HEALTH AND RETIREMENT STUDY

Life History Mail Survey (LHMS) 2017 Fall

Version 2, June 2023

Data Description and Usage

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1. Introduction

The Life History Mail Survey 2017 Fall (LHMS 2017 Fall) contains questions about residential, education, employment and health history, and other important childhood and family events.

The LHMS is part of the Health and Retirement Study (HRS), which is funded under a cooperative agreement between the National Institute on Aging (NIA) and the Survey Research Center at the University of Michigan. The HRS is designed to study labor force, health, and family transitions of the U.S. population aged 51 and older, and the impact of those transitions on economic resources, claims on structured programs such as Social Security, Medicare, and Medicaid, and informal assistance and transfers to and from family members.

The National Institute on Aging (NIA) provided funding (R01 AG051142) for the LHMS 2017 Fall, which was conducted by the Survey Research Center (SRC), at the Institute for Social Research (ISR), at the University of Michigan.

By receiving the dataset, you agree to use it for research and statistical purposes only and make no effort to identify respondents.   In addition, you agree to send us a copy of publications you produce based on the data. See Registration and Downloading the Data (at the end of this document) for additional details.

The questions in the LHMS are based on several similar studies around the world, including: the English Longitudinal Study of Aging (ELSA, England), the Survey of Health, Ageing and Retirement in Europe (SHARELIFE), and the China Health and Retirement Longitudinal Study (CHARLS).

2. LHMS Sample Design

In 2015, all but a subsample of Spanish-speaking HRS respondents were assigned to receive one of two mail surveys: Consumption and Activities Mail Survey (CAMS) or Life History Mail Survey (LHMS). CAMS is a longitudinal sample that receives CAMS (and usually only CAMS) in every odd-numbered year. The sample selection for CAMS is household based and covers about 40% of HRS households. That left about 60% of households for the 2015 LHMS.

HRS had not planned to administer the LHMS until 2017, but an opportunity arose to administer a preliminary version of the LHMS in 2015. The 2015 LHMS questionnaire included only part of the content and is referred to as Part 1. In addition, the 2015 LHMS questionnaire was only administered to English-speaking respondents.

In order to incorporate the CAMS sample into the LHMS but not interrupt the fall CAMS cycle, HRS administered the LHMS to respondents in the CAMS sample in spring 2017. The sample included all individuals who were in the CAMS sample in 2015 (regardless of their response outcome and including both English and Spanish speakers) plus any new spouses/partners that they reported in the 2016 core interview. They received the full version of the LHMS (Parts 1 and 2) as a single questionnaire. One complexity is that, because 2016 was a new cohort recruitment year, interviewing for some panel and many new cohort cases continued well into 2017. As a result,
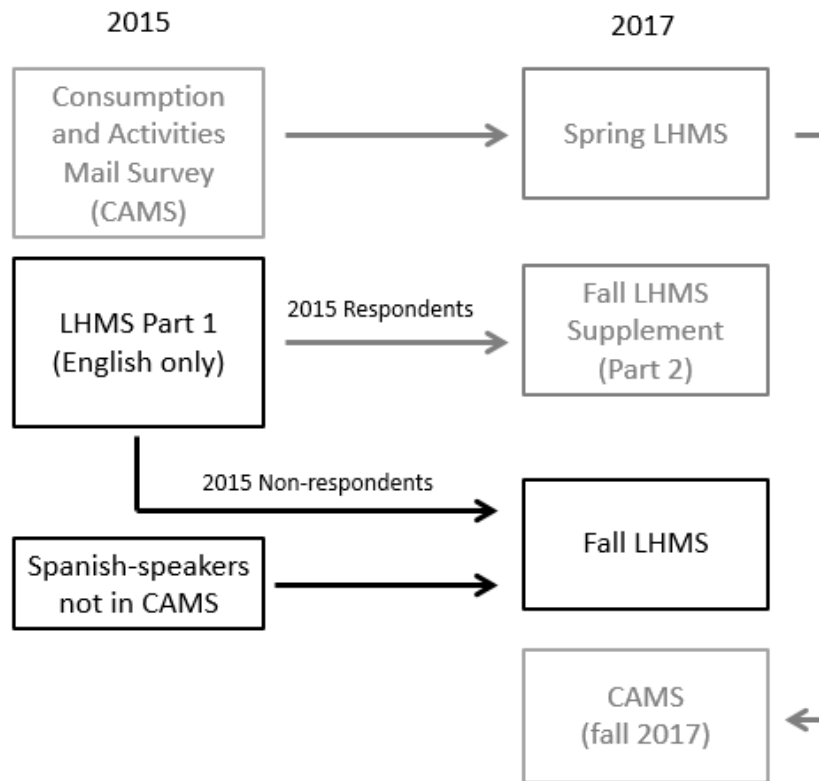
CAMS sample members who had not completed their 2016 core interview by early March 2017 were excluded from the 2017 LHMS. The CAMS sample then received the CAMS survey as scheduled in fall 2017.

