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### **Predictors of Job Retention After Onset of Visual Impairment in Late Middle Age**

Jennifer L. Cmar, Ph.D., COMS<sup>a</sup>

Michele C. McDonnall, Ph.D., CRC<sup>a</sup>

G. Lynn Mitchell, MAS, FAAO<sup>b</sup>

<sup>a</sup>The National Research & Training Center on Blindness & Low Vision,  
Mississippi State University, P.O. Box 6189, Mississippi State, MS 39762, USA

<sup>b</sup>College of Optometry, The Ohio State University, 338 W. 10<sup>th</sup> Ave.,  
Columbus, OH 43210, USA

#### **Author Note**

Correspondence concerning this manuscript should be addressed to Jennifer L. Cmar, The National Research & Training Center on Blindness & Low Vision, P.O. Box 6189, Mississippi State, MS 39762, USA. Phone: 662-325-2001 Email: [jcmar@colled.msstate.edu](mailto:jcmar@colled.msstate.edu)

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**Predictors of Job Retention After Onset of Visual Impairment in Late Middle Age****Abstract**

**Objectives:** We investigated factors associated with job retention after developing a visual impairment in late middle adulthood.

**Methods:** Using longitudinal survey data from the Health and Retirement Study, we identified respondents who first reported poor eyesight or legal blindness at age 44–64 years in Waves 3–14 and who were employed in the previous wave. We conducted a multiple logistic regression analysis with job retention as the dependent variable and health and socioeconomic characteristics as independent variables.

**Results:** Women, people who were married or partnered, and people with fair or better self-reported health were more likely to retain employment after vision loss, whereas people with more chronic health conditions were less likely to retain employment.

**Discussion:** Poor health and chronic health conditions may prompt late middle-aged adults to leave the labor force after developing vision loss. Timely vocational rehabilitation services can help employed people with vision loss retain employment.

*Keywords:* visual impairment, blind, low vision, employment, job retention

### **Predictors of Job Retention After Onset of Visual Impairment in Late Middle Age**

Approximately 7.08 million people in the United States had a visual impairment (including low vision and blindness) in 2017, and about 77.1% were aged 40 years or older (Flaxman et al., 2021). Given that vision loss increases with age, and the U.S. population is aging, the prevalence of visual impairment is projected to increase substantially by 2050 (Varma et al., 2016). Relationships between visual impairment and adverse health outcomes in middle-aged and older adults have been documented in the literature. Visual impairment is associated with poor health (Crews et al., 2017; Crews & Campbell, 2004; Cumberland & Rahi, 2016), chronic health conditions (Crews et al., 2017; Crews & Campbell, 2004; Steinman, 2016), mental health conditions (Crews et al., 2017; Crews & Campbell, 2004; Cumberland & Rahi, 2016; Frank et al., 2019), cognitive decline (Nagarajan et al., 2022), activity limitations (Crews & Campbell, 2004; Steinman, 2016), and reduced social participation (Crews & Campbell, 2004). Many adults in the upper range of working age who acquire vision loss do so while employed, perhaps at the height of their careers, yet little research has focused on employment or job retention for late middle-aged adults with visual impairments.

Persistent employment disparities by visual impairment have been well-documented in the broader population of working-age adults. People with visual impairments have substantially lower employment rates and higher unemployment rates than the general U.S. population (McDonnall & Sui, 2019). In 2022, employment rates were 51.2% for working-age adults with visual impairments and 78.9% for adults without disabilities, whereas unemployment rates were 7.8% and 3.9% for adults with visual impairments and without disabilities, respectively (U.S. Census Bureau, 2023). People with visual impairments were more likely to not work at all across four consecutive years compared to a matched sample of people without visual impairments

(Authors, in press). Visual impairment is also associated with being out of the labor force (McDonnall & McKnight, 2021) and leaving the labor force early due to disability (Garcia Morales et al., 2023). People with visual impairments often encounter barriers (e.g., negative attitudes, transportation difficulties, and accessibility issues) that may contribute to these inequities in employment and labor force participation (Crudden & McBroom, 1999; Silverman et al., 2019).

