

Pandemic personalities: how do people react to lockdown?

Weilong Zhang

Faculty of Economics, University of Cambridge

with the assistance of Xiaomeng Li, Darwin College

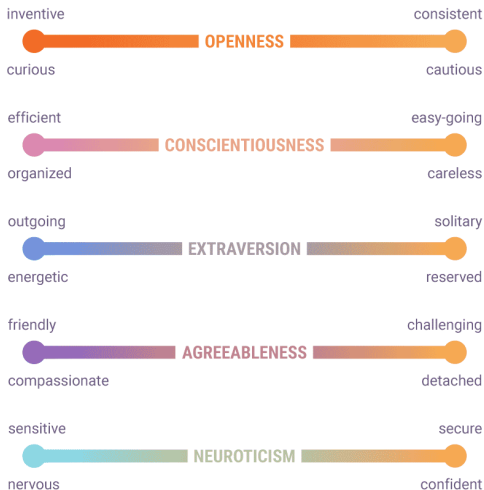
Same pandemic shocks, different responses

- Why do people react differently when confronting the same threat?



- One possible explanation: personality differences
- Three related outcomes: (1) chances of getting infected; (2) labour market opportunities; (3) home production activities

How to measure personality traits? big-5 OCEAN



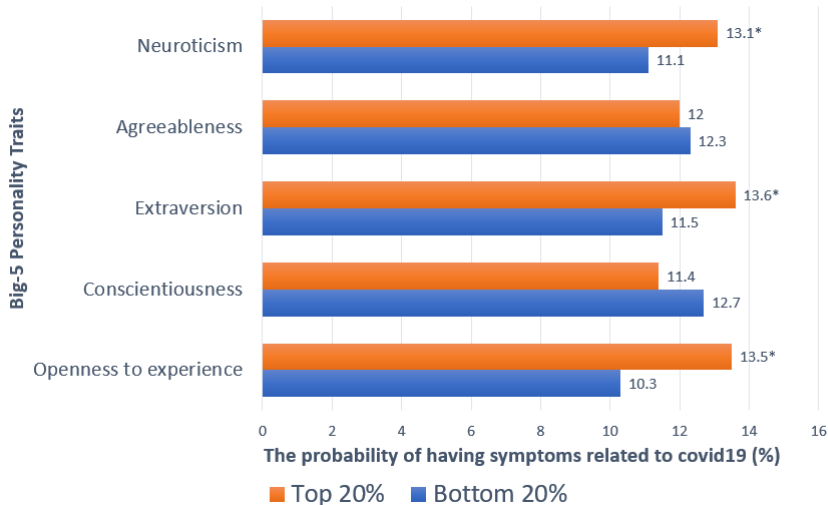
© Adiona

Understanding society: the UK household longitudinal study

- The largest longitudinal household panel study with the purpose of capturing life in the UK in the 21st century
- The Big-5 personality traits:
 - Wave 3 (2011-2013): A self-completion module for the Big 5 personality measures
- Various daily activities during April and May this year (2020): COVID-19 special survey
 - Coronavirus symptoms and test results
 - Employment and financial situation
 - Division of domestic labour

How personality traits affect the probabilities of getting infected

The probability of having coronavirus-related symptoms



Notes: * indicates a statistically significant difference between bottom 20% group and top 20% group; $p < 0.05$

How personality traits affect the job opportunities during pandemic?

Personality traits and labour market outcomes

Flinn, Todd and Zhang (2020) study the association between personality traits and the gender wage gap

- Develop and structurally estimate a job search and bargaining model
- Identify bargaining power difference as the main source to explain the gender wage gap
- Agreeableness is the most important trait in explaining the bargaining power heterogeneity

The association between agreeableness and monthly earnings (before the covid crisis)



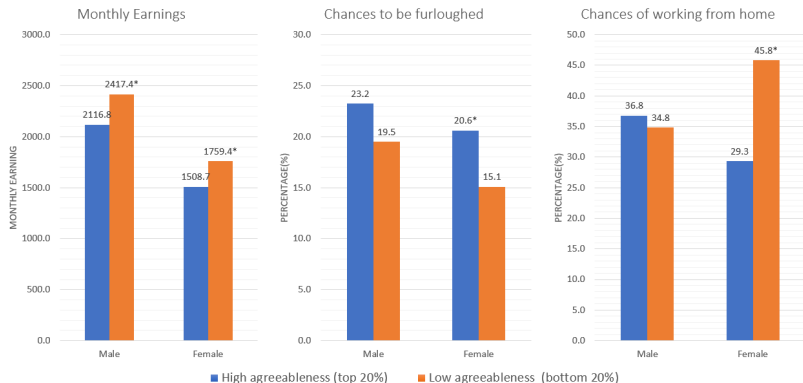
Notes: * indicates a statistically significant difference between low and high agreeableness; $p < 0.05$

