



# Heterogeneity in Experience of and Coping with the COVID-19 Pandemic by Personality Traits

*Marco Angrisani*

*Wändi Bruine de Bruin*

*Htay-Wah Saw*

# Motivation



## The Big5 personality traits

- Openness
- Conscientiousness
- Agreeableness
- Neuroticism
- Extraversion

play an important role in shaping life experiences and responses to stressors

# Motivation



The Big5 personality traits have been found to be associated with

- Health and well-being [Zell & Krizan, 2017]
- Mental health [Furnham & Cheng, 2019]
- Psychopathology [Lamers et al., 2012]
- Mindfulness [Giluk, 2009]
- Drinking motives [Mezquita et al., 2010]
- Coping more generally [Geisler, 2009]

# Research Question



In the midst of the COVID-19 pandemic, to what extent the Big5 drive differences across individuals in

- Health risk perceptions
- Economic risk perceptions
- Adoption of protective behaviors
- Adoption of coping behaviors
- Mental health



# Research Question

There exists some anecdotal evidence on this topic:



**AS STATES STRUGGLE TO GET THE COVID-19 BALANCE RIGHT** – between eased restrictions and rising infection rates – it falls to individuals to abide by mask-wearing rules and to maintain six feet of distance between themselves and others when out and about.

We tackle the question scientifically and comprehensively

# Approach

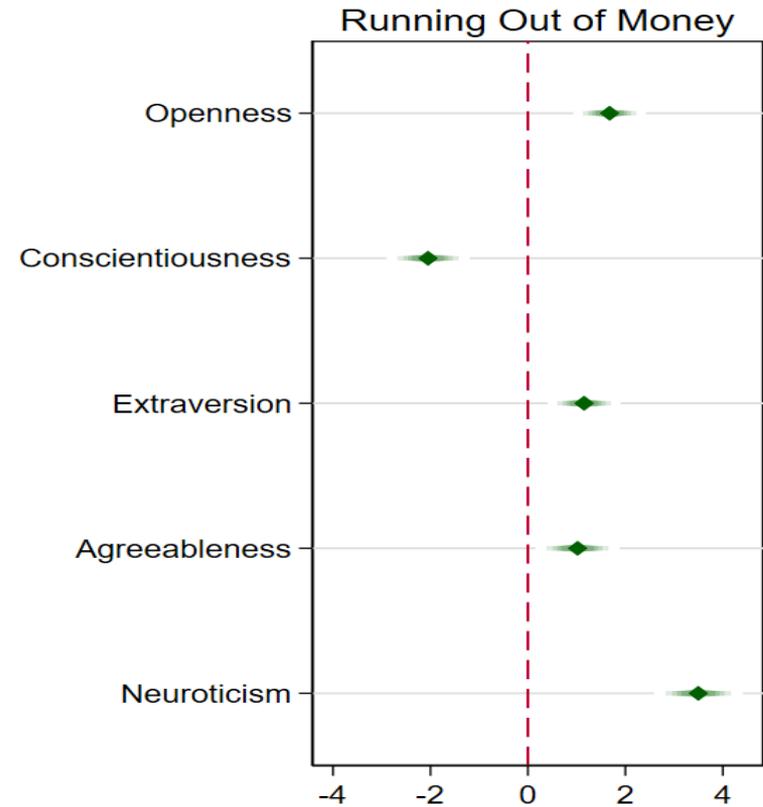
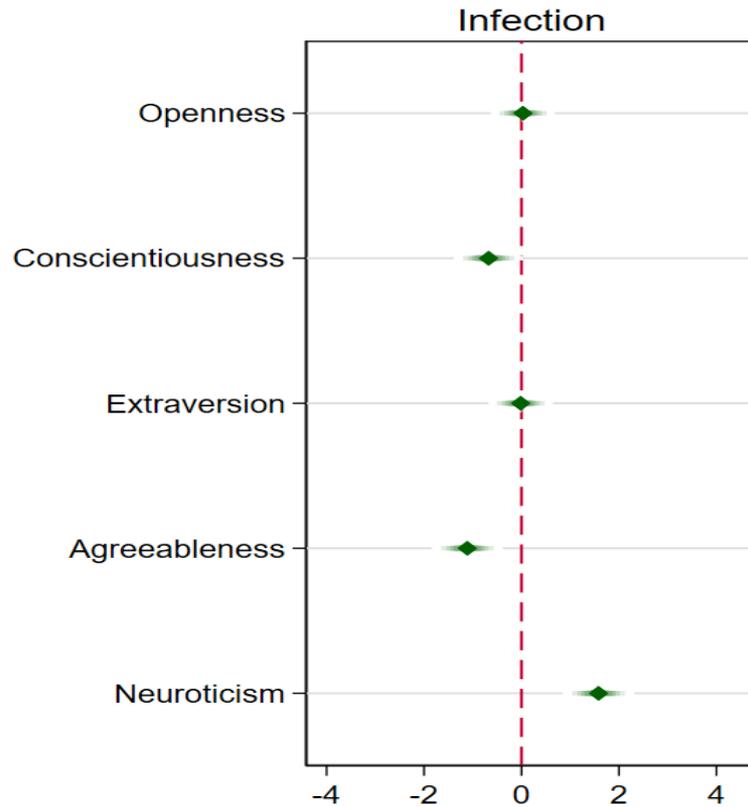