Numerous studies have focused on factors associated with employment and labor force participation for people with visual impairments of various ages, but only two focused on late middle-aged or older adults (Cavanaugh & Rogers, 2002; Jeon et al., 2022). Findings from many of these studies have been synthesized through several systematic reviews (Daniëls et al., 2023; Goertz et al., 2010; Lund & Cmar, 2019a, 2019b, 2020), one of which included a meta-analysis (Daniëls et al., 2023). Predictors of employment identified in this body of literature include education (Daniëls et al., 2023; Goertz et al., 2010; Lund & Cmar, 2019b, 2019a, 2020); previous work experience, including work history and earnings (Lund & Cmar, 2019b, 2019a, 2020); male gender (Daniëls et al., 2023; Goertz et al., 2010; Lund & Cmar, 2019a, 2020); and being married or with a partner (Daniëls et al., 2023). Findings regarding age varied across studies (Daniëls et al., 2023; Goertz et al., 2010; Lund & Cmar, 2019b, 2019a), but younger age was associated with higher odds of employment in analyses of late middle-aged and older adults (Cavanaugh & Rogers, 2002; Jeon et al., 2022). White race had a positive association with employment in some studies, but other studies found no association between race and employment (Daniëls et al., 2023; Lund & Cmar, 2019b, 2019a). Several disability and health-related variables were negatively associated with employment, including more severe visual impairment (Daniëls et al., 2023; Goertz et al., 2010; Lund & Cmar, 2019b, 2020), additional

(non-visual) disabilities (Daniëls et al., 2023; Goertz et al., 2010; Lund & Cmar, 2019b, 2020), and poor health (Cimarolli & Wang, 2006; Jeon et al., 2022; Kirchner et al., 1999). Additional research indicates that health is a strong contributor to employment and labor force participation for people with visual impairments. One study documented the relationship between self-reported health and employment trajectories for people with visual impairments; consistent fair or poor health and declining health were associated with not working, whereas experiencing an improvement in health was associated with working (Authors, in press). Other studies suggest that poor health and chronic health conditions may explain why some people with visual impairments are out of the labor force (Crudden et al., 2023; Crudden & McKnight, 2022).

The Workforce Innovation and Opportunity Act (WIOA, 2014), the most recent reauthorization of the Rehabilitation Act, prioritizes job retention for people with disabilities. Given this emphasis, several recent studies have focused on job retention for people with visual impairments, although none focused specifically on late middle-aged or older adults. In one study, 66.3% of people who experienced vision loss while employed did not retain their job (Crudden & Steverson, 2021). Two studies investigated factors associated with job retention for vocational rehabilitation (VR) consumers or applicants with visual impairments (Crudden et al., 2018; McKnight et al., 2021). Risk factors for losing employment among VR consumers who were employed at application identified in the first study included female gender; presence of a secondary disability; low education level; fewer work hours; previous unsuccessful VR closure; and longer VR case length, particularly among older individuals (Crudden et al., 2018). Risk factors for not working identified in the second study included female gender, number of additional disabilities, and disability benefit receipt, whereas encouragement to work and older age at disability onset (4 or more years after onset) were associated with higher odds of working

(McKnight et al., 2021). Previous investigations of job retention did not differentiate between congenital and adventitious visual impairment or included participants who may have acquired vision loss in their teenage years; therefore, findings from these studies may not generalize to adults with adventitious visual impairment that occurred at a later stage in their careers.

Qualitative findings revealed multiple challenges regarding job retention in the broader population of people with visual impairments, such as assistive technology-related stress, financial concerns, issues with accommodations, discrimination, and concerns about efficiency and productivity (Crudden & Steverson, 2022). Considering the pervasiveness of age discrimination among older workers throughout the hiring process and in the workplace (Cebola et al., 2023), late middle-aged adults who develop vision loss while employed may experience additional barriers to job retention. For instance, the combination of age and disability discrimination may create a double jeopardy for late middle-aged and older adults with visual impairments who want to remain in the labor force. In fact, workplace discrimination complaints were more common among older versus younger people with visual impairments, and older people were more likely to report discrimination in areas related to job retention than younger people (Cichy et al., 2015).

Despite the adverse impact of visual impairment on job retention and the additional potential for discrimination associated with aging, late middle-aged adults with recent vision loss onset have been underrepresented in the job retention literature. The few studies of predictors of job retention after vision loss were limited to VR applicants or consumers who may be more connected to employment services than the broader U.S. population. Furthermore, none of those studies focused specifically on job retention for late middle-aged adults who were working when they experienced vision loss. To address this gap in the literature, we investigated factors

associated with retaining a job after onset of visual impairment in late middle adulthood. Identifying factors associated with job retention for late middle-aged adults with recent onset of visual impairment can provide insight into risk factors for poor outcomes and guide service provision for at-risk sub-groups. The following research question guided the study: What factors predict whether employed adults who develop visual impairment later in life retain employment?

## **Method**

### **Data Source**

Data from the Health and Retirement Study (HRS) were used to address our research question. Survey responses from Wave 2 (1994) through Wave 14 (2018) of the HRS related to vision were exploited to identify the study sample. The HRS is a longitudinal, population-based panel study of more than 43,000 individuals over the age of 50 years in more than 23,000 households in the United States. The complex sampling design oversamples minorities and includes responses from multiple members of a household. Themes explored in the bi-yearly surveys include health and wellness, work and retirement, social connections, and economic status (Sonnegg et al., 2014). The HRS is overseen by the Institute for Social Research at the University of Michigan and funded by the National Institute on Aging and the Social Security Administration.

