

Utah State University

DigitalCommons@USU

Extension Research

Extension

6-27-2019

Boundaries of the Construct of Unemployment in the Pre-Retirement Years: Exploring an Expanded Measurement of Lost-Work Opportunity

Maren Wright Voss

Utah State University, Maren.Voss@usu.edu

Soham Al Snih

University of Texas Medical Branch

Wei Li

University of Utah

Man Hung

Roseman University of Health Sciences

Lorie Gage Richards

University of Utah

Follow this and additional works at: https://digitalcommons.usu.edu/extension_research



Part of the [Sociology Commons](#)

Recommended Citation

Maren Wright Voss, Soham Al Snih, Wei Li, Man Hung, Lorie Gage Richards, Boundaries of the Construct of Unemployment in the Preretirement Years: Exploring an Expanded Measurement of Lost-Work Opportunity, *Work, Aging and Retirement*, Volume 6, Issue 1, January 2020, Pages 59–63, <https://doi.org/10.1093/workar/waz006>

This Article is brought to you for free and open access by the Extension at DigitalCommons@USU. It has been accepted for inclusion in Extension Research by an authorized administrator of DigitalCommons@USU. For more information, please contact digitalcommons@usu.edu.



Boundaries of the Construct of Unemployment in the Pre-Retirement Years: exploring an expanded measurement of lost-work opportunity

Maren Wright Voss, ScD^{1,2}; Soham Al Snih, MD, PhD³; Wei Li, MS²;

Man Hung, PhD⁴; Lorie Gage Richards, PhD²

¹Utah State University; ²University of Utah;

³University of Texas Medical Branch at Galveston; ⁴Roseman University

Maren Wright Voss, ScD: Corresponding author
Utah State University Extension, Health and Wellness;
Old Main Hill
Logan, UT 84322
Email: maren.voss@usu.edu
Phone: 240-367-4777
Fax: 801-587-5411

Author Note:

Acknowledgements

This work was supported in part by grant P2CHD065702 from the National Institutes of Health - National Institute of Child Health and Human Development (National Center for Medical Rehabilitation Research), National Institute for Neurological Disorders and Stroke, and National Institute of Biomedical Imaging and Bioengineering.

Conflict of Interest

None of the authors have any conflict of interest to disclose.

Abstract

There is uncertainty related to whether retirement negatively impacts health--possibly due to complexity around retirement decisions. Lost work opportunity through unemployment or forced retirement has been shown to negatively impact health. Lost work opportunity can be captured in two measurement fields, either a reported experience of being forced into retirement or reported unemployment. However, 17% of individuals retiring due to the loss of work opportunity identified in qualitative interviewing (i.e., unemployment, temporary lay-offs, company buy-outs, forced relocations, etc.) do not report this unemployment or involuntary retirement in quantitative survey responses. We propose broadening the conceptualization of late-career unemployment to incorporate other lost work opportunity scenarios. Using the Health and Retirement Study (HRS), a lost-work opportunity score (LOS) was computed from items indicating unemployment and forced or unplanned retirement. Correlations were computed between this LOS and all continuous variables in the RAND longitudinal compilation of the HRS to determine its convergent and discriminant validity. The LOS demonstrated a Chronbach's alpha of $\alpha=0.82$ and had convergent validity with constructs of employment (9 variables), finances (36 variables), and health (14 variables), as predicted by the literature on retirement timing. No other continuous variables in the HRS were identified with a moderate or strong correlation to LOS, demonstrating discriminant validity. Further research should explore whether a combination of variables in the HRS can improve the accuracy of measuring lost work opportunity. Improved precision in measurement, through an expanded conceptualization of lost-work opportunity, may help explicate the retirement-related factors that impact health, to inform policy and support healthy aging decisions at a societal level.

Keywords: Unemployment, lost-work opportunity, forced retirement, unplanned retirement

Introduction

Mismeasurement around the construct of lost-work opportunity has made it difficult to determine whether a loss of choice to work has contributed to the health declines that occur post-retirement (Behncke, 2012; Heller Sahlgren, 2013; Wu, Odden, Fisher, & Stawski, 2016). This study sought to develop a new way to measure lost-work opportunity by expanding the construct of late-career unemployment to include involuntary retirement and unplanned retirement. Capturing a comprehensive assessment of lost-work opportunity at retirement by accessing related constructs would allow future use of data to clarify how the context of retirement impacts health.

