Letter From the Director

The importance of current research in the Health and Retirement Study (HRS) has never before been more obvious than now with the largest segment of our population entering retirement. With the Baby Boom generation about to enter retirement and an ever-increasing longevity, the number of elderly is dramatically increasing relative to the number of individuals active in the labor force. We will be challenged to sustain improved quality of life, health care, and economic success with this demographic shift. Research is the critical element needed to anticipate the complexity of economic and social change ahead.

Using the data in the HRS, researchers in psychology, public health, economics, demography, medicine and sociology analyze the interaction of variables that cut across traditional disciplinary domains such as health, wealth, and family. The broad range of disciplines represented by the HRS Co-Investigators is evidence of our commitment to a multi-disciplinary approach. Many members of a large and diverse community of researchers originally participated in the study’s design and implementation. This has lead to the inclusion of a variety of information that has never before been combined and, as a result, the creation of new areas of research and theory.

In this newsletter, Fonda, Wallace, and Herzog provide us with an excellent example of this cross cutting approach with an interesting interaction of variables examining driving patterns and depressive symptoms (see Changes in Driving Patterns and Worsening Depressive Symptoms Among Older Adults). We recognize the importance of each researcher’s contribution to this growing body of information. This newsletter and our website are designed to support you in your efforts. The article Merging Cross-sectional Data may address problems you have encountered merging data. Issues with merging longitudinal data will be covered in our next newsletter. In this issue we have added a new support feature we invite you to use—Tips from Data Users. Your experience using HRS data may be valuable to fellow researchers. If you have tips you would like to pass on please send us an e-mail at hrsquest@umich.edu. Watch for ideas from fellow researchers in future editions.

Sincerely,

Robert J. Willis
Changes in Driving Patterns and Worsening Depressive Symptoms Among Older Adults

Stephanie J. Fonda, Robert B. Wallace, and A. Regula Herzog

Overview
Past research indicates that driving cessation has a deleterious effect on older people’s well-being. There has been little empirical work done on how or why this effect occurs, however, and there is no research on how older persons restricting their driving distances affects them. In this study, Fonda, Wallace, and Herzog assess how driving cessation and restrictions during one time period affect the depressive symptoms of a national sample of older people who live in the U.S. They analyze the effects of those changes in driving behavior on depressive symptoms 3-5 years later. The authors also examine whether the presence of a driving spouse mitigates these effects.

The Data and Methodology
This study used AHEAD data from 1993, 1995, and 1998 (Waves 1, 2, and 3) on respondents born during or before 1923. The variables used in the study, and the methods for coding, include:

**Depression.** The authors used data from the 8-item version scale (developed from the original 20-item Center for Epidemiologic Studies-Depression [CES-D] scale) that is administered as part of the HRS interview. Each of the 8 items represents a symptom and was coded so as to indicate the presence of that symptom. The authors then combined those codes to create a summary measure—ranging from 0 to 8. Then they looked at the change in this score between Waves 2 and 3. Respondents’ scores were combined into three groups: when they improved, did not change, or changed by only one symptom.

**Loss to Follow-up and Death.** Though not the main point of the study, the authors examined competing risks to worsening depressive symptoms between the second and third waves of AHEAD. Those included loss to follow-up (including respondents who refused to participate and those who required proxies) and death.

**Respondent’s Driving Patterns.** Fonda et al. use data describing respondents’ driving status and changes in driving distances to categorize respondents as follows:
- Respondents who could drive at Waves 1 and 2
  - Unrestricted driving at Waves 1 and 2
  - Drove restricted distances prior to Wave 1
  - Restricted driving distances between Wave 1 and Wave 2
- Respondents who never drove or stopped driving before Wave 1
- Respondents who stopped driving between Waves 1 and 2

**Spouse’s driving status.** The effect of a spouse being able to drive was considered.

**Other Data.** HRS data on social demographics, health functioning (including cognition), and other variables lives are used as controls

**Controls for health status.** Fonda et al. controlled for debilitating health conditions, physical limitations and cognitive functioning at Wave 1.
Means, and Percentages of Study Variables, Using the Weighted Sample of Self-Respondents Aged 70 and Older in 1993*

The Findings
Older people who stopped driving between Waves 1 and 2 were 1.44 times more likely to have experienced worsening depressive symptoms at Wave 3 than those who still drove at Wave 2. Longer term restrictions increase risk of depressive symptoms—the net relative risk of having worsened symptoms at Wave 3 was 1.27 times greater for respondents who restricted their driving distances before Wave 1 than for respondents without such restrictions.