Sample members who responded to the 2015 LHMS were sent Part 2 of the LHMS in fall 2017 (Fall-Supplement), whereas those who were in the 2015 LHMS sample but did not respond were sent the full version of the 2017 LHMS (Fall). As with CAMS, new spouses/partners of 2015 LHMS sample members were also included in the 2017 Fall LHMS sample. Finally, Spanish-speaking respondents who were excluded from the 2015 LHMS (plus any new spouses/partners) received the full LHMS in Fall 2017.

When the three subsamples from 2017 are combined, the sample essentially covers all HRS participants who were in the sample in 2016 and were still living in 2017. The only exceptions are the 2016 new cohort (LBBs) and a small number of CAMS sample members who had not completed their 2016 core interview by March 2017. (Both of these excluded groups received the LHMS in 2019.)

Table 1 below depicts the 2015 and 2017 LHMS sample design with emphasis on LHMS 2017 Fall

Life History Mail Survey Sample Design: 2015 and 2017

The field period for the LHMS 2017 Fall was December 2017 through June 2018. Questionnaires were mailed to a subsample of HRS respondents (n= 5,180). The data file contains 559 variables and data for 1,445 respondents. The response rate is 28% percent.

3. About the LHMS 2017 Fall Data

3a. Updates in this release
New variables were added for the LH41 series.

Existing variables that were updated in this release include: LH22_xG, LH57A_2B_17, LH57A_2C_17, LH57A_3B_17, LH57A_3C_17

3b. Public and Restricted Versions
To protect the confidentiality of the information that respondents provide, a number of variables have been masked or are simply not included in the final release public file. Some of these variables are available to analysts as restricted data. The names of variables that were masked for confidentiality end in the capital letter "M".

The variables in the LHMS 2017 Fall Restricted file are identical to those in the LHMS 2017 Fall Public file except for the following variables that include detailed respondent-level information for industry and occupation.

2017 LHMS Fall Variable Name	Description
LH41_1E	FIRST OR ONLY TYPE BUSINESS - 1
LH41_1EL	TYPE BUSINESS, LAST JOB - 1
LH41_1F	FIRST OR ONLY JOB TITLE – 1
LH41_1FL	LAST JOB TITLE – 1
LH41_2E	FIRST OR ONLY TYPE BUSINESS - 2
LH41_2EL	TYPE BUSINESS, LAST JOB - 2
LH41_2F	FIRST OR ONLY JOB TITLE – 2
LH41_2FL	LAST JOB TITLE – 2
LH41_3E	FIRST OR ONLY TYPE BUSINESS - 3
LH41_3EL	TYPE BUSINESS, LAST JOB - 3
LH41_3F	FIRST OR ONLY JOB TITLE – 3
LH41_3FL	LAST JOB TITLE – 3
LH41_4E	FIRST OR ONLY TYPE BUSINESS - 4
LH41_4EL	TYPE BUSINESS, LAST JOB - 4
LH41_4F	FIRST OR ONLY JOB TITLE – 4
LH41_4FL	LAST JOB TITLE – 4
LH41_5E	FIRST OR ONLY TYPE BUSINESS - 5
LH41_5EL	TYPE BUSINESS, LAST JOB - 5