Background

Generally, retirement is associated with worsening health (Behncke, 2012; Heller Sahlgren, 2013). But planned retirement seems to diminish the negative health effects (Jokela et al., 2010; Mein, Martikainen, Hemingway, Stansfeld, & Marmot, 2003; Neuman, 2008). Only early retirees (those retiring earlier than statutory requirements) (Calvo, Sarkisian, & Tamborini, 2013) or involuntary retirees (those reporting being partially or fully forced into retirement) (Rhee, Mor Barak, & Gallo, 2016; Van Solinge, 2007) seem to experience health declines after retirement. This suggests the importance of the construct of voluntary and planned retirement to the health of individuals.

Forced retirement shares a common factor with unemployment, a loss of work opportunity. Higher unemployment is associated with earlier retirement (Coile & Levine, 2011; Coile, Levine, & McKnight, 2014). Past research demonstrates that loss of work has long-term negative health effects (Browning & Heinesen, 2012; Granados, House, Ionides, Burgard, & Schoeni, 2014) (Clark, Georgellis, & Sanfey, 2001; Edin & Gustavsson, 2008). This is important

because, for Baby Boomers, there is an increasing likelihood that retirement will be prompted by lay-offs, meaning an increased risk of loss of work prior to planned retirement, compared to earlier generations (Cahill, Giandrea, & Quinn, 2015). Thus, this large cohort of people at retirement age are more at risk for experiencing negative health effects in their retirement years.

A Comprehensive Construct of Lost Work Opportunity

Research has indicated that individuals nearing retirement age can be hesitant to look for work and may choose to retire when a job loss occurs (Voss et al., 2019), particularly among workers with less education (Coile & Levine, 2011). Social bias theories suggest retirement as a social role is less stigmatizing than unemployment (Hetschko, Knabe, & Schöb, 2014). Older workers face obstacles to re-employment including, 1) their higher wage replacement costs, 2) lack of skills for the current job market; or 3) factors related to age discrimination (Chan & Stevens, 2004). Earlier than planned retirement may occur due to difficulties in finding re-employment (Coile & Levine, 2011; Hirsch, Macpherson, & Hardy, 2000). The traditional measures of unemployment and forced retirement do not capture the complexity of this transition. Among individuals over age 50, 17% of those who reported in qualitative interviewing retiring due to the loss of work opportunity (i.e., unemployment, temporary lay-offs, company buy-outs, forced relocations, etc.) did not report this unemployment or involuntary retirement in their quantitative survey responses (Voss et al., 2019).

Under-reporting of lost-work opportunity presents a problem when measuring the health effects of retirement. We propose a quantification of late-career unemployment which incorporates measures of forced-retirement and unplanned early retirement to compensate for under-reporting of lost work opportunity. We then test this construct of lost work-opportunity for discriminant and convergent validity.

Methods

Data Set and Sample

This analysis comprehensively construing lost-work opportunity at retirement utilized the Health and Retirement Study (HRS). The biennial HRS assesses the contributors to health among adults aged 50 years and older (Chien et al., 2015). It contains information on labor force and retirement conditions.

All individuals participating in the 2004 HRS over age 50 who reported being active in the labor force were included in the variable construction and analysis. The 2004 wave was selected as the first wave including the early Baby Boomers (individuals born between 1948 and 1953). Data collected 2006 and forward includes a leave-behind psycho-social survey with information on forced retirement (Sonnegga et al., 2014). Using 2004 data as the baseline and 2006-2014 data in the variable construction allowed the largest survey cohort possible to test the hypothesized constructs.

In the 2004 HRS, 11,230 individuals were eligible to participate and 9,724 were interviewed, yielding a 86.6% response rate (Sonnegga et al., 2014). The leave-behind survey has a lower completion rate but included the necessary variables, reducing the sample size to 3,748. Data from the HRS are available at (<http://hrsonline.isr.umich.edu/>).

Variable Construction

To triangulate the construct of being forced out of the labor force into retirement through a loss of job opportunity we combined three aspects of lost-work opportunity; unemployment, involuntary retirement, and earlier than planned retirement. The third variable attempted to isolate unmet retirement expectations which might serve as a proxy for under-reporting of

unemployment/involuntary retirement. The three variables were combined into a comprehensive lost-work opportunity score (LOS).

