HRS Data Products: Journal Replication Policy

1. Background

Many scholarly journals require that researchers must include the components of their analysis process (input/output data and supporting documentation) as part of their publication submission. The reason for this requirement is to allow other researchers to replicate the findings that are reported in the publication. In this context, replication may be defined as either *pure replication* (checking on a published paper using the same data) or *scientific replication* (reapplying analysis techniques of the original researcher to data representing a different population). Journals that have adopted a replication policy typically require that researchers provide a replication package that can be made available from the journal's Web site. Items to be included in the replication package vary by journal, but usually include the input/output file(s) and programs used to generate the reported results, as well as documentation explaining how the results were produced. Exceptions to this type of policy are typically made for situations in which the researcher has used proprietary or restricted access data.

This document provides guidance to researchers who are using or who plan to use HRS data products as inputs to analysis conducted as part of the publishing process. As outlined below, the guidelines differ slightly depending on the category of data used in the analysis, whether it was public, health sensitive or restricted.

2. Replication Policy by HRS Product Category

2a. HRS Public Products

Although Health and Retirement Study *public* data products may be used without restriction, distribution² of these products is managed by the study via the <u>HRS File Download Site</u>. Since HRS conditions of use prohibit redistribution of any HRS data product, all HRS public datasets are considered to be proprietary.

2a1. Journal Request

Given this situation, researchers should begin by asking the journal editor for an exemption from the requirement that data be posted on the journal web site. In place of data files, the researcher should include the following items in their replication package that is submitted to the journal:

- 1. A statement explaining how to obtain public data from HRS
- 2. A list of the HRS public files used as inputs to the analysis process
- 3. Step-by-step documentation of the procedures by which HRS files were incorporated into the final analysis file(s)
- 4. Statistical programs used to generate analysis files and execute analyses

¹ Daniel S. Hamermesh, Replication In Economics, NBER Working Paper Series 13026, http://www.nber.org/papers/w13026

² HRS <u>Third Party Redistribution</u> policy

The HRS recognizes that some journals will require that the analysis data set(s) created by the researcher be made available to the public. If this is the case, researchers should submit a replication package that includes the data file(s) directly to HRS for redistribution via the file download site. Items to be included in the replication package that is submitted to HRS are noted in 2a2 below.

2a2. Replication Package for Submission to HRS

Researchers should create a digital file set containing the following information:

- 1. Contact information for researcher
- 2. Journal to which article was submitted
- 3. Citation text for article including PMCID (if applicable), DOI, keywords, and abstract
- 4. Items 2-4 from 2a1 that were submitted to the journal
- 5. (If appropriate) Intermediate File(s) and documentation
- 6. Final data file(s) and documentation

2b. HRS Restricted Data Products

Health and Retirement Study restricted data products may only be used under the contractual conditions described on the <u>Restricted Data</u> page and must be treated as confidential data. Data files derived from HRS restricted data products are **not eligible** for redistribution by the journal or from the HRS file download site.

2b1. Journal Request

When reporting results derived from HRS restricted data, researchers should request an exemption from the data file posting requirements, specifying that the replication submission will include these items:

- 1. A statement explaining how to obtain restricted data from HRS
- 2. A list of the HRS restricted files used as inputs to the analysis process
- 3. Step-by-step documentation of the procedures by which HRS files were incorporated into the final analysis file(s)
- 4. Statistical programs used to generate analysis files and execute analyses

2b2. Replication Package for Submission to HRS

Although not required, it would be helpful in managing replication requests involving restricted data if researchers would also submit their replication package to HRS. The package should include the following:

- 1. Contact information for researcher
- 2. Journal to which article was submitted
- 3. Citation text for article including PMCID (if applicable), DOI, keywords, and abstract
- 4. Items 2-4 from 2b1 that were submitted to the journal
- 5. (If appropriate) description of intermediate File(s)
- 6. Description of final data file(s)

2c. HRS Sensitive Health and Genetics Data Products

Health and Retirement Study sensitive health and genetics data products may only be used under the terms of the <u>Sensitive Health</u> and <u>Genetics</u> data use agreements and must be treated as

confidential data. Data files derived from HRS sensitive health and genetics data products are **not eligible** for redistribution by the journal or via the HRS file download site.

2c1. Journal Request

When submitting analysis results derived from HRS sensitive health and/or genetics data, researchers should request an exemption from the data file posting requirements, specifying that the replication submission will include these items:

- 1. A statement explaining how to obtain sensitive health and/or genetics data from HRS
- 2. A list of the HRS sensitive health and/or genetics data files used as inputs to the analysis process
- 3. Step-by-step documentation of the procedures by which HRS files were incorporated into the final analysis file(s).
- 4. Statistical programs used to generate analysis files and execute analyses

2c2. Submission Package

Although not required, it would be helpful in managing replication requests involving Health Sensitive and Genetics data if researchers would also submit their replication package to HRS. The package should include the following:

- 1. Contact information for researcher
- 2. Journal to which article was submitted
- 3. Citation text for article including PMCID (if applicable), DOI, keywords, and abstract
- 4. Items 2-4 from 2c1 that are submitted to the journal
- 5. (If appropriate) description of intermediate File(s)
- 6. Description of final data file(s)

3. Summary of HRS Replication Options

Journal Requirements	Replication File Availability by HRS Data Product Category					
	Public		Restricted		Sensitive Health/Genetics	
	HRS	Journal	HRS	Journal	HRS	Journal
Input files	Υ	N	Y ³	N	Y ⁴	N
Output files	Y ⁵	N	N	N	N	N
Programs	Υ	Υ	Υ	Υ	Υ	Υ
Documentation	Υ	Υ	Υ	Υ	Υ	Υ
of Process						
Results ⁶	Υ	Υ	Υ	Υ	Υ	Υ

³ Restricted data files may be obtained from HRS as specified on the HRS Restricted Data page

⁴ Visit the HRS Web site for instructions on how to obtain <u>Sensitive Health</u> and <u>Genetics</u> data files

⁵ If required by the journal, files created as part of the data analysis process may be submitted to HRS for download from the HRS File Download site.

⁶ Including study-specific results for meta-analysis.

4. Submitting Your Replication Package

When you have finished assembling the file set containing your replication materials, forward the package to the Health and Retirement Study at hrsquestions@umich.edu. Your submission will be logged and archived. Replication packages containing data files derived from public data will be posted for redistribution as an HRS User Contribution. Note: Questions from users are the responsibility of the researcher. The Health and Retirement Study will not provide support for the data, documentation and programs contained in the replication package.