LH41_5F	FIRST OR ONLY JOB TITLE – 5
LH41_5FL	LAST JOB TITLE – 5
LH41_6E	FIRST OR ONLY TYPE BUSINESS - 6
LH41_6EL	TYPE BUSINESS, LAST JOB - 6
LH41_6F	FIRST OR ONLY JOB TITLE – 6
LH41_6FL	LAST JOB TITLE – 6
LH41_7E	FIRST OR ONLY TYPE BUSINESS - 7
LH41_7EL	TYPE BUSINESS, LAST JOB - 7
LH41_7F	FIRST OR ONLY JOB TITLE – 7
LH41_7FL	LAST JOB TITLE – 7
LH41_8E	FIRST OR ONLY TYPE BUSINESS - 8
LH41_8EL	TYPE BUSINESS, LAST JOB - 8
LH41_8F	FIRST OR ONLY JOB TITLE – 8
LH41_8FL	LAST JOB TITLE – 8
LH41_9E	FIRST OR ONLY TYPE BUSINESS - 9
LH41_9EL	TYPE BUSINESS, LAST JOB - 9
LH41_9F	FIRST OR ONLY JOB TITLE – 9
LH41_9FL	LAST JOB TITLE – 9
LH41_10E	FIRST OR ONLY TYPE BUSINESS - 10
LH41_10EL	TYPE BUSINESS, LAST JOB – 10
LH41_10F	FIRST OR ONLY JOB TITLE – 10
LH41_10FL	LAST JOB TITLE – 10
LH45	(MOST IMPORTANT) JOB TITLE
LH46	(MOST IMPORTANT) TYPE OF EMPLOYER OR BUSINESS

3c. Variable Names and Labels

Variable names begin with the letters LH to designate the Life History Mail Survey, followed by _17 for the wave in which the data were collected.

LH1_17   LH1. LIVED OUTSIDE U.S.

As shown in the example, the variable label contains the question number found in the LHMS 2017 Fall questionnaire.

3d. Data Quality

Due to the skip patterns in this questionnaire, all missing answers are treated the same in the dataset and coded as simply "Answer not given/Missing." This is true whether the respondent was "expected" to answer the question or not, based on earlier responses.

While cleaning the data, when extreme, unlikely or conflicting values were encountered, electronic images of the questionnaires were checked directly to determine if errors were

introduced during the data entry/scanning process. This includes instances where a start year is greater than an end year, or a start age is greater than an end age. If the respondent reported the extreme or conflicting value, the value appears unchanged in the data.

3d1. LH22 Series, Primary through High School Education – Start Grade, Start Age, End Age

For these two questions, respondents were instructed to write the start grade, end grade, start age and end age for each school they attended from Kindergarten through high school.

In the LH22 series, a number of respondents provided information for post high school education or training (rather than writing those in the LH35 series). In these cases, if the "School Name" field in LH22 clearly indicated a post-high school institution, the response was moved to LH35; otherwise it was left in LH22.

As described earlier in this section, electronic images were checked in all instances of extreme or conflicting values to confirm that the data accurately reflects the respondent's answers.

3d2. State Coding Scheme

LH5 Residential History
LH22 Primary through High School Education
LH35 Post High School Education
LH44 Employment History

These four series asked respondents to provide the state for their residence, education and employment history. The state variable in these series is coded as follows: beginning with LH5, the first state mentioned is coded as 1, the second state is coded as 2, and so on for each unique state mentioned. If the first state mentioned is repeated on a later line in LH5, it is coded as 1, if the second state mentioned is repeated on a later line it is coded as 2, etc. Mentions of foreign countries are coded as 96.

For LH22, LH35 and LH44 the same scheme is maintained. For example, a 1 in the state variables in the education and employment series represents the same state as the 1 in the LH5 residential series.

3d3. Occupation and Industry
For LH41, respondents were asked to describe places worked for one year or more after finishing full-time education. If a respondent changed jobs (or job titles) but stayed with the same employer, they were asked to list the first and last title held with that employer on the same line. The first (or only) job is provided in the variable LH41_xFM_19 (FIRST OR ONLY JOB TITLE); the corresponding employer/business is in variable LH41_xEM_19 (TYPE OF EMPLOYER OR BUSINESS, FIRST JOB). The last (where applicable) job is provided in the variable LH41_xFLM_19 (LAST JOB TITLE); the corresponding last employer/business is in variable LH41_xELM_19 (TYPE OF EMPLOYER OR BUSINESS, LAST JOB).