### **Sample**

To reduce the potential for bias in selecting our analysis sample, we employed strict criteria for identifying people with visual impairments, including examining their self-reported vision across multiple waves. For this study, we defined visual impairment as self-reported poor eyesight or legal blindness based on responses to the question, “Is your eyesight excellent, very good, good, fair, or poor using glasses or corrective lenses as usual?” We restricted the sample to

HRS respondents from five cohorts (i.e., original HRS, War Babies, Early Baby Boomers, Mid Baby Boomers, and Late Baby Boomers) who met the following criteria: (a) reported visual impairment in at least one survey, (b) first reported visual impairment at or before age 64 years in Waves 3–14 (1996–2018), (c) reported visual impairment in all subsequent surveys, and (d) worked for pay in the wave directly before first reporting visual impairment (e.g., in Waves 2–13). We excluded respondents who had missing data for the vision or employment variables at the wave *before* their first report of visual impairment and respondents with missing data for the vision variable at any wave *after* their first report of visual impairment. Thus, the number of respondents who met the abovementioned criteria determined the final sample size ( $N = 248$ ).

### **Variables**

Independent variables (Table 1) were obtained from either the HRS survey files (University of Michigan, 2022) directly or from the RAND data files (RAND Center for the Study of Aging, 2022). The RAND Corporation datasets are a cleaned and easy-to-use compilation of HRS variables that have undergone rigorous review and include imputations for financial data (income, assets) and medical expenditures (Bugliari et al., 2022). Demographic independent variables included age at first report of visual impairment (centered), gender, race, marital status, and highest level of education (Table 1).

Three separate constructs of physical health were investigated for their relationship with the outcome measure. A self-report rating of health (from the HRS) was obtained using responses to the survey item “Would you say your health is...” The construct of health was also modeled using responses to “Aside from any hospital or nursing home stays, about how many days did you stay in bed more than half the day because of illness or injury during the last month?” From the RAND dataset, the number of conditions the respondent reported ever having was also used



as a measure of physical health. The eight conditions queried were high blood pressure or hypertension; diabetes or high blood sugar; cancer or malignant tumor of any kind except skin cancer; pulmonary disease except asthma; heart disease (heart attack, coronary heart disease, angina, congestive heart failure, or other heart problems); stroke or transient ischemic attack; emotional, nervous, or psychiatric problems; and arthritis (osteo or rheumatoid). Mental health was conceptualized using responses to the survey item “Have you ever had or has a doctor ever told you that you have any emotional, nervous, or psychiatric problems?”

Responses from the survey directly preceding the first report of visual impairment related to earnings and job tenure were obtained from the RAND dataset. Earnings include monies from the respondents’ wages/salary, bonuses/overtime, pay/commissions/tips, and trade income (Bugliari et al., 2022). The number of years worked was derived using all reported jobs (current, if applicable, and those reported in earlier surveys).

[Table 1 near here]

The outcome variable, job retention, came from the RAND dataset. This variable was based on responses to the survey item “Are you doing any work for pay at the present time?” RAND dichotomized participant responses to “working” and “not working.”

### **Data Analysis**

SAS version 9.4 was used for data analyses with the alpha (significance level) set at .05. We calculated descriptive statistics to examine frequencies and distributions of the independent variables for the full sample and by job retention after the onset of visual impairment. Inferential analyses to determine predictors of job retention after the onset of visual impairment were conducted using logistic regression. The primary outcome modeled was whether the respondent reported working for pay (i.e., job retention) in the wave in which visual impairment was first

reported. Because the outcome variable was unique to people who developed vision loss and occurred in various waves, it was necessary to subset the data and use unweighted data. In this case, applying weights would be impractical and result in incorrect variance estimates due to most strata having a single cluster. Additionally, missing weights for some sample members would further reduce the sample size. Although the HRS employs a complex sampling design, including oversampling of minorities, unweighted analyses provide unbiased and consistent estimates of effect in the logistic model (Winship & Radbill, 1994).

A series of univariable logistic regression analyses were conducted to examine the relationship between each independent variable (Table 1) and job retention. Then, we built a multiple logistic regression model utilizing backward elimination methodology to determine the set of independent variables significantly related to job retention. We fit a preliminary model that included all independent variables with a  $p$ -value below .25 in the univariable analyses (Hosmer et al., 2013). Next, we fit a reduced model by removing non-significant independent variables one at a time based on the  $p$ -value. The maximum number of variables to retain was determined using the 10 events per parameter rule-of-thumb (Peduzzi et al., 1996). Finally, each independent variable excluded from an earlier model was added back to the model (one at a time) to test for significance.