- ❖ We use longitudinal data from the UAS-COVID survey
- ❖ We exploit rich background information available for UAS respondents, including the Big5
- ❖ We relate heterogeneity in outcomes at the beginning of the pandemic to the Big5
- ❖ We also study heterogeneity in changes in outcomes over time in relation to the Big5

# Results: Risk Perceptions



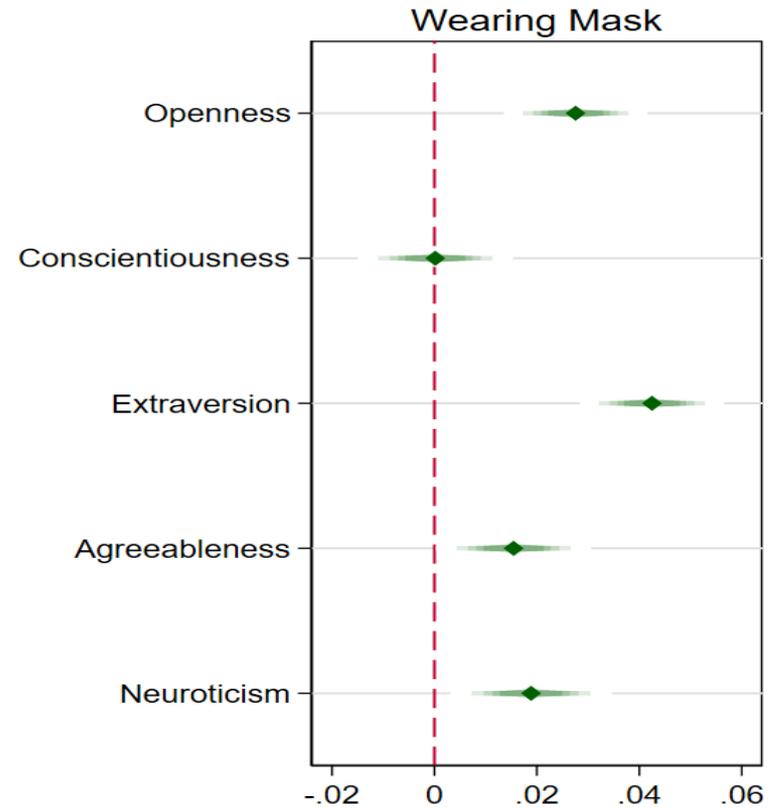
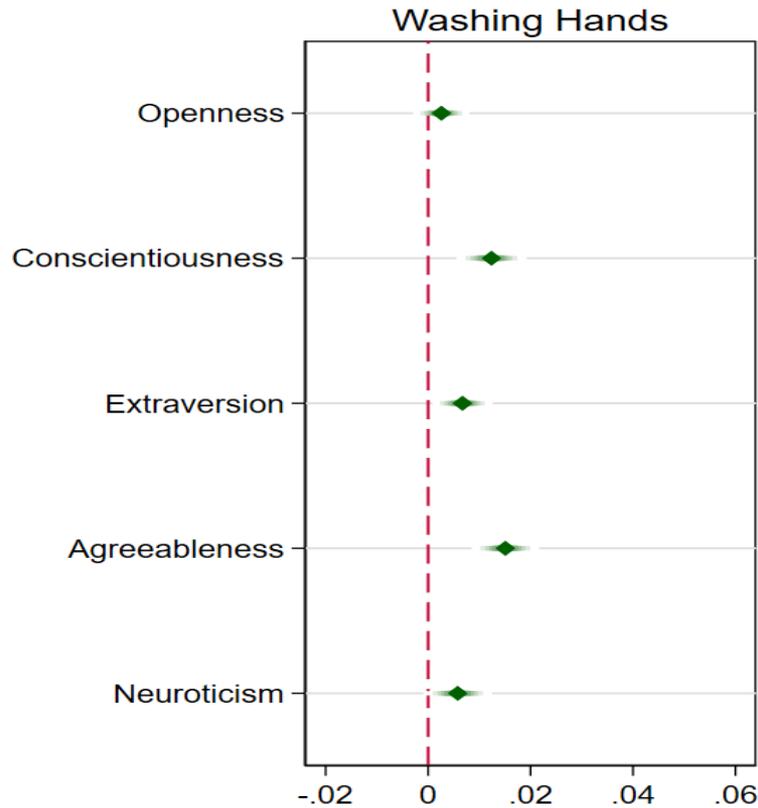
## Association of Big5 with Perceived Risk of...