3e. Open End Questions

Responses were reviewed for six open end questions:

LH35f_17, major field of study in post high school education

LH35g_17, degree earned in post high school education

LH35h_17, certificate earned in post high school education

LH54_17, major surgeries

LH57a_17, periods of ill health or disability

LH60_17, most important accomplishments

Responses to the LH35 series, post high school training or education, were coded based on the Classification of Instructional Programs (CIP) categories, provided by the National Center for Educational Statistics (https://nces.ed.gov). The codes for LH35FM_17, major field of study, were then grouped into larger categories to protect respondent confidentiality, as shown below:

LHMS code	NCES CIP Code	NCES Description
1	52	BUSINESS, MANAGEMENT, MARKETING, AND RELATED SUPPORT SERVICES
2	9	COMMUNICATION, JOURNALISM
3	13	EDUCATION
4	51	HEALTH PROFESSIONS, RESIDENCY PROGRAMS, AND RELATED PROGRAMS
4	60	RESIDENCY PROGRAMS
5	16	FOREIGN LANGUAGES, LITERATURES, AND LINGUISTICS
5	23	ENGLISH LANGUAGE AND LITERATURE/LETTERS
5	24	LIBERAL ARTS AND SCIENCES, GENERAL STUDIES AND HUMANITIES
5	38	PHILOSOPHY AND RELIGIOUS STUDIES
5	39	THEOLOGY AND RELIGIOUS VOCATIONS
5	50	VISUAL AND PERFORMING ARTS
5	54	HISTORY
6	22	LEGAL PROFESSIONS AND STUDIES
6	28	MILITARY SCIENCE, LEADERSHIP, OPERATIONAL ART
6	29	MILITARY TECHNOLOGIES AND APPLIED SCIENCES
6	43	HOMELAND SECURITY, LAW ENFORCEMENT, FIREFIGHTING AND RELATED PROTECTIVE SERVICES
7	1	AGRICULTURE, AGRICULTURE OPERATIONS, AND RELATED SCIENCES

LHMS code	NCES CIP Code	NCES Description
7	3	NATURAL RESOURCES AND CONSERVATION
8	4	ARCHITECTURE AND RELATED SERVICES
8	14	ENGINEERING
8	15	ENGINEERING TECHNOLOGIES AND ENGINEERING-RELATED FIELDS
8	26	BIOLOGICAL AND BIOMEDICAL SCIENCES
8	27	MATHEMATICS AND STATISTICS
8	40	PHYSICAL SCIENCES
9	5	AREA, ETHNIC, CULTURAL, GENDER, AND GROUP STUDIES
9	19	FAMILY AND CONSUMER SCIENCES/HUMAN SCIENCES
9	42	PSYCHOLOGY
9	44	PUBLIC ADMINISTRATION AND SOCIAL SERVICE PROFESSIONS
9	45	SOCIAL SCIENCES
10	10	COMMUNICATIONS TECHNOLOGIES/TECHNICIANS AND SUPPORT SERVICES
10	11	COMPUTER AND INFORMATION SCIENCES AND SUPPORT SERVICES
10	25	LIBRARY SCIENCE
11	12	PERSONAL AND CULINARY SERVICES
11	31	PARKS, RECREATION, LEISURE, AND FITNESS STUDIES
11	36	LEISURE AND RECREATIONAL ACTIVITIES
12	46	CONSTRUCTION TRADES
12	47	MECHANIC AND REPAIR TECHNOLOGIES/TECHNICIANS
12	48	PRECISION PRODUCTION
12	49	TRANSPORTATION AND MATERIALS MOVING
12	53	HIGH SCHOOL/SECONDARY DIPLOMAS AND CERTIFICATES
13	96	OTHER

Responses to the employment series beginning at LH41 were coded based on the same US Census codes used to code J166M and J168M (Section J) in the HRS core interview. These codes were then grouped into larger categories to protect respondent confidentiality, also using the same masking code used in the HRS core study.