For those who had restricted their driving distances between Waves 1 and 2, the relative risk of worsened depressive symptoms was not significantly greater. Both longer term and relatively recent restrictions to driving distances were premonitory of loss of follow-up and death. Availability of a driving spouse does not significantly affect respondents' depressive symptoms. The effects of never having driven or driving cessation before the AHEAD study were not significantly related to an increase in depressive symptoms, but were significantly related to its competing risks.

![Probability of Worsening Depressive Symptoms](image)

Conclusions
Driving cessation and reduction were associated with increased depression. Older people who stopped driving between Waves 1 and 2 were 1.44 times more likely to have experienced worsening depressive symptoms at Wave 3 than those who still drove at Wave 2. However, availability of a driving spouse did not significantly affect respondents’ depressive symptoms.
The Depression Scales. If you are interested in using the depression scales used in the HRS, we provide references for publications and other materials that document the comparability of the abbreviated HRS depression scales to the full instruments. The depression scales were designed to provide a measure of depression that could be combined with the rich financial and health survey data from a nationally representative sample like the HRS.

The depression scales used in the HRS have been analyzed for comparability within the HRS and across scales. For additional information on the depression scales used in the HRS, selected references are listed below:


Survey Questions. To view the questions on driving behavior, depression, or any other topics, use the new HRS concordance (see above for more information about the concordance) to search the HRS questionnaires by topic or keyword: http://hrsweb.isr.umich.edu/concord/index.html
Upcoming Data Releases

In the next few months, the HRS staff anticipates the release of several datasets:

- **Pre-HRS 2000 Date of Interview.** Files containing complete date of interview are under construction for pre-2000 waves.

- **Early release of the 2002 core data is scheduled for June.**

Recent Data Releases


- **New Release: 2001 Consumption and Activities Mail Survey (CAMS),** February 4, 2003. This data from two random subsamples of the HRS households includes information about individual activities and time use, household consumption, expenditures and individual use of prescription drugs. In 2003, the CAMS will be repeated to provide longitudinal data consumption and time use.


- **Alpha version of new Pension Estimation Program,** February 4, 2003 (See page 6 for details.)

- **HRS 2002 Experimental Modules (Partial Early Release),** December 19, 2002

- **HRS 2000 (v2.0) and HRS 1998 (v3.0),** Imputation File Releases, December 18, 2002

- **HRS 1998 Imputation Release (Version 3.0),** December 18, 2002

- **HRS 1996 (v3.0) and AHEAD 1995 (v3.0),** Imputation File Releases, December 13, 2002

- **NDI 2000 File (Public) Early Release (v1.0),** December 13, 2002

- **Tracker File (3.0) Release,** December 12, 2002

To view a list of recent HRS data releases, go to the HRS home page at http://hrsonline.isr.umich.edu/index.html or for a detailed year-by-year listing of datasets and files which are currently available to registered users visit the What’s Available section of our website.

Tips from Data Users—NEW!!

This new section will come from you, our readers. In working with HRS data you may have discovered something useful that you think might interest other HRS data users. Here is an opportunity to share your insights. Please e-mail your tips to hrsquest@umich.edu.
A RAND Version of HRS and AHEAD Data

Researchers at RAND have created public-use files that simplify the HRS data structure. For example, they have reorganized the data so that each observation represents one individual. They have merged the appropriate information from the various modules to each observation so now household level information is present for each individual respondent. They also made the files easier to merge across waves.