# Results: Protective Behaviors (I)



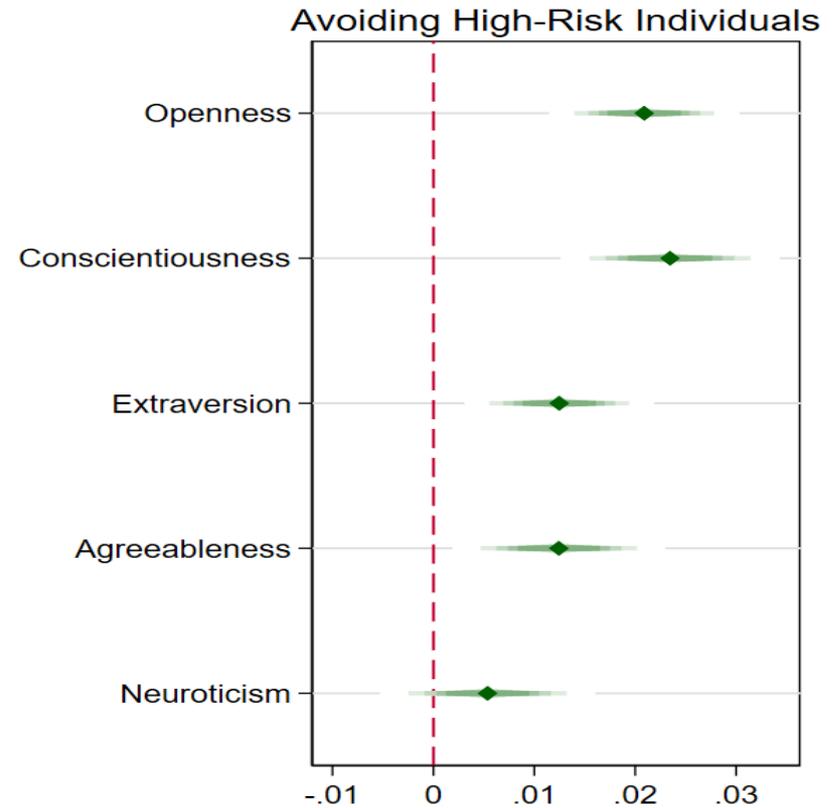
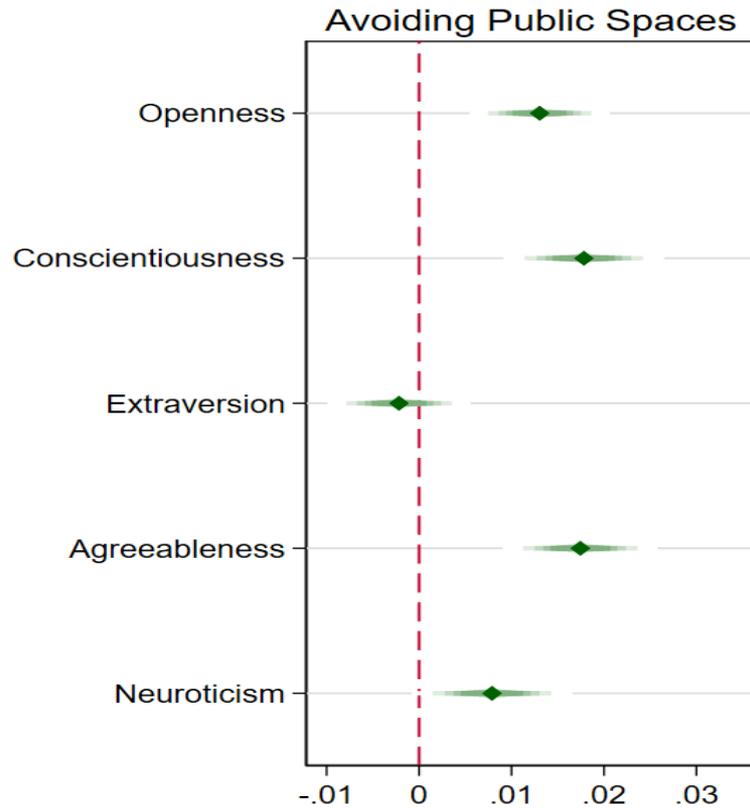
## Association of Big5 with Likelihood of...



