

## **AATISHYA MOHANTY**

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### **Doctoral Studies**

Nanyang Technological University, Singapore  
Ph.D. Economics, *expected completion June 2022*  
DISSERTATION: “Essays on Culture and Disease”

### **Dissertation Committee and References**

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### **Prior Education**

M.Sc. Applied Economics, Nanyang Technological University, Singapore, 2015  
B.A. Economics, Amity University, India, 2012

### **Fields**

Primary fields: Development Economics, Cultural Economics  
Secondary fields: Health

### **Teaching Experience**

Semester 2, 2021	Tutor, Principles of Economics, Nanyang Technological University
Semester 2, 2022	
October 2020	Tutor, MSc Applied Economics Preparatory Course - Mathematics, Nanyang
July 2021	Technological University
October 2021	
October 2020	Tutor, MSc Applied Economics Preparatory Course - Economics, Nanyang
July 2021	Technological University

## **Research Experience and Other Employment**

2017-2019	Nanyang Technological University, Singapore, Research Associate
2016	Asian Venture Philanthropy Network, Singapore, Research Associate

## **Scholarships**

2019-2023	NTU Research Scholarship
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## **Publications**

**“Sunlight and Culture,”** *Journal of Economic Behavior & Organization* 188, 2021, pp. 757-782 (with Per G. Fredriksson).

The effects of the individualism vs. collectivism cultural dichotomy on economic outcomes have been widely recognized in the literature. We propose and test the hypothesis that individuals and populations located in areas exposed long-term to more ultraviolet radiation (UV-R; sunlight) exhibit a greater degree of collectivism. We provide individual level evidence using data from the World Values Survey, evidence from pre-industrial societies using data from the Standard Cross-Cultural Sample, and cross-country findings. We propose that the mechanism works via the eye disease cataract. Populations exposed to higher amounts of UV-R have higher incidence of cataract. A greater probability of eye disease raises the level of uncertainty avoidance and risk aversion and increases the importance of close family or village bonds, facilitating the emergence of collectivism. This has provided an insurance mechanism against income shocks associated with poor eyesight and blindness. Moreover, humans tend to view disabilities such as blindness to indicate a positive probability of being associated with pathogen threats, resulting in less out-group interaction and greater collectivism. Empirical evidence supports this mechanism.

**“COVID-19 Regulations, Political Institutions, and the Environment,”** *Environmental and Resource Economics* 81, 2022, pp. 323-353 (with Per G. Fredriksson).

The COVID-19 pandemic was associated with short-term air quality improvements in many countries around the world. We study whether the degree of democracy and political institutions played a role. We provide novel empirical evidence from 119 countries. A given stringency of COVID-19 containment and closure policies had a stronger effect on air quality in more democratic countries, and in countries with majoritarian rather than proportional electoral rules. Our estimates suggest that the improvement in air quality was around 57% greater in majoritarian systems than in proportional systems. Confidence in government, trust in politicians, and social capital also affected outcomes.

## **Research Papers**

**“Diarrheal Disease, Sanitation, and Culture in India”**

(with Akshar Saxena)

The health burden of childhood diarrhea in India has been a major public health concern. This study examines the role of the individualism-collectivism dichotomy in the prevalence of diarrhea in children under the age of five in India. Using subnational data on rice suitability to measure collectivism, we provide evidence that collectivism is negatively associated with the prevalence of childhood diarrhea across 618 Indian districts. We find that the mechanism works through improvements in water and

sanitation. Collectivism propagates values of interdependence, cooperation and collective action which increases safe water and sanitation practices, thereby reducing the prevalence of diarrhea in children.

### **“Covid-19 and Culture”**

*(with James B. Ang)*

The United States has been particularly hard hit by the COVID-19 pandemic and a wide spatial variation can be seen in its spread and mortality. This raises the question of why some regions are more resilient to the pandemic than others? We hypothesize that the individualism-collectivism cleavage explains the disparity in COVID-19 cases observed across sub-national units in the United States. Cultural disparity among different groups of people leads to differences in how they perceive health crisis and thereby shape the way they respond to pandemics. A heightened sense of obligation and responsibility increases in-group sociability and interdependence and raises the perceived vulnerability towards disease transmission among collectivistic individuals, and this leads to greater adherence to containment measures and social distancing rules. Our results provide evidence that more individualistic states tend to have more COVID-19 cases across the United States.

### **Research in Progress**

“COVID-19 Regulations, Culture and the Environment” *(with Swati Sharma)*.

### **Professional Activity**

Referee for *Singapore Economic Review*

### **Computational Skills**

Stata, ArcGIS, LaTeX.

### **Personal**

**Citizenship:** Indian

**Gender:** Female

### **Languages**

English (fluent), Hindi (fluent), Oriya (native), Urdu (basic)