Responses to the health questions (LH54 and LH57), and to LH60, major accomplishments, were coded based on an analysis of frequencies found in the responses.

3f. "Other: Specify" Questions

Responses were reviewed for all questions with an "Other: Specify" option, and were either coded into existing code frames or new code frames were created. For the questions below, the following new code frames were created:

LH14_17, Who lived with you when you started your first full-time job?

11 Children, unspecified
12 In the military

LH16_17, What type of residence did you live in when you started first full-time job?

4 Military housing/barracks
5 Rooming house, boarding house/YMCA/dormitory

LH18_17, Who lived with you when you were 40?

11 Children, unspecified

LH33b_17, In what sports did you participate (in junior/middle and high school)?

12 Softball
13 Wrestling
14 Cheerleading, drill team

LH41d_17, What did you do after leaving this job?

6 Retired, took buy out package
7 Pursued further education
8 Started own business/became self-employed
9 Moved/relocated
10 Joined military
11 Still work at this job

LH49a_17, Why did you leave or stop working for this employer?

11 The company closed, went out of business, or relocated
12 Started own business/became self-employed
13 Did not like it; problems with the owners; problems with coworkers; hours were cut
14 Moved to a different job, reason unspecified
15 Divested ownership in the business/sold the business

4. File Structure

The HRS LHMS 2017 Fall Final Release data are at the respondent level. The data file contains one record for each respondent or proxy (n= 1,445) who filled out and returned a 2017 LHMS Fall questionnaire. The variable LH61_17 WHO ANSWERED SURVEY QUESTIONS provides information about who answered the questions in the 2017 LHMS.

The data file is called LHMS17FALL, translated as: Life History Mail Survey 2017 Fall.

The primary Identification variables (IDs) are:

HHID   HOUSEHOLD IDENTIFIER
PN   PERSON NUMBER

Records in the data files are sorted in order by the identifying variables from the HRS core study, HHID (household ID) and PN (person number). The variable PN refers to the respondent to whom the questionnaire was mailed. Identification variables in the HRS LHMS 2017 Fall Final Release are stored in character format. For further information about HRS identification variables and merging data, see the Data Description for the HRS 2002 Core.

5. Distribution Files

The following extensions are used for the six different types of distribution files:

.DA for data files,
.SAS for SAS program statements and .sas7bdat for SAS "ready-to-use" files,
.SPS for SPSS program statements and .sav for SPSS "ready-to-use" files,
.DO for Stata DO statements and .dta for Stata "ready-to-use" files,
.DCT for Stata dictionary statements, and
.TXT for codebook files.

For example,

LHMS17FALL.DA contains ASCII data
LHMS17FALL.SAS contains corresponding SAS program statements,
LHMS17FALL.SAS7BDAT contains SAS data in "ready-to-use" format,
LHMS17FALL.SPS contains corresponding SPSS program statements,
LHMS17FALL.SAV contains SPSS data in "ready-to-use" format,
LHMS17FALL.DO contains corresponding Stata DO statements,
LHMS17FALL.DTA contains Stata data in "ready-to-use" format,
LHMS17FALL.DCT contains corresponding Stata dictionary statements, and
LHMS17FALL.TXT contains the ASCII codebook

The HRS LHMS 2017 Fall Final Release data are provided as SAS (.sas7bdat), SPSS (.sav) and Stata (.dta) "ready-to-use" files and in ASCII format with fixed-length records. Use the associated SAS, SPSS or Stata program statements to read the data into the analysis package of your choice or use the available "ready-to-use" files. In addition, you may also download the codebook file (LHMS17FALL.TXT) and the data description (this document).

6. Program Statements

6a. Using the SAS Program Statements

To create a SAS system file for a particular dataset, two file types must be present for that dataset -- .SAS program statement files and .DA data files.

To create a SAS system file, load the *.SAS file into the SAS Program Editor.

If the *.SAS file is located in "c:\lhms2017fall\sas" and the data file is located in "c:\lhms17fall\data", you can run the file as is. A SAS system file (*.SD2 or *.SAS7BDAT) will be saved to directory "c:\lhms2017fall\sas".

If the files are not located in the specified directories, you will need to edit the *.SAS file to reflect the proper path names prior to running the file.