The data can be downloaded as SAS data sets, one per HRS or AHEAD Wave, with one observation for each responding individual in the wave. HRS 1992 and 1994 (Waves 1 and 2) include the complete public release data. HRS 1996 (Wave 3) is a partial public release. AHEAD 1993 (Wave 1) includes all variables on the respondent and household files (BR21 and BHH21), but does not yet have the other-person and helper files.

For more information refer to http://hrsonline.isr.umich.edu/m eta/rand/index.html

Restricted Data Releases

A rich body of data is available for those looking into interesting sources for new research. Think about how these data sources could be incorporated into your research plans: earnings and benefits data, national death index data and pension estimation. Researchers who need geographical data to merge with respondent files (for example with Medicare information) can access this information through the restricted data releases. Please refer to our website to apply for access to this data http://hrsonline.isr.umich.edu/rda/index.html.

Earnings and Benefits Data for the HRS cohort, derived from SSA administrative data includes, for example, 1951-1991 annual earnings data, Social Security Retirement, Survivors, and Disability Insurance (RSDI) monthly benefit amount and benefit paid data for the period January 1962-December 1991 and Supplemental Security Income (SSI) monthly basic federal benefit paid data for the period January 1974-December 1991. A file of summary measures, based on the unrounded versions of the SSA Covered Earnings and SSA RSDI Benefits data, and created in part using the Social Security Administration’s ANYPIA program, is also available.

The National Death Index Data in the HRS 2000 (Early Release) contains variables of interest such as month and year of death, cause of death, and quality of match information. The dataset covers all respondents through interviewing year 2000.

The alpha version of our new Pension Estimation Program 2003 is available to current pension data users. This program has a database of 1717 different pension programs used by the employers of select respondents. The Pension Calculator allows you to project the present value of pension earnings or future cash flows using your user-supplied assumptions about parameters such as: interest and inflation rates, mortality and others. The flexibility and ease of use are apparent in the many new features this program offers:

- Improved User Interface that allows interactive changes to program parameters
- Cash Flows option
- Multiple output options
- Multiple runs without application restart
- Application data conveniently stored in a Microsoft ACCESS database
- Improved Documentation

To obtain your copy of the new Pension Calculator or get more information about these data sets and the application process for use go to:
http://hrsonline.isr.umich.edu/rda/reslis.htm#pension2003
Frequently Asked Questions

- Merging Cross-sectional Data
- Working with the Family Data
- Documentation Available on the HRS Website

You may contact us with questions in two ways:
- Help Desk – The form on this page is designed to assist users who have questions about the HRS study and its procedures; are seeking solutions to problems with HRS data products; or who wish to contact the study concerning other issues.
- hrsquest@umich.edu – To e-mail questions about HRS datasets.

Merging Cross-Sectional Data

HRS users have sent in a variety of questions asking for help resolving problems that have arisen in merging HRS data files. In this article we address cross-sectional merging. Because each wave dataset is large, the data are separated into several sections. Cross-sectional merging puts sections, the files, of data within one wave together. Typically, analysts want to merge two or more of these files.

1. Issues To Consider when Merging Files

- What are the variables of interest? Predetermining which variables are needed for an analysis allows you to subset files to include only the necessary variables, weights, and identification variables.

- What should be the level of the analysis file – will it be at the respondent level, one record per respondent, or will it be at the household level, one record per household, or some other level, e.g. helper or household-member/child?

- Will the merge be a one-to-one matching of records, such as merging respondent level health characteristics to respondent-level demographic characteristics, or a one-to-many matching, such as merging household-level wealth or family data to respondent-level health data?

- Which variables must I use to merge? The Data Description documents provide information about primary and secondary identifiers for all files that will assist you in determining which identification variables to use for your merge.

2. Examples Merging Using 2000 Data

- To create a respondent-level file with data from two or more respondent-level files, merge the respondent-level files using HHID and PN. This is a one-to-one match. For 2000, each input file contains 19,580 records. A respondent-level output file with 19,580 respondent records results.

- To create a household-level file with data from two or more household-level files, merge the household-level files using HHID and, for 2000, GSUBHH. This is a one-to-one match. For 2000 each input file contains 13,214 records. A household-level output file with 13,214 household records results.

