

## **Replication Package: Read Me File**

*„Adaptation in Life Satisfaction and Self-Assessed Health to Disability - Evidence from the UK“*

### **Contact:**

**Link to Publication:** [Will be added after final version is online]

### **Data Access and Replication File Instructions:**

We are not able to make the underlying Understanding Society Data fully available. However, access to the Understanding Society data releases is free of charge for researchers and other non-commercial users after creating an account with the UK Data Service. **Access instruction can be found via this hyperlink created April 2024:**

<https://www.understandingsociety.ac.uk/documentation/access-data>

**The results presented in the paper are based on the following Understanding Society release:**

University of Essex, Institute for Social and Economic Research. (2022). Understanding Society: Waves 1-12, 2009-2021 and Harmonised BHPS: Waves 1-18, 1991-2009. [data collection]. 17th Edition. UK Data Service. SN: 6614, DOI: <http://doi.org/10.5255/UKDA-SN-6614-18>

However, as described below this requires using only files corresponding to waves 1-10 (prefixes a\_ to j\_) as described in the manuscript, covering the survey period between 2009 and March 2020, or waves 1 to 10.

**If possible, we recommend using files from this specific release** when replicating our results. This prevents any problems arising from future Understanding Society data releases changing the file types or coding conventions of certain variables for the wave-specific files used in the construction of our analysis dataset or the subsequent analyses. If it is not possible to get access to the specific release files corresponding to the 17<sup>th</sup> edition release we can provide copies of these files to certified Understanding Society users via a secure file transfer.

### **System Specification:**

The laptop used for the analysis was a Dell XPS 15 with 16GB RAM running Windows 10 (Version 22H2) as the operating system. All analyses used Stata version 16.1 for Windows (64-bit x86-64, revision 14<sup>th</sup> of June 2022). The dofiles make use of a few non-standard commands that need to be installed. The replication package contains a copy of the ado-files corresponding to the versions of these commands installed at the time of creating the final output included in the manuscript (folder: ado\_stored). To ensure that these commands are used in the same version when replicating our results, you will need to copy the content of these folders into your own personal ado-directory (note this is **not** Stata's base ado directory under e.g., ./Stata16/ado/base). The personal ado-folder with installed commands is usually located on the same hard-drive your Stata distribution is installed (path: ./ado/plus). The contents in the ado\_stored folder need to be copied into the corresponding folders in your ./ado/plus folder. For example, the contents of folder "c" inside the ado\_stored folder in the replication package need to be moved to folder "./ado/plus/c" on your local harddrive. To run this replication package on a Mac might require additional changes to the dofiles that the authors are not currently aware of.

### **Running the replication package:**

We cannot provide our analysis dataset directly, but the replication package includes the dofiles to replicate the intermediate steps creating our analysis dataset from the Understanding Society data. To ensure that the files in the replication package and the relative file-paths within dofiles can work properly you will need to unpack the entire content of the replication zip-folder. The resulting folder should include:

- A set of 18 (sub) dofiles enumerated in groups from 00 to 05 which conduct the data cleaning and analyses. Below an overview on the different types of dofiles and their general purpose:

<b>Dofile</b>	<b>Main Purpose</b>
<b>00</b>	Master dofile running all subsequent dofiles covering data-formatting and analyses.
<b>01</b>	Preparing the wave-by-wave files for merging (variable selection + harmonization if necessary).
<b>02</b>	Merging the datasets together into a long-form raw dataset of waves 1-10.
<b>03</b>	Conditioning on non-missingness for variables necessary in the analysis as described in the manuscript.
<b>04</b>	Preparing the data for analysis; creating relevant datasets and defining variables.
<b>05</b>	Running analysis dofiles and creating tables and figures presenting the results.

- A set of folders titled:
  - o **data\_source** → Location for the source-files from Understanding Society (see below).
  - o **data\_merge** → Location for intermediate files created by dofiles **01**
  - o **data\_panel** → Location for intermediate/final panel datasets created in subsequent dofiles **02** to **04**
  - o **output** → Location for log-files and two subfolders with graphs in a png format and tables in .tex format.
- A zipped folder containing all log-files, tables and figures as displayed in the paper before uploading the final version of this replication package on May 2<sup>nd</sup> 2023: **SSM\_02052023\_output\_vault**

To ensure that the master-dofile (00\_ukhls\_adaptation\_master.do) and subsequent dofiles can run smoothly using the encoded file-paths **you will need to place the Understanding Society source files in the empty folders of the unzipped replication package:**

<b>USoc Filename</b>	<b>Content</b>	<b>Designated folder</b>
indresp.dta	Individual-level generate variables (e.g. marital status) and individual survey module responses All years included in waves 1-10. Waves are designed by alphabetical indices “a_” for wave 1 to “j_” wave 10.	data_source
hhresp.dta	Household-level generate variables (e.g. net income) and individual survey module responses All years included in waves 1-10. Waves are designed by alphabetical indices “a_” for wave 1 to “j_” wave 10.	data_source

The zipped folder already has the structure necessary to run our analyses so be aware that **moving dofiles will require you to adjust the pathways to reflect a change in your working directory.**

Running the dofile “00\_ukhls\_adaptation\_master” will replicate our analyses from scratch. By running the dofiles prefixed with “01\_” to “04\_” you will create the datasets underlying all results presented in the manuscript.