Data source: earnings in Jan and Feb, UK understanding society COVID-19 special survey

Labour markets during the Covid-19 crisis

- 20% of the employed workers are put into the furloughed scheme
 - Coronavirus Job Retention Scheme (furlough scheme): furloughed workers across UK will continue to receive 80% of their current salary, up to £2,500
- The surge in popularity of home working
 - The fraction of workers who work from home increases from 3% to 36%
 - Among workers who never worked from home before, 23.3% said they are doing so frequent right now

Low vs. high agreeableness (labour market outcomes)



Notes: * indicates a statistically significant difference between low and high agreeableness; $p < 0.05$

Data source: workers who are still employed, UK understanding society COVID-19 special survey

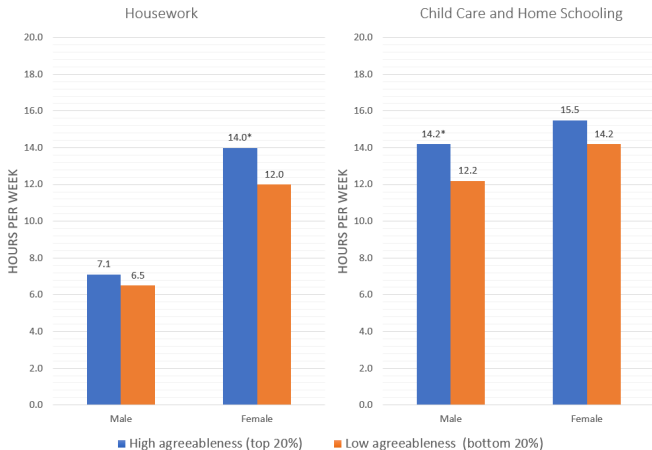
How personality traits affect the home production activities?

How personality traits affect home production activities?

Flinn, Todd and Zhang (2018) study the association between personality traits and household labour division

- Develop and structurally estimate an intra-household bargaining model
- The spouse with low bargaining weight takes more responsibility in home production
- Agreeableness is the most important trait to explain bargaining weight variations

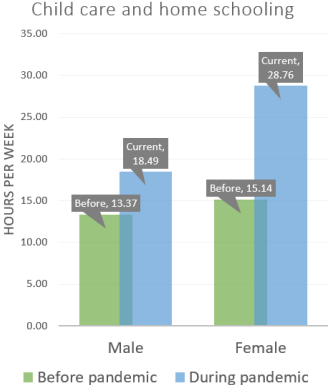
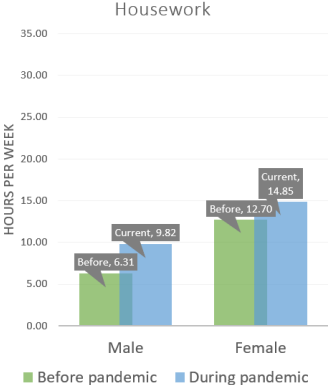
The association between agreeableness and home production activities (before the covid crisis)



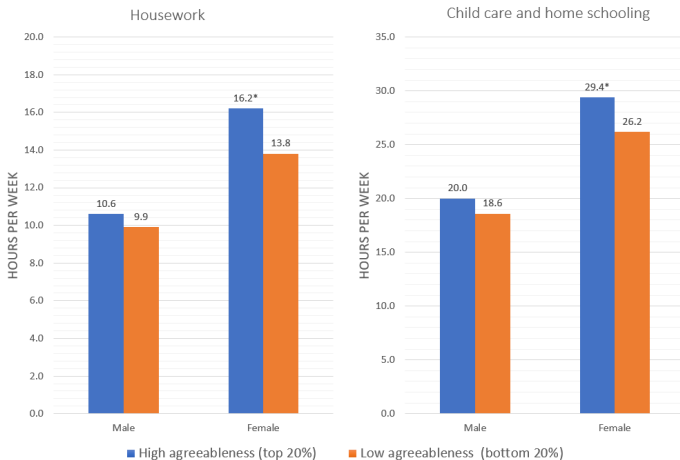
Notes: * indicates a statistically significant difference between low and high agreeableness; $p < 0.05$

Data source: UK understanding society COVID-19 special survey. Child care and home schooling is conditioning on the existence of dependent child under age 15

More chores and childcare work during pandemic



Low vs. high agreeableness (chores and childcare)



Notes: * indicates a statistically significant difference between low and high agreeableness; $p < 0.05$

Data source: UK understanding society COVID-19 special survey. Child care and home schooling is conditioning on the existence of dependent child under age 15

Moving forward

UK labour market has several profound changes due to pandemic

- Furlough scheme will last until this Oct
- More work from home arrangements in the future
- A tighter connection between external labour supply and internal home production

Develop a unified model in which individuals bargain with their employers and spouses simultaneously

- Evaluate the overall importance of agreeableness
- A deliberate labour market policy should also take its externalities to other family members into consideration