- To create a respondent-level file including data from a household-level file, merge the respondent-
level file(s) and the household-level file(s) using HHID and GSUBHH. This is a one-to-many match (one household-to-many respondents). Household-level input files contain 13,214 records; respondent-level input files contain 19,580 records. A respondent-level output file with 19,580 respondent records results. Since you are creating a respondent-level output file, be sure to keep PN, as well as HHID and GSUBHH, in the output file even though PN is not used for the merging. SAS code is provided below. Other languages would use analogous procedures.

```sas
* sort each input dataset by HHID GSUBHH and subset variables;
proc sort
   data=in.h00a_r
   out=h00a_r(keep=hhid gsubhh pn g1051 g1053);
   by hhid gsubhh;
run;
proc sort
   data=in.h00j_h
   out=h00j_h(keep=hhid gsubhh g5068);
   by hhid gsubhh;
run;
* merge two datasets by HHID GSUBHH to create a respondent file
   this is a one-to-many merge;
data resp;
   merge h00a_r h00j_h;
   by hhid gsubhh;
run;
```

For additional examples of cross-sectional merges (in SAS, SPSS and Stata), see the 2000 Data Description and Usage Document.

3. Additional Sources of Information on Merging the HRS Datasets

Data Description Documentation
For each wave of data that is released, the HRS staff produces a corresponding Data Description and Usage Document. These documents are available at our Website – see the 2000 Data Description and Usage Document. The documents include sections on merging as well as other valuable information about the files with which you will be working. We strongly recommend reading the Data Description and Usage Document for the wave of HRS data you will be using.

HRSQuest
If after reading this section of the HRS Newsletter and the Data and Usage Documents, you are still encountering difficulties, submit your question to the Help Desk at our Website or send e-mail with a detailed description of the problems you are encountering to hrsquest@umich.edu.

Working with the Family Data
HRS users have shown a great interest in what is often referred to as the HRS family data. Because of this interest, we have received numerous questions about the nature and content of the family data and how best to access the family data.

In each of the waves of HRS data, from 1992 to the present, the HRS has collected detailed information about respondents’ children, household members, parents, and siblings. The HRS collects demographic
information about respondents’ household members and family. The HRS also collects information that allows researchers to investigate the flow of transfers from children to parents and from parents to children. The types of transfers include money, time, and housing. Researchers are able to assess transfers both within households (family members that are co-resident with respondents) and across households. It is also possible to use the HRS to explore questions about the involvement of grandparents with grandchildren.

A more extensive examination of the specific questions that are part of the family data can be found in a variety of sources including, the Questionnaires (HRS Box-and-Arrow), the HRS Question Concordance (v2.1), and the HRS codebooks that accompany each wave of data.

Most researchers are familiar with using data at the household or respondent level of analyses. However, the family data files, in final form, are released at various levels. In addition to the respondent and household level files, in 1996, 1998 and 2000 the data is provided on the following levels listed below, in order to facilitate the use of the family data.

- MC - for household level and child level
- SB - for sibling level
- TC - for transfer-to-child level
- HP - for helper level
- FC - for transfer-from-child level

The Data Descriptions documents, released with each wave of data, provide insight into the structure of all files, including these special family files.

Special Opportunities for Analysts of Family Data. See Upcoming Events for information about an introductory Family Data Workshop at ISR June 16-June 20, 2003 and about a research conference on Older Families in early 2004.

Resources for Analysis of Family Data. This new section of our Website contains information on resources available to researchers who wish to use HRS family data. Currently it contains links to

- * Questionnaire Sections
- * Codebook Sections
- * Bibliography
- * Notes

Creating Parent Files with a Standard Format. Over different waves of the HRS and AHEAD data collection and distribution, variables about the parents have been asked and distributed in a variety of different ways. In order to facilitate longitudinal analysis, the analyst may wish to create files using a standard format for parent information for all waves of data, for instance a file with one record for each respondent for whom parent information was available. The record would contain information about both the respondent’s mother and father. More information about creating parent files for all years in this format will soon be available in the Analysis of Family Data section on our Website.