# Results: Protective Behaviors (II)



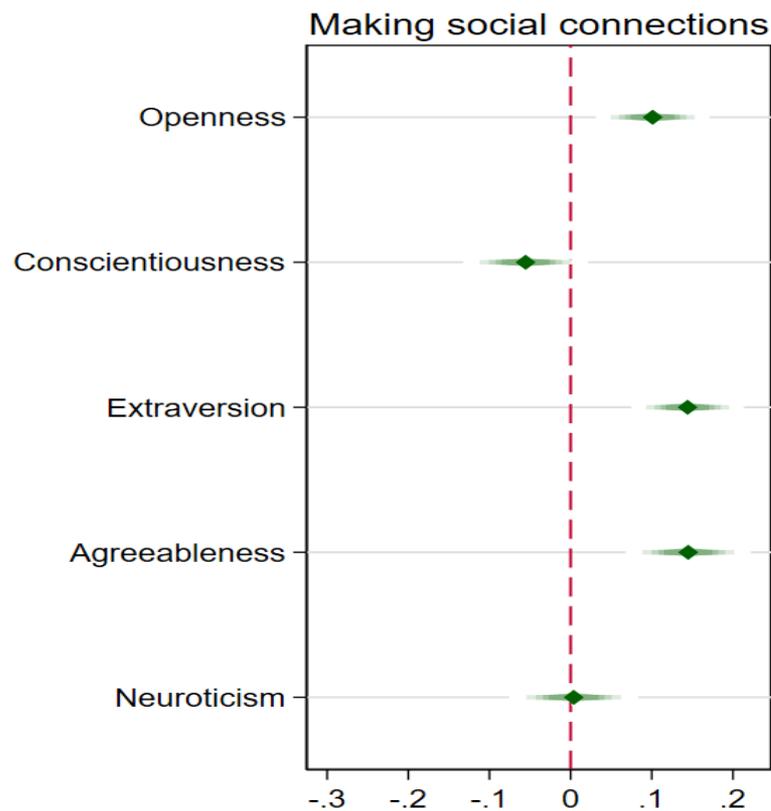
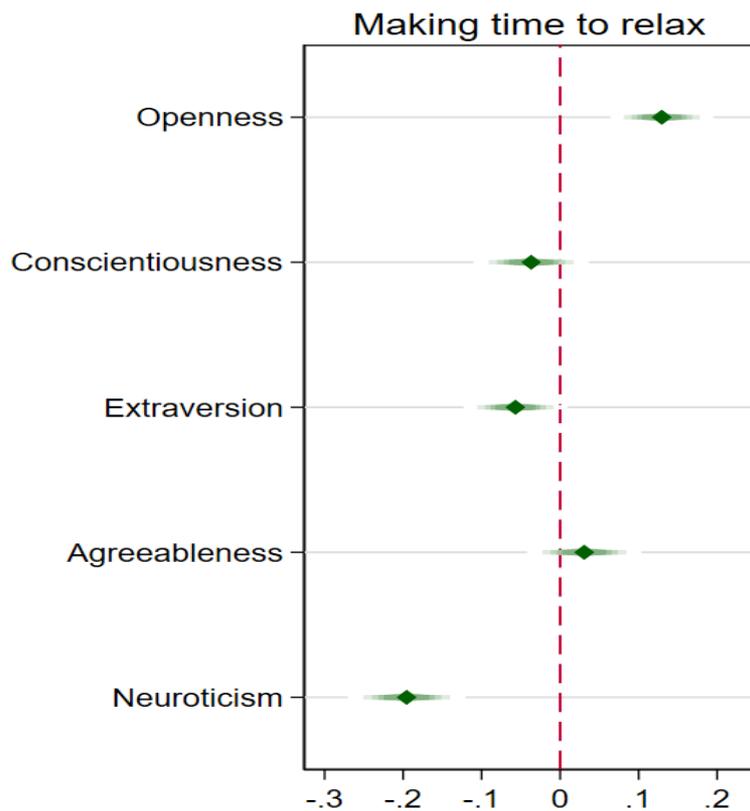
## Association of Big5 with Likelihood of...