Unemployment. Unemployment was drawn from the HRS item which identifies labor force status. The survey asks, “Are you working now, temporarily laid off, unemployed and looking for work, disabled and unable to work, retired, a homemaker, or what?” If answered as “laid off” or “unemployed” the labor force status was identified as an indicator of unemployment in the construction of LOS.

Involuntary Retirement. Self-reported involuntary retirement is queried, “Thinking back to the time you (partly/completely) retired, was that something you wanted to do or something you felt you were forced into?” This question can be answered in three ways as wanted, forced, or part wanted/part forced. Either an answer of “forced” or “part wanted/part forced” was included in the forced-retirement variable construction, consistent with past research on forced retirement.

Earlier than Planned Retirement. A third aspect of lost-work opportunity was included through a constructed variable based on reviewed literature relating unemployment rates and early retirement, in conjunction with underreporting of unemployment and forced retirement. We calculated the difference between planned retirement age (reported when still working) and actual retirement age. Planned retirement age when measured appears to be relatively stable, with one study showing 92% consistency year to year (Midanik, Soghikian, Ransom, & Polen, 1990) and when the planned age shifts, it tends to be in the direction of later retirement rather than earlier retirement (Ekerdt, Bosse, & Moge, 1980). A short 2-year window between consecutive surveys identified earlier than planned retirement in order to minimize the non-job related factors impacting altered expectations. The question asks, “At what age do you plan to

stop working?” This planned retirement age was subtracted from the actual retirement age for individuals reporting retirement in the successive wave. When yielding a negative number (i.e. individuals retired earlier than planned) it was incorporated into the construct of LOS.

Across all waves, a LOS score was created as a count variable, in which individuals experienced an occurrence of 0, 1, 2, or 3 of the three described events related to lost-work opportunity. The LOS score from 0-3 was calculated for each individual in each wave from 2006-2014. The final LOS was the highest value reported in any wave so that a single, greatest degree, ordinal score for each individual could be compared to variables in the HRS. Missing data due to varied survey administration formats necessitated using the count variable as the best option to maximize the available data.

Analysis

Correlations between the 3 LOS components were calculated and evaluated for each wave. The Cronbach’s alpha and Guttman’s split-half reliabilities for the total LOS variable were evaluated. Principle component analysis and tests of unidimensionality and multidimensionality were conducted. Bivariate correlation was selected as an initial validity check of the lost-work opportunity LOS measure. From the 11,638 variables in the 2014 HRS, correlational analysis was used to determine whether the 3-part LOS measure was related to similar constructs. This method was selected to establish both convergent and discriminant validity with similar and non-similar constructs (Swank & Mullen, 2017).

The Spearman rank-order correlation was calculated for each continuous and rank-order variable in the 2014 HRS against the highest LOS achieved by each individual from the 2004-2014 data. The purpose was to broadly identify how the construct of lost-work opportunity at retirement related to other variables in the HRS. Because this was an initial validity check

evaluating as many variable relationships as possible, for expediency correlational analysis was run for all variables. Moderate correlations greater than 0.30 were considered meaningful (Cohen, 1992).

Results

We computed a LOS for 3,748 individuals who met inclusion criteria. Active labor force status includes individuals who are either employed, laid-off, or unemployed and looking for work, but does not include individuals reporting to be homemakers, disabled, or retired. Excluding individuals reporting disability minimizes the influence of poor health in assessing lost-work opportunity. The average age of the sample in 2014 was 72.2 (SD = 5.7) and 50.6% were female (N=1,897) (see Table 1). The number of individuals with 0, 1, 2, or 3 adverse LOS events are displayed (see Table 2). The Cronbach's alpha for the LOS variable was $\alpha=0.82$, with Guttman's split-half reliability = 0.70. LOS scores from cross-sectional survey waves demonstrated mid-range correlations with LOS components (see Table 3) and unidimensionality in years 2006, 2008, and 2012. Two dimensions were evident (forced and unplanned retirement loading as distinct from unemployment) in waves 2010 and 2014.

