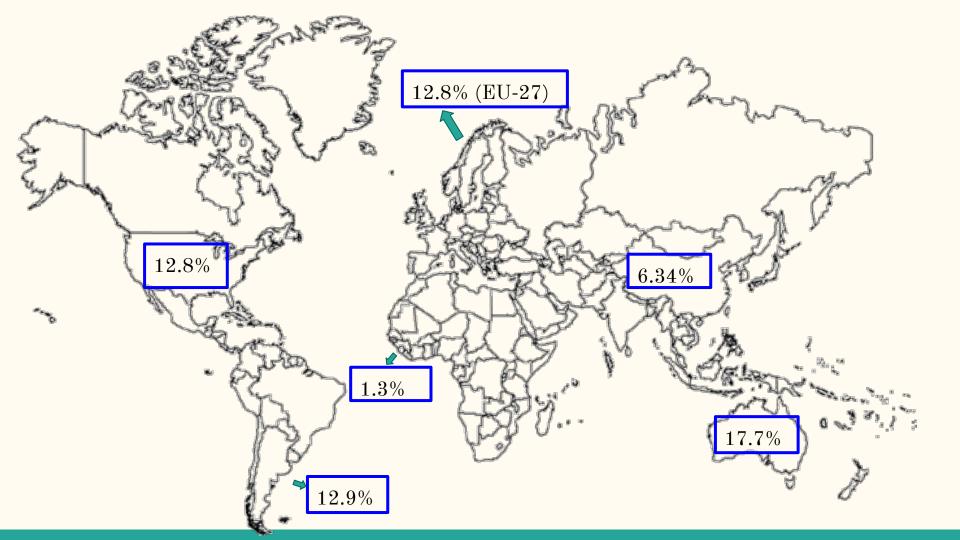
The Prevalence and Socio-Economic Consequences of Disability Among Children and Young Adults

Roshie Xing With Dr. Juan Pablo Atal



# Project Description

- Previous umbrella project: maternal and child health in Africa (causes, consequences of poor health)
  - Mapping health facilities, healthcare access
- Disability as a natural follow-up

#### Aims

- Explore available data on disability and relevant outcomes
- Contribute to literature on a relatively unexplored question: consequences of disability
- Understand relationship between legal protections and outcomes

Research Question: To what extent does childhood disability impact outcomes of children and parents?

## Existing Literature

- Previous studies focused on prevalence, few on consequences for parents and long-term impacts for children, particularly in LDCs
- Long-term Impacts: educational, vocational, and social
  - Lower odds of future employment, lower average wages
  - Lower rates of post-secondary education
  - Higher perceived stigma/discrimination
  - Largely concentrated in advanced industrialized countries (US, UK, Europe)

# Study Scope

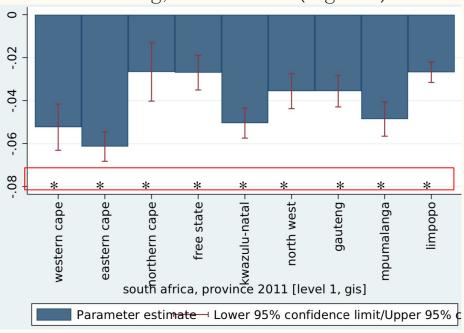
- Disability "disadvantage"
- Levels of variation
  - Across countries
  - Across time
  - Within countries
- Reasons for variation
  - Protections (legal and norm/attitude-based)
  - Economic situations (local + household)
- Missing: triggers of disability

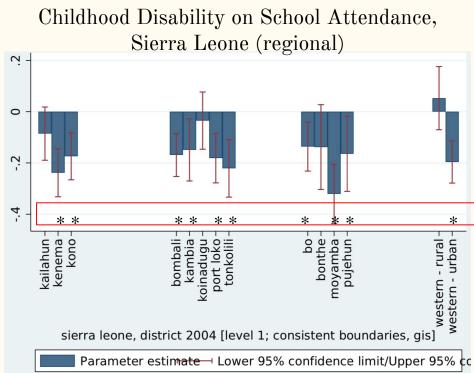
## Methodology/Data

- Demographic information, outcome variables
  - IPUMS datasets Sierra Leone 2004, South Africa 2011
    - Population censuses
- Levels/types of protections
  - WORLD Policy Database
- Descriptive analyses
- Regressions on outcome variables (school attendance, log years of schooling, parental employment)
  - Controls: individual, household-level, regional

- Regression of having a disability on educational outcome variables (school attendance, log years of school)
  - Restricted to children 6-14
  - Broken down by 1st level of administrative units largest subnational regions
  - Controls: poverty indicator, urban/rural
  - Fixed Effects: age, region
- Fairly strong effects:
  - Negative relationship between childhood disability and educational attainment in both datasets, for most regions