# Results: Coping Behaviors



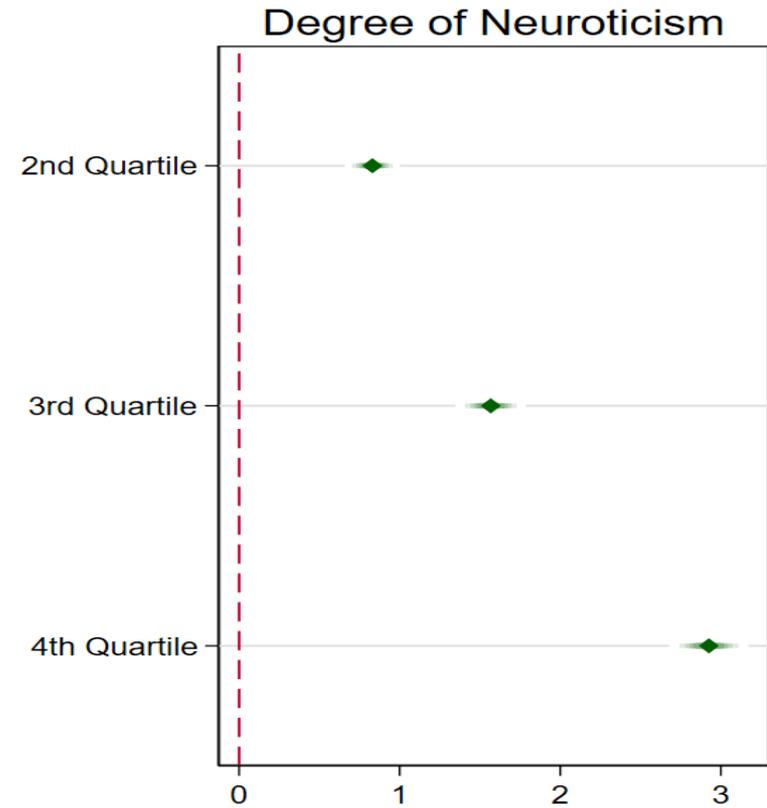
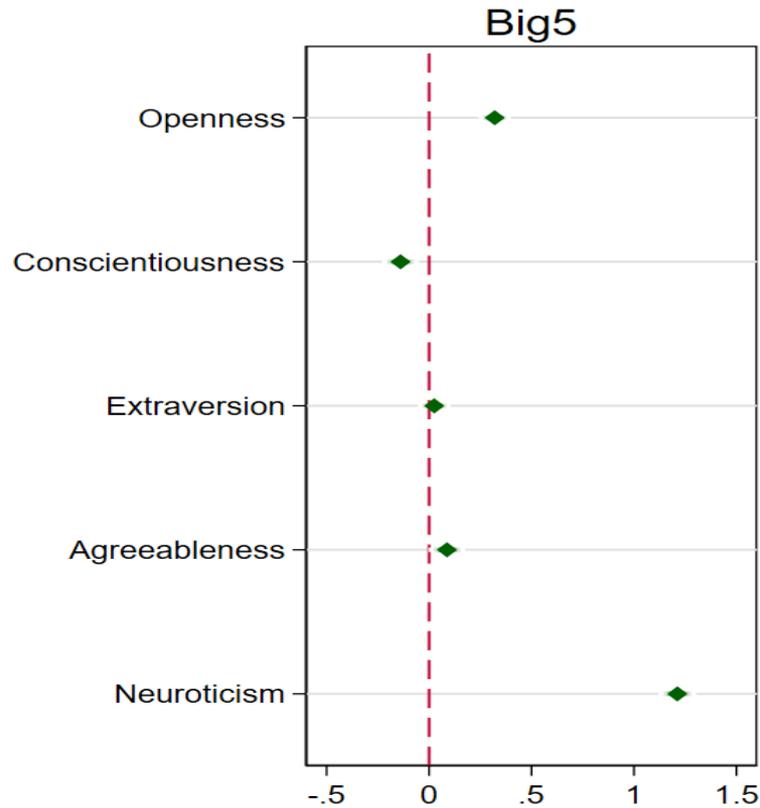
## Association of Big5 with Frequency of...