A total of 59 continuous variables from the initial 11,638 variables contained in the HRS dataset were identified with a correlation equal or greater than 0.30 to LOS. A complete list of the 59 variables and Spearman Rho correlation values is contained in Appendix A. The variables having moderately strong correlations with LOS could be placed into three categories (see Table 4). The largest group of 36 variables related to the financial aspects of retirement, including 1) pension plan balance; 2) amounts employers or employees had contributed to the pensions; 3) Social Security Disability Insurance (SSDI) payments; 4) applying for and receiving SSDI or Social Security Insurance (SSI) benefits; and 5) an imputed wage rate.

The second most-frequent category was related to the health aspects of aging with 14 health variables correlated with the LOS, including 1) self-reported mortality expectations (higher values = no chance of living to older age, the positive correlation suggests higher chance of dying associated with higher LOS); 2) insurance premium amounts (varying negative/positive correlations, some depending on plan type); and 3) nursing home stays (negative correlation for days in nursing home and positive correlation for year). The final grouping of LOS-related variables included 9 employment related variables with the numbers of hours worked (negatively correlated as the number of hours increased, the lower the LOS) and the self-rated probability of working past either age 62 or age 65 (negatively correlated, with greater expectations of working longer related to lower LOS). No other categories or types of continuous variables from the HRS were identified as having a correlation greater than or equal to 0.30 with the lost-work opportunity score.

Table 1: Demographics of HRS individuals included in correlational analysis (N=3,748)

	N (%)	Correlation with LOS
Age, mean \pm SD, range	72.2 \pm 5.7, 65-104	-.163
Gender		.155
Male	1,851 (49.4)	
Female	1,897 (50.6)	
Race		.014
White/Caucasian	3,050 (81.4)	
Black/African American	506 (13.5)	
Other	190 (5.1)	
Ethnicity		.011
Hispanic	329 (8.8)	
Not Hispanic	3,418 (9.2)	
Education (years)		-.100
Less than HS	533 (14.8)	
HS Graduate/GED	1,247 (33.2)	
Some College	905 (24.2)	
College Graduate and above	1,014 (27.8)	

Table 2: Highest LOS (Lost-Work Opportunity Score) for any Survey Year 2006-2014¹

Number of LOS items Reported	N	%
0	1,288	34.4
1	1,681	44.9
2	656	17.5
3	123	3.3

¹ Sum of reports of any Unemployment, Forced Retirement, or Earlier than Planned Retirement in any single survey wave

Table 3: Spearman Rho Correlations with LOS Scores from each Survey Wave

	LOS Correlation with Factors from each Survey Wave		
	Unemployment	Forced Retirement	Unplanned Retirement
LOS 2006	.739	.587	.611
LOS 2008	.622	.586	.566
LOS 2010	.535	.614	.494
LOS 2012	.525	.601	.531
LOS 2014	.483	.636	.449

Table 4: HRS variables that Correlate with LOS (Lost-Work Opportunity Score)

	Variable Type		
	Employment	Financial	Health
Number of Variables	9	36	14
Spearman Rho Range	0.31 - 0.52	0.30 - 0.67	0.30 - 0.62

Discussion

Having proposed a construct of lost-work opportunity, it is important to clarify and define what the term entails. LOS is an expansion of the traditional construct of unemployment at retirement age, where a job loss might co-occur with the option to retire, altering available choices. LOS applies only to individuals who have been working prior to retirement and are exposed to macro-economic factors (i.e., employment rates, pension models, outsourcing, relocations, etc.) influencing their activities and available choices. Thus, those who have been disabled, homemakers, volunteers, or unpaid caretakers in the years prior to retirement would not experience retirement impacts related to LOS.

As predicted, the LOS measure was related only to employment, financial, and health variables in the HRS, demonstrating convergent and discriminant validity. Health and economic resources have been identified as critical elements in retirement timing and adjustment (Weir, 2017), so it was not surprising that these were also related to the construct of lost-work opportunity during retirement. Each of the job related factors showing a high degree of correlation with lost-work had relationships occurring in the expected direction. The number of hours worked was negatively correlated with lost-work indicators, and this relationship strengthened in each wave from 2004 ($r = -0.32$) to 2014 ($r = -0.52$). Expectations of working at later ages showed a negative correlation with LOS, suggesting that individuals with more lost-work opportunity indicators expressed less certainty that they would be working at later ages.