The dofile “05\_ukhls\_adaptation\_manuscript\_master” creates figures and tables presented in the paper. All outputs are stored in the folder “outputs” in respective subfolders;

- **graphs:** All figures presented in the main manuscript and online appendix.
- **log\_files:** Log files of the stata output created by the different dofile groups.
- **results:** Datasets with the data underlying all figures.
- **tables:** All tables presented in the main manuscript and online appendix.

Below all output items are enumerated in their order of creation when running the dofiles. As we make use of globals to store variable lists it is necessary to first run lines 54 to 60 in the “05\_ukhls\_adaptation\_manuscript\_master” dofile before running subsequent dofiles independently. Please note that color-schemes might be different to the published paper:

Manuscript Output Item and Files	Dofile
<b>Descriptive Tables and Figures (in order of creation)</b>	
<b>Table 1</b> – Duration Table (contents displayed in Stata output window)	[05_01a]
<b>Table A1.2</b> - Dimensions of Limitation at LSI Onset (contents displayed in Stata output window)	[05_01a]
<b>Table 2</b> – Descriptive Statistics (in folder ./output/tables) - <i>table2_descriptivestats.tex</i>	[05_01a]
<b>Table A1.1</b> - Cumulative Response shares before LSI-onset by Analysis Sample (in folder ./output/tables) - <i>tableA1_1_cumulative_response_ls_samples.tex.dta</i> - <i>tableA1_1_cumulative_response_sah_samples.tex.dta</i>	[05_01a]
<b>Figure 1 panels a) to d)</b> - Subjective and Objective Health and Well-being Outcomes around the LSI Onset (in folder ./output/graphs) - <i>figure1_a_sf12compscore_plot.png</i> - <i>figure1_b_sf12_limit_plot.png</i> - <i>figure1_c_ls_cumulative_plot.png</i> - <i>figure1_d_sah_cumulative_plot.png</i>	[05_01b]
<b>Figure 5</b> - Individual-Level Differences in Mean Mental/Physical Component Scores (in folder ./output/graphs) - <i>figure5_mcs_pcs_severity_plot.png</i>	[05_01b]
<b>Results Tables and Graphs (in order of creation)</b>	
<b>Table 3</b> – Baseline Results (in folder ./output/tables) - <i>table3_BaseResults.tex</i>	[05_00]
<b>Tables A2.1 to A2.3</b> – Results by Gender, Age, and Severity (in folder ./output/tables) - <i>tableA2_1_GenderResults.tex</i> - <i>tableA2_2_AgeResults.tex</i> - <i>tableA2_3_SeverityResults.tex</i>	[05_00]
<b>Tables A3.1 to A3.4</b> – Robustness Checks Results for Age-specific trends, higher severity cutoff, alternative definition of LSI onset based on functional limitations, and attrition. (in folder ./output/tables) - <i>tableA3_1_AgetrendsRobustResults.tex</i> - <i>tableA3_2_SeverityRobustResults.tex</i> - <i>tableA3_3_LsilimitRobustResults.tex</i> - <i>tableA3_4_AltdefinitionRobustResults.tex</i> - <i>tableA3_5_AttritionRobustResults.tex</i>	[05_00]
<b>Figures 2, 3, 4 , and 6</b> – Marginal Effect Plots for the Full Sample, by Gender, Age, and Severity (in folder ./output/graphs) - <i>figure2_margins_base_lifesat.png</i> - <i>figure2_margins_base_sah.png</i> - <i>figure3_margins_bygender_lifesat.png</i> - <i>figure3_margins_bygender_sah.png</i> - <i>figure4_margins_byage_lifesat.png</i> - <i>figure4_margins_byage_sah.png</i> - <i>figure6_margins_byseverity_lifesat.png</i>	[05_04]
<b>Figures A3.1, A3.2, A3.3, and A3.4</b> – Robustness Checks Marginal Effects Results for Age-specific trends, higher severity cutoff, alternative definition of LSI onset based on functional limitations, and attrition. (in folder ./output/graphs) - <i>figureA3_1_margins_robust_agetrends_lifesat.png</i> - <i>figureA3_1_margins_robust_agetrends_sah.png</i> - <i>figureA3_2_margins_robust_severity_lifesat.png</i> - <i>figureA3_3_margins_robust_lsilimit_lifesat.png</i> - <i>figureA3_3_margins_robust_lsilimit_sah.png</i> - <i>figureA3_3_margins_robust_altdefinition_lifesat.png</i> - <i>figureA3_3_margins_robust_altdefinition_sah.png</i> - <i>figureA3_4_margins_robust_attrition_lifesat.png</i> - <i>figureA3_4_margins_robust_attrition_sah.png</i>	[05_04]