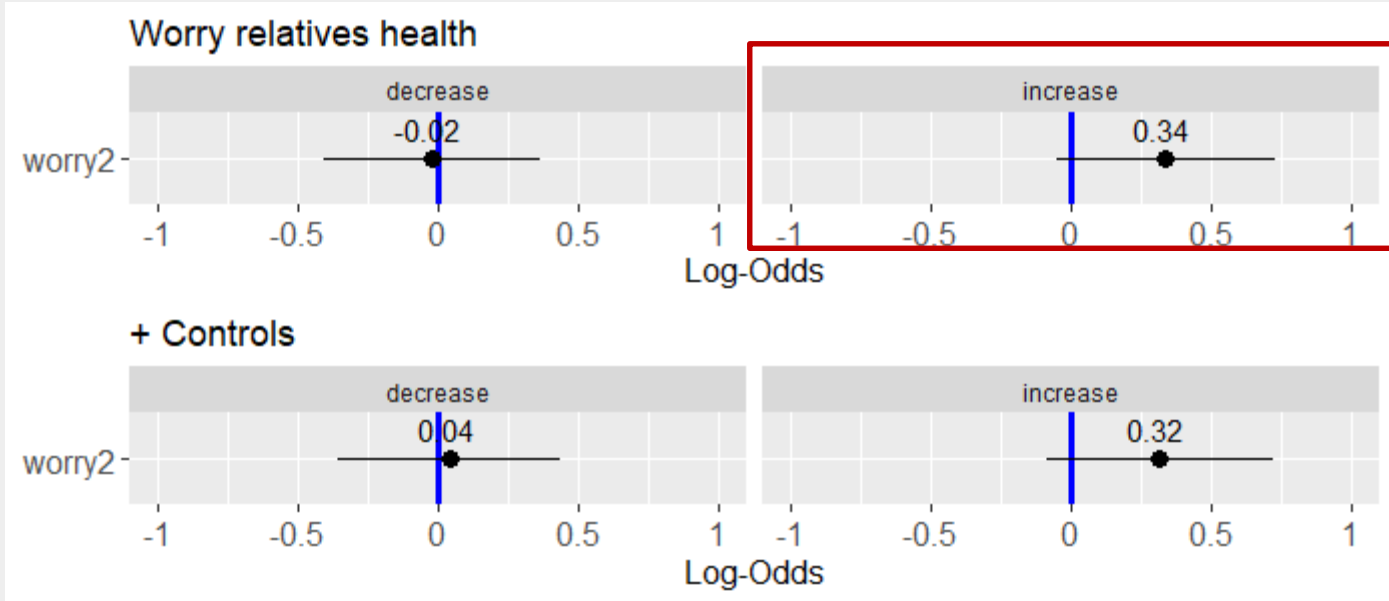
# Results: **TM** ✓ / Anxiety, Anger





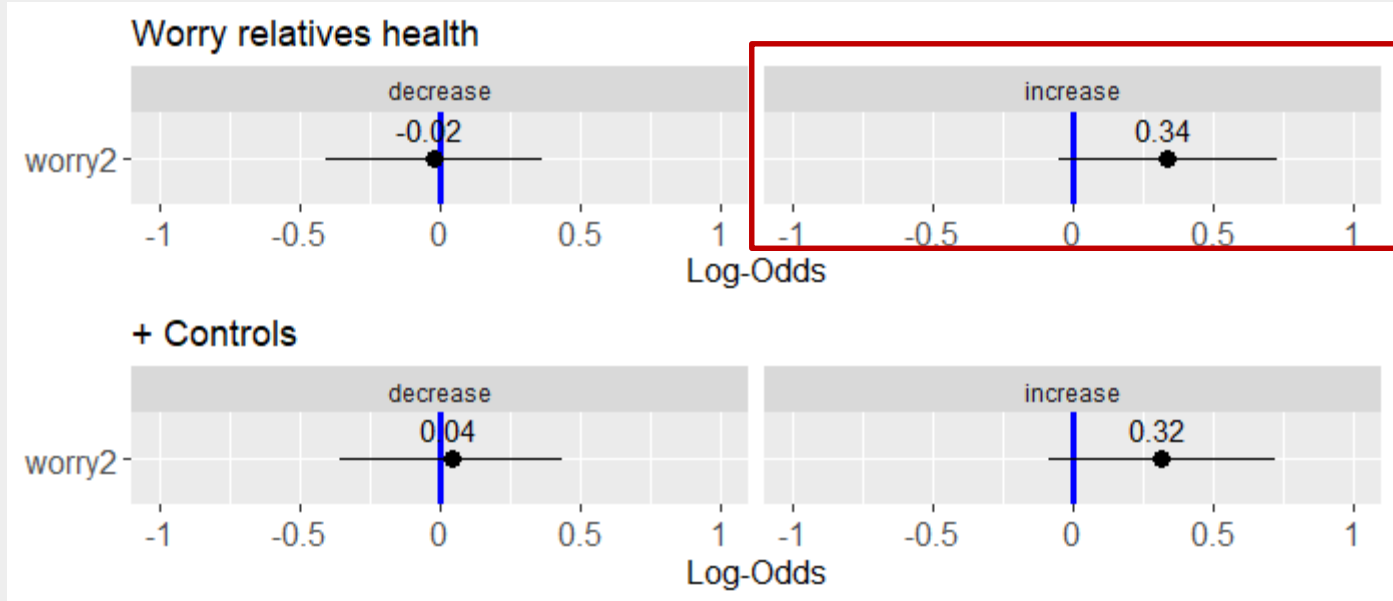


# Results: **TM** + **UM** / Relatives' Health Worries





# Results: **TM** ✓ + ~~UM~~/ Relatives' Health Worries



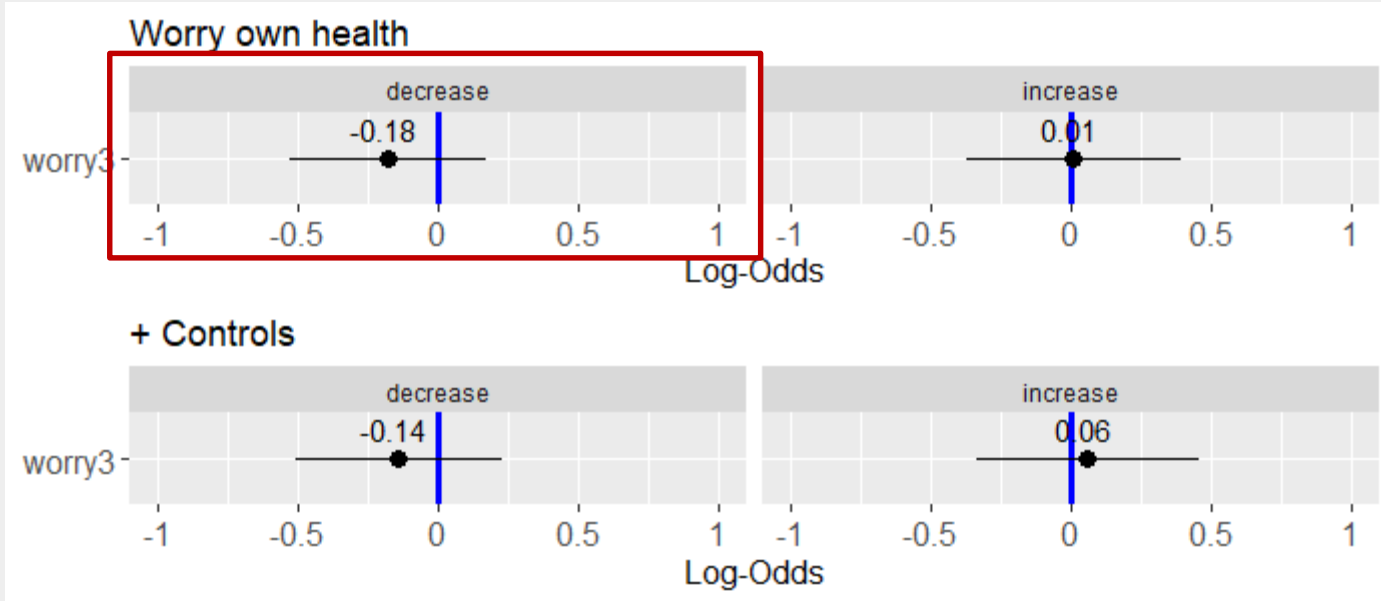


# Results: **TM** + **UM** / Own Health Worries



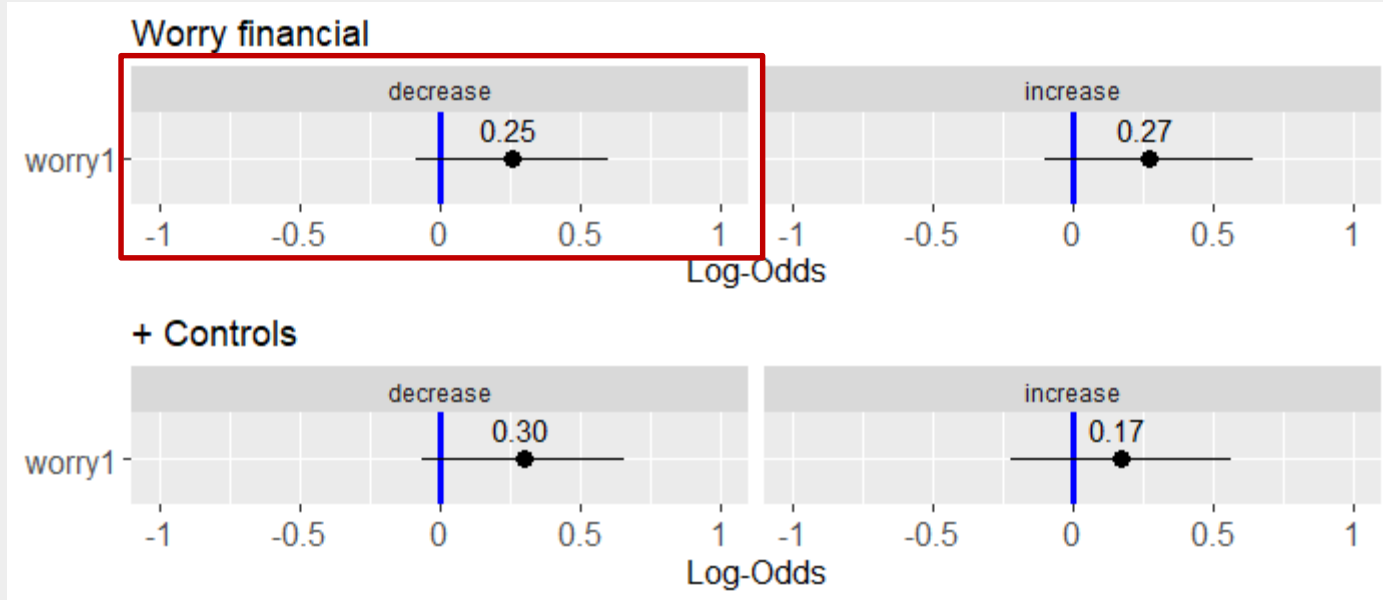


# Results: ~~TM~~ + UM ✓ / Own Health Worries



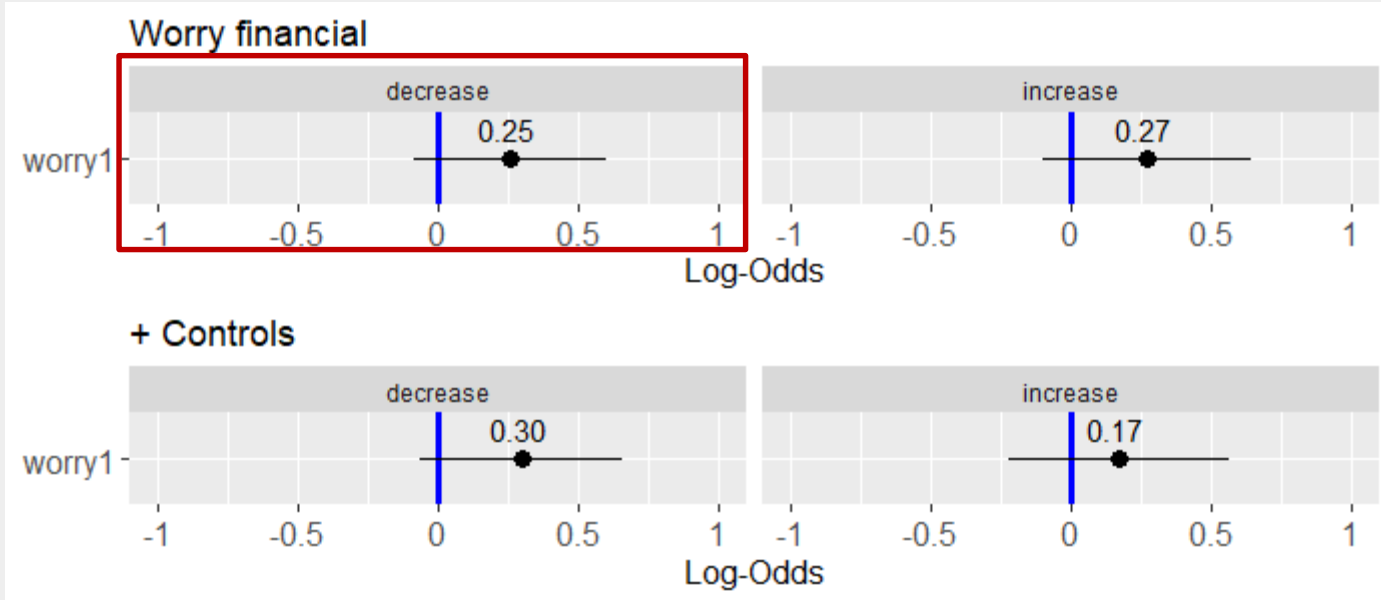


# Results: UM / Financial Worries





# Results: **UM** ✓ / Financial Worries





# Conclusions

- Psychological pathways may underlie disaster-fertility-preference relationship
- **Terror Management ✓ (anxiety, anger, relatives' health worry)**
- ~~Terror Management~~ (loneliness, own health worry)
- **Perceived Uncertainty Model ✓ (financial & own health worry)**



# Limitations and Discussion

- Analyses are exploratory, simple, lack statistical power
- Unobserved heterogeneity? Personality? Life circumstances? Moderators (individuals, couples, culture)?
- Findings unique to disaster moments?
- We don't examine fertility behavior--preference implementation may be affected by disaster itself
  
- What does it all mean for fertility change in times of disaster?
- Does emotion distribution predict (short or longer term) shifts in preferences, or actual change in fertility in disaster times?
- Promising avenue for future research





# Thank you!

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