Most health variables had associations as expected, including self-reported mortality expectations. However, the relationship between LOS and health insurance premiums varied. The variability may be due to the different types of insurance (whole life, long-term, private, Medicare) and differing premiums (possibly implying difference in health or finances) prior to retirement. Days spent in nursing home were negatively associated with LOS, with more days (poorer health) unexpectedly relating to a lower LOS. Some financial variable relationships were as expected, with a lower wage related to higher LOS. A higher SSI or SSDI payment was associated with lower LOS, which can be influenced by prior income or age of retirement, both of which would be related to employment conditions pre-retirement. Pension contributions had both negative and positive correlations with LOS.

For the 59 variables with moderate to strong correlations, only one was greater than 0.70. Validity analysis factors 'relevance' into the variance equation, and thus correlations of 0.50 can be considered quite strong or useful, though these values might seem low from a reliability

perspective (Schmitt, 1996). Lower values are consistent with the abstract nature of evaluating complex constructs such as LOS, as abstract concepts can be difficult to measure (Swank & Mullen, 2017). In terms of discriminant validity, there were no correlations found between LOS and spurious, a-theoretical, or inconsistent constructs.

Limitations include the constraints public survey data, with mixed administration methods which resulted in missing data on relevant variables. The limitations in reporting forced retirement by leave-behind survey in addition to the qualitative data suggesting limitations in reporting forced retirement put significant constraints our ability to quantify lost-work opportunity. Earlier than planned retirement was used as an alternative measure of lost-work opportunity. This approach removed retrospective bias, but included risk of classifying LOS in individuals who experienced a positive reason to retire within the 2 year window. In qualitative follow-up to this study we plan to investigate the positive and negative aspects of short time-frame (less than 2 years) shifts in planned retirement age to better understand the limitations of earlier than planned retirement in conceptualizing LOS and to determine if better proxy variables can be identified. Before additional analysis is conducted to evaluate the predictive validity of LOS (in terms of health and wellness impacts), the LOS construct needs to be assessed for content and concurrent validity using mixed methods research which can verify whether the incorporated survey items have value in accurately identifying retirement timing factors.¹

¹ Next steps are currently underway conducting mixed methods research with recent retirees to assess content and concurrent validity of the LOS. The objective is to test the LOS construct to determine whether it can serve as an enhanced identifier of lost work opportunity. If it is determined that this construction of LOS has value in producing more precision regarding lost-work opportunity measurement, the research team will then proceed to assessing whether LOS has criterion validity.

Conclusion

The Cronbach alpha and Guttman split-half values over 0.70, mid-range correlations, and the component analysis suggest a cohesive relationship between the three LOS incorporated measures of lost-work opportunity. The chosen analytic method allowed a broad survey of all continuous variables from the 11,638 variables contained in the HRS which established convergent and discriminant validity for the LOS measure. The 3-variable LOS quantification can be similarly constructed from the Survey of Health, Ageing, and Retirement in Europe and Midlife in the United States surveys, but may not be relevant with other ageing surveys. While an efficient and pragmatic first step in analyzing unemployment as a more comprehensive construct at retirement, a mixed-methods follow-up study followed by additional psychometric validation is necessary before determining the utility of LOS.