Documentation Available on the HRS Website

The HRS website includes documentation that answers many of the most common user questions.

Background information includes important information about how the HRS was designed, how the HRS and AHEAD studies were merged, sample selection, etc.
HRS Documentation Products:
- **Data Descriptions** – Text description of each wave and suggestions for use
- **Questionnaires** – Representations of interviews in "box-and-arrow" format
- **Question Concordance (v2.1)** – The concordance is a tool for cross-referencing interview questions by content across time (1992 through 2000 interview years).
- **Codebooks** – For all data products; available for download in ASCII and HTML format
- **Module Descriptions** – For each round of data collection, several topics are selected to be asked in addition to those that we ask as part of the core HRS interview. These topics are included as part of the HRS in modules. Each module includes a few questions on one of the topics (such as volunteer time or religious activity). The modules are asked of a small subset of HRS participants and typically, are only asked in one wave of data collection. Details on module contents for each interviewing year are available at the link above.
- **Imputation Datasets** – Information on imputation products currently available to the public
- **Data Alerts** – Data release errors, omissions, notes, and corrections
- **User Guides** – These documents provide additional documentation about the concepts, measures and questions in the HRS surveys. They expand upon the information found in codebooks, questionnaires and data descriptions (PDF format).
- **Documentation report series** – Which includes reports on issues surrounding the HRS, such as imputations, cognitive functioning, and depression scales.

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**HRS In the News**

A list of news articles that cite the HRS can be found on our web page at [HRS in the News](#). Full text of selected press releases can also be viewed on the HRS website.

The study staff continues to acquire citations for articles that appear in the mainstream media regarding the HRS. We would greatly appreciate being alerted to any items of which you are aware. Please send the references or a copy of the article to:
HRS Publications
Institute for Social Research
426 Thompson St. #3050
Ann Arbor, MI 48106
or e-mail to:
hrsquest@umich.edu

**Upcoming Events**

NCOA/ASA—March 13-15, 2003, HRS Booth # 628
The HRS will have an exhibit booth at the National Council on Aging/American Society on Aging annual meetings in Chicago. Staff will be available to answer questions about the HRS.

PAA—April 30-May 3, 2003, HRS Booth #45
The HRS will have an exhibit booth at the Population Association of America annual meetings in Minneapolis. Staff will be available to answer questions about HRS.

**HRS Family Data Workshop** at the Institute for Social Research
June 16-June 20, 2003 to help users gain familiarity with the HRS family data. Research proposals will be due a month later, July 15, 2003.

**Call for Papers—Research Conference on Older Families:** In order to encourage greater use of our family data, the Health and Retirement Study will sponsor a research conference on Older Families in early 2004. We encourage research papers utilizing the HRS panel data on family, kin, and intergenerational transfers. Users new to the HRS data are especially welcome to submit proposals.
Register Your Paper

If you are aware of publications that utilize HRS data but are not included on this list or have an upcoming publication, please click here for instruction on how to register your paper so that we can include it in our bibliography.

Funding Opportunities

Intergenerational Family Resource Allocation (R01)  

Collaborative Studies on Alzheimer's Disease and Other Neurodegenerative Diseases Associated with Aging (R01)  

Epidemiology of Alcohol Consumption and Alcohol-Related Problems in Older Persons (R01, R03, R21)  

Selected Citations of Recent Publications Using HRS Data

Since the HRS' inception in 1990, over 600 articles have been published using HRS data. This section of the newsletter includes recent publications (2002) that illustrate the range and quality of the data available in the HRS:


Ostbye T, Taylor DH, Sang-Hyuk J. A Longitudinal Study of the Effects of Tobacco Smoking and Other Modifiable Risk Factors on Ill Health in Middle-Aged and Older Americans: Results from the Health and Retirement Study and Asset and Health Dynamics among the Oldest Old Survey. *Preventive Medicine* 2002; 34:334-5. [2002]


Bibliography. For the list of over 600 articles published using HRS data, visit the HRS bibliography, or search our dynamic bibliography by publication type, subject, author, and title. For published and non-published articles and reports, visit the HRS index of papers and publications.
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