

Suffer for the Faith? The Impact of Parental Religiosity on Children's Health in Russia

New Project Presentation

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Outline

- Introduction and Motivation
- Research Questions and Contribution
- Econometric Model and Data
- Challenges and Discussion

Motivation: Religiosity and Health of Adults

+ effects

- 1 patients' view: faith heals, "God acts through doctors" (Mansfield et al., 2002)
- 2 fasting improves physical and mental health (Bragg and Bragg, 1999, among others)
- 3 protecting from self-harm (McCullough and Willoughby, 2009)
- 4 reducing drug addiction, smoking, drinking (Fletcher and Kumar, 2013; Gruber and Hungerman, 2008; Mellor and Freeborn, 2011)

- effects/ no effect

- 1 doctors' view: faithhealing leads to medical problems (King et al., 1992, among others)
- 2 no effect on blood donation (Gillum and Masters, 2010)
- 3 extreme ethic beliefs of some religions (Sulmasy, 2009)
- 4 unintended pregnancies and illegal abortions (Bartowski et al., 2012; Hosseini-Chavoshi et al., 2012; Rahman, 2010, among others)

Previous Economic Literature

Religiosity affects socioeconomic outcomes of adults:

- insures against idiosyncratic and aggregate shocks (Clark and Lelkes, 2006, 2009; Dehejia et al., 2007; Popova, 2010)
- leads to higher levels of education and income, lower levels of welfare receipt and disability, higher levels of marriage, and lower levels of divorce (Gruber, 2005, among others)

Religiosity affects health, education, behavior of adolescents:

- risky health behavior of adults and adolescents (Gruber and Hungerman, 2008; Fletcher and Kumar, 2013, among others)
- improves educational outcomes of adolescents and reduces their asocial behavior (Regnerus, 2003)
- improves psychological and overall health condition of children and adolescents of 6-19 ages (Chiswick and Mirtcheva, 2013)

Theoretical Framework

- allocation of time for church attendance (Azzi and Ehrenberg, 1975)
 - ▶ utility-maximizing model of household allocation of time
 - ▶ division of religious participation between husband and wife
 - ▶ religious and market participation
- demand for health (Grossman, 1972)
 - ▶ health is a durable capital shock
 - ▶ health that depreciates with age and can be increased by investment
- Chiswick and Mirtcheva's (2013) adaptation of the Grossman's (1972) model
 - ▶ demand for kids' health
 - ▶ health is affected by kids' own religiosity

Research Questions and Contribution

Does parental religiosity affect children's health?

- general health condition
- presence of chronic diseases

Does the impact (if any) differ for children of different ages? different denominations of parents?

Expected Contribution:

- Theory: adaptation of Chiswick and Mirtcheva's (2013) to account for parental religiosity
- Empirics: results regarding general health and chronic diseases of children in Russia
- Policy: implications for improving children's health

Survey Questions (RLMS)

Kids' Health:

- | |
|--|
| 1. Has the child had any health problems in the last 30 days? Yes/No |
| 2. Has (he/she) been in the hospital in the last three months? Yes/No |
| 3. Did he/she skip any of required vaccinations? Yes/No |
| 4. How many kilograms does (he/she) weigh? |
| 5. What is (his/her) height in centimeters? |
| 6. How would you evaluate (his/her) health? 5-point scale |
| 7. Does (he/she) have any kind of chronic illness? Yes/No
(Heart disease, Lung disease, Liver disease, Kidney disease,
Gastrointestinal disease, Spinal problems, Another chronic illness) |

Parental Religiosity:

- | |
|---|
| 1. What do you think about religion? You are a believer/
You are more a believer than a non-believer/
You are more a non-believer than a believer/
You are a non-believer / You are an atheist |
| 2. Of what religion do you consider yourself?
Orthodoxy/Islam/Other religion |

Econometric Model

1) **Probit/Count/OLS methods** (depends on a health question)

$$Health_{ijt} = \alpha + \beta Religious_{ipj} + \mathbf{X}'_{ipjt} \boldsymbol{\theta} + \gamma_j + \varepsilon_{ijt} \quad (1)$$

i child, j region, t time, p parent

X_{ipjt} socioeconomic characteristics of child, parent, household

γ_j regional specific fixed effects

robust st. errors clustered at the child level, to allow for correlations over time within child observations.

2) **Propensity score matching** to eliminate potential selection bias

1st step: analyze propensity of a parent to be religious

$$\Pr(Religious_{pj} = 1) = \Phi(\mathbf{X}'_{pj} \boldsymbol{\delta}) \quad (2)$$

2d step: match children of religious parents to children of non-religious parents based on propensity scores

3) **Treatment effects regression / IV** to account for omitted variable bias

Challenges and Discussion

- accounting for family heterogeneity
- suggesting the mechanism of the effect, crucial to understanding the ways to improve health
possible mechanisms: social norms and support, homeschooling, ...