References

- Behncke, S. (2012). Does retirement trigger ill health? *Health Economics*, 21(3), 282-300. doi:10.1002/hec.1712
- Browning, M., & Heinesen, E. (2012). Effect of job loss due to plant closure on mortality and hospitalization. *Journal of Health Economics*, 31(4), 599-616.
- Calvo, E., Sarkisian, N., & Tamborini, C. R. (2013). Causal effects of retirement timing on subjective physical and emotional health. *The Journals of Gerontology Series B: Psychological Sciences and Social Sciences*, 68(1), 73-84.
- Chan, S., & Stevens, A. H. (2004). How does job loss affect the timing of retirement? *Contributions in Economic Analysis & Policy*, 3(1).
- Chien, S., Campbell, N., Chan, C., Hayden, O., Hurd, M., Main, R., . . . Meijer, E. (2015). RAND HRS Data Documentation, Version O. *RAND Center for the Study of Aging: Santa Monica, CA, USA*.
- Cohen, J. (1992). A power primer. *Psychol Bull*, 112(1), 155-159.
- Coile, C. C., & Levine, P. B. (2011). The market crash and mass layoffs: How the current economic crisis may affect retirement. *The BE Journal of Economic Analysis & Policy*, 11(1). doi:doi.org/10.2202/1935-1682.2568
- Coile, C. C., Levine, P. B., & McKnight, R. (2014). Recessions, older workers, and longevity: How long are recessions good for your health? *American Economic Journal: Economic Policy*, 6(3), 92-119.
- Ekerdt, D. J., Bosse, R., & Moge, J. M. (1980). Concurrent change in planned and preferred age for retirement. *J Gerontol*, 35(2), 232-240.
- Granados, J. A. T., House, J. S., Ionides, E. L., Burgard, S., & Schoeni, R. S. (2014). Individual joblessness, contextual unemployment, and mortality risk. *American Journal of epidemiology*, 180(3), 280-287.
- Heller Sahlgren, G. (2013). Work Longer, Live Healthier: The Relationship Between Economic Activity, Health and Government Policy. *Live Healthier: The Relationship Between Economic Activity, Health and Government Policy (May 16, 2013)*.
- Hetschko, C., Knabe, A., & Schöb, R. (2014). Changing identity: Retiring from unemployment. *The Economic Journal*, 124(575), 149-166.
- Hirsch, B. T., Macpherson, D. A., & Hardy, M. A. (2000). Occupational age structure and access for older workers. *Industrial & Labor Relations Review*, 53(3), 401-418.
- Jokela, M., Ferrie, J. E., Gimeno, D., Chandola, T., Shipley, M. J., Head, J., . . . Kivimaki, M. (2010). From midlife to early old age: Health trajectories associated with retirement. *Epidemiology*, 21(3), 284-290. doi:10.1097/EDE.0b013e3181d61f53
- Mein, G., Martikainen, P., Hemingway, H., Stansfeld, S., & Marmot, M. (2003). Is retirement good or bad for mental and physical health functioning? Whitehall II longitudinal study of civil servants. *J Epidemiol Community Health*, 57(1), 46-49.
- Midanik, L. T., Soghikian, K., Ransom, L. J., & Polen, M. R. (1990). Health status, retirement plans, and retirement. The Kaiser Permanente retirement study. *J Aging Health*, 2(4), 462-474. doi:10.1177/089826439000200403
- Neuman, K. (2008). Quit your job and get healthier? The effect of retirement on health. *Journal of Labor Research*, 29(2), 177-201.

Rhee, M. K., Mor Barak, M. E., & Gallo, W. T. (2016). Mechanisms of the Effect of Involuntary Retirement on Older Adults' Self-Rated Health and Mental Health. *Journal of Gerontological Social Work, 59*(1), 35-55. doi:10.1080/01634372.2015.1128504

Schmitt, N. (1996). Uses and Abuses of Coefficient Alpha. *Psychological assessment, 8*(4), 350-353.

Sonnega, A., Faul, J. D., Ofstedal, M. B., Langa, K. M., Phillips, J. W. R., & Weir, D. R. (2014). Cohort Profile: the Health and Retirement Study (HRS). *International Journal of Epidemiology, 43*(2), 576-585. doi:10.1093/ije/dyu067

Swank, J. M., & Mullen, P. R. (2017). Evaluating evidence for conceptually related constructs using bivariate correlations. *Measurement and Evaluation in Counseling and Development, 50*(4), 270-274.

Van Solinge, H. (2007). Health change in retirement a longitudinal study among older workers in the Netherlands. *Research on Aging, 29*(3), 225-256.

Voss, M. W., Merryman, M. B., Crabtree, L., Subasic, K., Birmingham, W., Wadsworth, L., & Hung, M. (2019). Late-career unemployment has mixed effects in retirement. *Journal of Occupational Science, 26*(1), 29-39.

Weir, D. (2017). *Aging in the 21st Century: Challenges and Opportunities for Americans*. University of Michigan: Institute for Social Research.

Wu, C., Odden, M. C., Fisher, G. G., & Stawski, R. S. (2016). Association of retirement age with mortality: a population-based longitudinal study among older adults in the USA. *Journal of epidemiology and community health, 70*(9), 917-923.