Childhood Disability on Log Years of Schooling, South Africa (regional)

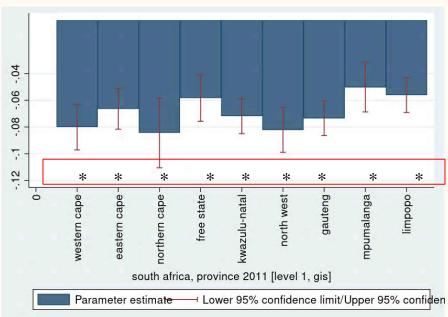




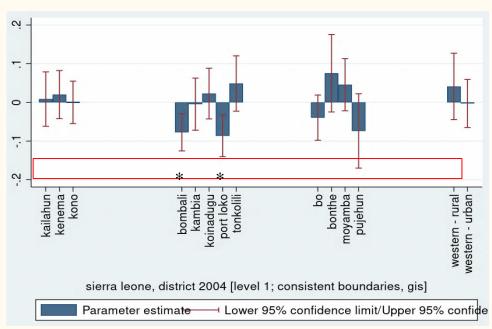
<sup>\*</sup>statistically significant at the 95% confidence level

- Regression of parenting a disabled child on the employment status of parents
  - Restricted to parents matched in dataset
  - Broken down by 1st level of administrative units
  - o Controls: Sex
  - Fixed Effects: Age, region
- Varying levels
  - Sierra Leone: little to no apparent average impact
  - South Africa: clear negative impact
- Potential interpretations
  - Definition of "employment," state support
  - Interaction of sex and employment: differential impact on mothers
- Need to examine many datasets to detect meaningful patterns

Disabled Child on Employment Status, South Africa (regional)



Disabled Child on Employment Status, Sierra Leone (regional)



\*statistically significant at the 95% confidence level

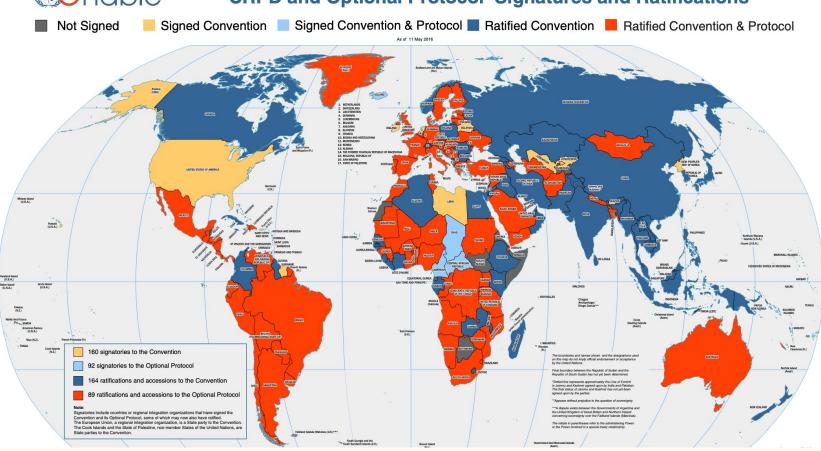
# Disability Protections

- Integration of protections data
  - UN Convention on the Rights of Persons with Disabilities ratification
  - Legal, constitutional protections domestically

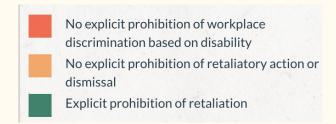
Goal: understand if protections result in outcome effects



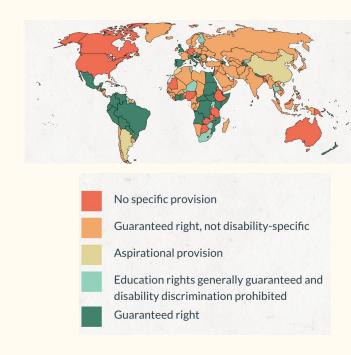
#### **CRPD and Optional Protocol Signatures and Ratifications**



Does legislation explicitly prohibit retaliation for reporting workplace discrimination based on disability?







Does the constitution explicitly guarantee the right to education for children with disabilities?

From the WORLD Policy Analysis Center

# My Role

- Past economics experience
  - Environmental/energy, regulations, coursework
- Literature exploration
- Data exploration + analysis
  - On-the-fly learning, both econometrics + programming

#### Lessons

- Project Takeaways
  - Existence of disability-associated costs; variation across countries and regions
  - Desire to understand how widespread
- Personal
  - Documentation/Google
  - o Possibilities within economics and health economics research

Torsten Walter; Joanne Levy, Evelyn Fabian, and the SUMR/LDI team; and the 2020 SUMR Scholars

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