

Human-Capital-Flagship-2025

Reproducibility Package for Human Capital Flagship

Overview

This repository contains the replication files for the 2025 Human Capital Flagship Report.

Human capital — health, skills, knowledge, and experience — is what people need to thrive. It is also what is needed for families and communities to prosper and for people to find good jobs. This report emphasizes that while traditional policies often focus on sectors like education and health or stages of the life cycle, human capital is also deeply shaped by the settings where it is built: the home, the neighborhood, and the workplace. At home, family choices around care, health, and education have lasting effects; in neighborhoods, access to services and environmental and social conditions can either enable or constrain human capital development; and in workplaces, individuals continue to build human capital through experience, learning, and interaction with others. Recognizing the role of these settings offers opportunities for more effective public and private investment to enhance both the quantity and quality of human capital.

The flagship report is structured around five chapters. Chapter 1 discusses why we should care about human capital, whether poor countries have increased their levels of human capital, and the importance of settings for human capital policy. Chapter 2 discusses human capital accumulation in the home. Chapter 3 discusses human capital accumulation in the neighborhood. Chapter 4 discusses human capital accumulation in the workplace. Chapter 5 discusses how to build more human capital at home, in neighborhoods, and at work.

This repository contains the replication files for each chapter, including data, code, and outputs. Chapter 5, because it is a synthesis of the previous chapters and includes policy recommendations, does not have specific replication files.

Directory Structure

The directory structure of the repository is as follows:

```
Human-Capital-Flagship-2025/
├── Chapter-1/                # Chapter 1 dir
│   ├── data/
│   ├── code/
│   ├── outputs/
│   ├── temp/
│   └── README.md
├── Homes/                    # Chapter 2 dir
└── run_ch2.do
```

data/	
code/	
outputs/	
README.md	
Neighborhoods/	# Chapter 3 dir
run_ch3.do	
data/	
code/	
outputs/	
README.md	
Workplaces/	# Chapter 4 dir
run_ch4.do	
data/	
code/	
outputs/	
temp/	
README.md	
Interludes/	# Chapter Interludes dir
run_chi.do	
data/	
code/	
outputs/	
README.md	
renv/	
master_flagship.R	# master file
renv.lock	
.here	
README.md	# this file

1. data/ contains the raw data for the project for each chapter.
2. code/ contains the main replication files for the chapters. Execute these files to replicate the results. Each chapter has a separate README .md file that provides more details on the specific data and code used in that chapter.
3. outputs/ contains a number of final output files in either .csv, stata .dta or png format.
4. run_ch*.do are do-files designed to run all subfolders at once using the project master file (master_flagship.R).
5. temp/ contains intermediate data files produced during the analysis.
6. renv/ and renv.lock contain the configuration files required to ensure a reproducible R package environment.
7. .here is an empty marker file used by the {here} package to identify the project root directory.
8. master_flagship.R is the master file that runs the entire project.

Instructions to Replicators

1. Clone the repository

Clone this repository to your local machine using Git or download it as a ZIP file.

2. Open the project

Open the RStudio Project file (`./Human-Capital-Flagship-2025.Rproj`) included in the repository.

Alternatively, if you do not open the R Project, the working directory will still be set automatically using the `.here` file included in the repository.

3. Restore the R package environment (important)

This repository uses the **{renv}** package to manage R package versions and ensure full reproducibility.

Because differences in package versions across systems can cause code to fail or produce inconsistent results, **{renv}** records the exact package versions used to generate the outputs in this repository.

Before running any scripts, open `./master_flagship.R` and run line 24 once to restore the package environment:

```
renv::restore()
```

This step installs all required packages at the versions specified in `renv.lock` and only needs to be performed once per machine.

For more information on **{renv}**, see the [official documentation](#).

4. Manually set the paths for Stata and R

The system-specific paths for Stata and R must be configured manually in the master R script `./master_flagship.R` and in the Worplaces master `.do` file, `./Workplaces/code/01_master_file.do`.

Please update the paths specified on lines 32 and 37 (for `./master_flagship.R`) and line 54 (for `./Workplaces/code/01_master_file.do`) to match the installation locations on your machine.

5. Run the analysis

All results in the report can be reproduced by running the master R script `./master_flagship.R`.

Please review the `README.md` files in each chapter directory for specific instructions on how to replicate the results for that chapter. The path set up for each chapter depends on the working directory of the master R-Script.

License

The data are licensed under a Creative Commons/CC-BY-4.0 license.

Summary of Availability

- ☐ All data **are** publicly available.
- ☒ Some data **cannot be made** publicly available.
- ☐ **No data can be made** publicly available.

Some files in this repository are not publicly available due to licensing restrictions. These files are marked as “not publicly available” in the README.md files for each chapter. Instructions for accessing all data files are provided in the README.md files for each chapter.

Figures list

Chapter	Figure	Title	Status
Introduction	1.1	Adult height, by county income group	Ready 
Introduction	1.2	Enrollment and tertiary completion	Ready 
Introduction	1.3	Student learning across countries	Ready 
Introduction	1.4	Learning-adjusted years of schooling, by country income group	Ready 
Introduction	1.5	Human capital acquired on the job	Ready 
Homes	2.2	Child nutrition and skills, by maternal educational attainment	Ready 
Homes	2.3	Skill deficits over time by maternal educational attainment, ages 5 to 15	Ready 
Homes	2.4	Skill in childhood, by resources and care at home	Ready 
Homes	2.6	Share of children ages 5-14 living with neither parent	Ready 
Homes	2.7	Selected indicators of well-being, children ages 10-17, by left-behind status, China	Ready 
Homes	B2.1	Use and endorsement of violent punishment to discipline children ages 1-14	Ready 
Neighborhoods	3.2	Neighborhood poverty in childhood and outcomes in adulthood in Brazil	Ready 
Neighborhoods	3.3	People use local schools and local	Ready 

Chapter	Figure	Title	Status
		health facilities	
Neighborhoods	3.4	School and health care quality varies substantially across villages	Ready 
Neighborhoods	3.5	Village coverage of sanitation, much more than individual household coverage, is key to controlling waterborne disease in India	Ready 
Neighborhoods	3.6	Violence is often local	Ready 
Workplaces	4.2	Most people in low- and middle-income countries are self-employed or work in agriculture, low-skilled jobs, or in very small firms	Ready 
Workplaces	4.3	Farmers' productivity does not increase much with experience in small plots	Ready 
Workplaces	4.4	Returns to experience are lower for the self-employed than for wage workers	Ready 
Workplaces	4.5	Returns to experience among workers are in large vs small firms and self-employed	Ready 
Workplaces	4.6	Who is not accumulating human capital through work	Ready 
Workplaces	4.7	Soft skills on-the-job training improves productivity of trainees and of their non-trained co-workers	Ready 
Interludes	I1.1	Stunting rates in low- and middle-income countries	Ready 
Interludes	I1.2	Stunting, low vocabulary, and secondary school completion rates	Ready 
Interludes	I1.3	Stunting, low vocabulary, and math achievement 10 years later	Ready 
Interludes	I2.1	Agree that pre-school child suffers with working mother	Ready 
Interludes	I2.2	Proportion of results showing that childcare interventions benefited the following groups	Ready 
Interludes	I3.1	Returns to experience during self-employment and wage employment	Ready 

Chapter	Figure	Title	Status
Interludes	I3.2	in China and India Returns to experience during wage employment in large and small firms in Brazil	Ready 