Appendix A: Spearman Rho Correlations for All Variables ≥ 0.30

Variable Type	Variable Name	Year	Rho	Variable Description
Employment	R10WORK62	2010	-0.31	Expectation of Working at age 62
Employment	R12WORK65	2014	-0.51	Expectation of Working at age 65
Employment	R11WORK65	2012	-0.36	Expectation of Working at age 65
Employment	R7JHOURS	2004	-0.32	Hours Worked
Employment	R8JHOURS	2006	-0.36	Hours Worked
Employment	R9JHOURS	2008	-0.39	Hours Worked
Employment	R10JHOURS	2010	-0.47	Hours Worked
Employment	R11JHOURS	2012	-0.52	Hours Worked
Employment	R12JHOURS	2014	-0.52	Hours Worked

Financial	R2DCBAL3	1994	0.65	Balance of Pension
Financial	R7DCBAL4	2004	0.63	Balance of Pension
Financial	R10DCBAL3	2010	0.41	Balance of Pension
Financial	R11DCBAL3	2012	0.40	Balance of Pension
Financial	RADRECD3		-0.32	Date Received SSI/SSDI
Financial	R2DCCONT2	1994	0.56	Employee contribution to Pension
Financial	R6DCCONT4	2002	0.50	Employee contribution to Pension
Financial	R7DCCONT4	2004	0.43	Employee contribution to Pension
Financial	R8DCCONT3	2006	0.33	Employee contribution to Pension
Financial	R10DCCONT3	2010	0.63	Employee contribution to Pension
Financial	R11DCCONT3	2012	-0.30	Employee contribution to Pension
Financial	R12DCCONT3	2014	-0.60	Employee contribution to Pension
Financial	R1DCBENE3	1992	0.67	Employer contribution to Pension
Financial	R1DCPCT3	1992	0.43	Employer contribution to Pension
Financial	R2DCBENE2	1994	0.33	Employer contribution to Pension
Financial	R2DCPCT2	1994	-0.44	Employer contribution to Pension
Financial	R3DCBENE3	1996	-0.45	Employer contribution to Pension
Financial	R3DCPCT2	1996	0.41	Employer contribution to Pension
Financial	R7DCPCT4	2004	0.32	Employer contribution to Pension
Financial	R9DCBENE3	2008	0.32	Employer contribution to Pension
Financial	R10DCPCT3	2010	0.35	Employer contribution to Pension
Financial	R11DCPCT2	2012	-0.33	Employer contribution to Pension
Financial	R11DCPCT3	2012	-0.87	Employer contribution to Pension

Financial	R12DCBENE3	2014	-0.53	Employer contribution to Pension
Financial	R12DCPCT2	2014	-0.35	Employer contribution to Pension
Financial	R9WGIWK	2008	-0.33	Imputed Wage Rate
Financial	R10WGIWK	2010	-0.34	Imputed Wage Rate
Financial	R11WGIWK	2012	-0.40	Imputed Wage Rate
Financial	R12WGIWK	2014	-0.41	Imputed Wage Rate
Financial	R7DSSAMT	2004	-0.32	SSDI Amount Received
Financial	R8DSSAMT	2006	-0.36	SSDI Amount Received
Financial	R8DSIAMT	2006	-0.50	SSI Amount Received
Financial	R9DSIAMT	2008	-0.56	SSI Amount Received
Financial	R10DSIAMT	2010	-0.65	SSI Amount Received
Financial	R11DSIAMT	2012	-0.54	SSI Amount Received
Financial	RADRECY3		-0.50	Year Received SSI/SSDI
Health	R12NHMDAY	2014	-0.32	Days in Nursing Home
Health	R1LTCPRM	1992	0.37	Long Term Health Insurance Premium
Health	R3TLIPRM	1996	-0.40	Long Term Life Insurance Premium
Health	R3MRPREM	1996	0.38	Medicare/Medicaid HMO Monthly Premium
Health	R11MRPREM	2012	0.38	Medicare/Medicaid HMO Monthly Premium
Health	R9PRPRM3	2008	0.62	Private Insurance Plan Premium
Health	R11PRPRM3	2012	0.50	Private Insurance Plan Premium
Health	R12PRPRM3	2014	0.48	Private Insurance Plan Premium
Health	R2LIV8XC	1994	0.56	Self-reported Mortality Expectations
Health	R4LIV8XC	1998	0.32	Self-reported Mortality Expectations

Health	R2WLIPRM	1994	-0.38	Whole Life Insurance Premium
Health	R3WLIPRM	1996	-0.42	Whole Life Insurance Premium
Health	R8NHMMVY	2006	0.58	Year Moved to Nursing Home
Health	R12NHMMVY	2014	0.30	Year Moved to Nursing Home