6b. Using the SPSS Program Statements

To create an SPSS system file for a particular dataset, two file types must be present for that dataset -- .SPS program statement files and .DA data files.

To create an SPSS system file, open the *.SPS file in SPSS as an SPSS Syntax File.

If the *.SPS file is located in "c:\lhms2017fall\spss" and the data file is located in "c:\lhms2017fall\data", you can run the file as is. An SPSS system file (*.SAV) will be saved to directory "c:\lhms2017fall\spss".

If the files are not located in the specified directories, you will need to edit the *.SPS file to reflect the proper path names prior to running the file.

6c. Using the Stata Program Statements

To use Stata with a particular dataset, the following three file types must be present for that dataset -- .DCT files, .DO files, and .DA data files.

Files with the suffix .DA contain the raw data for Stata to read. Files with the suffix .DCT are Stata dictionaries used by Stata to describe the data. Files with the suffix .DO are short Stata programs ("do files") which you may use to read in the data. Load the .DO file into Stata and then submit it.

If the *.DO and *.DCT files are located in "c:\lhms2017fall\stata" and the data file is located in "c:\lhms2017fall\data", you can run the .DO file as is.

If the files are not located in these directories, you must edit the *.DO and *.DCT files to reflect the proper path names before you run the files.

Note that the variable names provided in the .DCT files are uppercase. If you prefer lower case variable names, you may wish to convert the .DCT files to lower case prior to use. You may do this by reading the .DCT file into a text or word processing program and changing the case. For instance in Microsoft Word, Edit, Select All, Format, Change Case, lowercase.

7. Linking Respondents across Time

Respondent records in the LHMS 2017 Fall Final Release can be linked to respondent records from 2016 and prior waves by HHID and PN. The core sub-household identifiers can be used to link household data with the cross-sectional respondent level data.

8. Registration and Downloading the Data

8a. Registration

HRS data are available for free to researchers and analysts at the HRS Web site. In order to obtain public release data, you must first register at our Web site. Once you have completed the registration process, your username and password will be sent to you via e-mail. Your username and password are required to download data files.

Registered users receive user support, information related to errors in the data, future releases, workshops, and publication lists. The information you provide will not be used for any commercial use, and will not be redistributed to third parties.

8b. Conditions of Use

By registering, you agree to the Conditions of Use governing access to the Health and Retirement Study's public release data. You must agree to
- not attempt to identify respondents
- not transfer data to third parties except as specified
- not share your username and password
- include specified citations in work based on HRS data
- provide information to us about publications based on HRS data
- report apparent errors in the HRS data or documentation files
- notify us of changes in your contact information

For more information concerning privacy issues and conditions of use, please read "Conditions of Use for Public Data Files" and "Privacy and Security Notice" at the Public File Download Area of the HRS Web site.

8c. Publications Based on Data

As part of the data registration process, you agree to include specified citations and to inform HRS of any papers, publications, or presentations based on HRS data. Please send a copy of any publications you produce based on HRS data, with a bibliographical reference, if appropriate, to the address below.

Health and Retirement Study
Attn: Papers and Publications
The Institute for Social Research
P.O. Box 1248
Ann Arbor, MI (USA) 48106-1248

Alternately, you may contact us by e-mail at hrsquestions@umich.edu with "Attn: Papers and Publications" in the subject line.

9. If You Need to Know More

This document is intended to serve as a brief overview and to provide guidelines to using the LHMS 2017 Fall Final Release. Additional information about the HRS can be obtained from the HRS Web site. If you have questions or concerns that are not adequately covered here or on our Web site, please contact us. We will do our best to provide answers.

9a. HRS Internet Site

Health and Retirement Study public release data and additional information about the study are available on the Internet. To access the data and other relevant information, point your Web browser to the HRS Web site.

http://hrsonline.isr.umich.edu/

9b. Contact Information

If you need to contact us, you may do so by one of the methods listed below.

Internet: Help Desk at our Web site

E-mail: hrsquestions@umich.edu

Postal service:
Health and Retirement Study
The Institute for Social Research
The University of Michigan
P.O. Box 1248
Ann Arbor, MI 48106-1248

FAX: (734) 647-1186