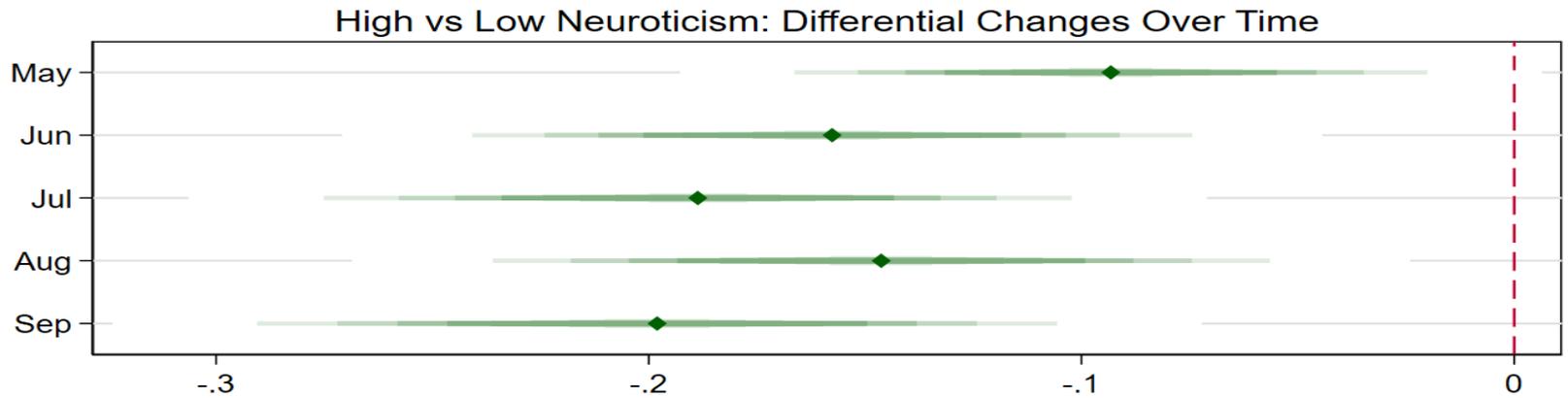
# Results: Mental Health (I)



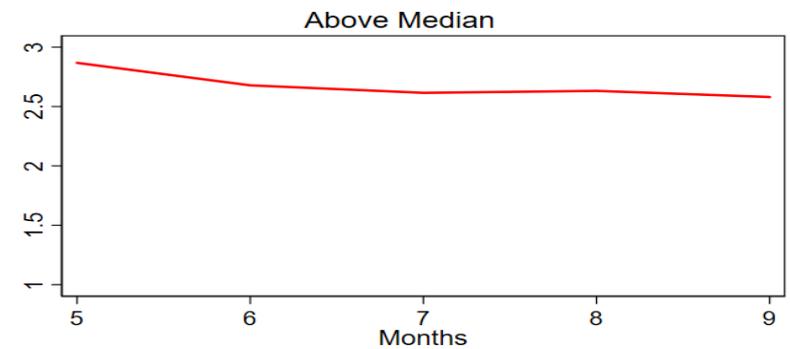
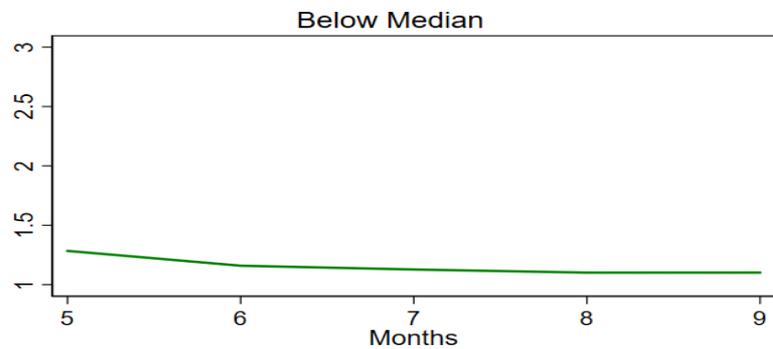
## PHQ4 Score and...



# Results: Mental Health (II)



## PHQ4 Score Over Time by Degree of Neuroticism



# Conclusions



- ❖ We find evidence of differential responses to the pandemic by personality traits
- ❖ We will explore heterogeneity in these responses by demographics
- ❖ If available, outcomes observed before and after the pandemic should provide additional insights
- ❖ As the COVID-19 crisis continues and new waves of data are collected, we will be able to document differential responses to a changing environment