Two separate measures were used to assess the logistic model fit. The Hosmer-Lemeshow goodness of fit test was used to assess calibration, or the ability of the model to predict the probability of job retention. The ability of the logistic model to discriminate based on job retention was characterized using a Receiver-Operator Characteristic (ROC) curve. The resulting area under the curve is a measure of the probability that a randomly selected participant working for pay has a greater predicted probability as compared to a participant not working for pay.

## Results

Figure 1 shows the flow of participants through the sample selection process, including the number of participants excluded at each step and the reasons for exclusion. The analysis sample included 248 people, ages 44–64 years, who first reported visual impairment in 1996–2018 and worked for pay in the wave directly before their initial report of visual impairment.

[Figure 1 near here]

Demographic characteristics of the sample and descriptive statistics for the independent variables are presented in Table 2. Most participants were female (56.1%), White (56.9%), non-Hispanic (70.2%), and members of the Mid Baby Boomers or Late Baby Boomers cohorts (61.7%). Participants reported 0 to 7 chronic conditions, with high blood pressure, arthritis, and diabetes reported most frequently. In the wave in which participants first reported visual impairment, 68.1% ( $n = 169$ ) were working, whereas 31.9% ( $n = 79$ ) were not working. Of the 169 participants who were working, 81.1% ( $n = 137$ ) continued working for the same employer as the previous wave, 18.3% ( $n = 31$ ) worked for a different employer, and 0.6% ( $n = 1$ ) did not report this information.

[Table 2 near here]

As shown in Table 3, seven of the 11 independent variables were significantly associated with job retention after onset of visual impairment in the univariable logistic regression analyses. Being married or partnered (vs. separated, divorced, widowed, or never married), reporting fair or better self-reported health (vs. poor health), and having higher earnings before vision loss were associated with higher odds of job retention. Older age; more days spent in bed; number of chronic health conditions; and history of emotional, nervous, or psychiatric problems were associated with lower odds of job retention.

[Table 3 near here]

All 11 independent variables met the threshold ( $p < .25$ ) for inclusion in the preliminary multiple logistic regression model. The final, reduced model (Table 4) included five independent variables: age, gender, marital status, self-reported health, and number of chronic health conditions. The likelihood ratio test of the global null hypothesis was significant,  $\chi^2(7, N = 248) = 71.48, p < .001$ , Nagelkerke  $R^2 = .35$ . The Hosmer-Lemeshow goodness-of-fit test was not significant, indicating that the model fits the data well,  $\chi^2(8) = 2.76, p = .949$ . The area under the ROC curve was 0.81, 95% CI [0.75, 0.89], which indicates good discrimination for the model. When adjusting for the other independent variables in the model, gender, marital status, self-reported health, and number of chronic health conditions were significantly associated with job retention. Age was not significant in this model, but we retained it due to its presumed relevance based on previous research (Cavanaugh & Rogers, 2002; Jeon et al., 2022). Female gender (vs. male gender), being married or partnered, and fair or better self-reported health were associated with higher odds of job retention. Number of chronic health conditions was associated with lower odds of job retention.

[Table 4 near here]

### **Discussion**

In this study, we utilized a national sample to investigate factors associated with job retention for late middle-aged adults who recently experienced vision loss while working. This study is the first to evaluate factors that predict continued employment among people who were working when they developed vision loss. We investigated 11 factors thought to be potentially associated with job retention and identified four variables that were significantly associated with continuing to work after experiencing vision loss in a multiple logistic regression model.

Self-reported health had the strongest association with job retention among our predictor variables, with people reporting poor health significantly less likely to continue working than those reporting fair or better health. People in better health (i.e., Excellent/Very Good, Good, Fair) were approximately equally likely to continue working, with 70% or more of the people in each category working after vision loss compared to 35% of those in poor health. As the number of chronic conditions increased, the likelihood of continuing to work decreased, and this relationship was unique from the impact of self-reported health. Previous research, including several recent studies, documented the association between poor health, chronic health conditions, or both, and being out of the labor force for people with visual impairments (Crudden et al., 2023; Crudden & McKnight, 2022; Kirchner et al., 1999; McDonnall & McKnight, 2021). This study substantiates and extends that body of research by documenting that poor health and chronic health conditions are key factors associated with leaving the labor force for workers with newly acquired vision loss.

Our results also provide new insights into the relationship between marital status and job retention for people with visual impairments. We found that people who were married or living with a partner were more likely to continue working after experiencing vision loss than people who were separated, divorced, widowed, or never married. This finding supports previous studies that documented higher odds of employment among married/partnered people with visual impairments, with a small effect size (Daniëls et al., 2023). However, the moderate relationship between being married/partnered and job retention documented in our study is substantially larger than the relationship between employment and marital status found in previous studies (Daniëls et al., 2023). One might expect that married people could more readily stop working from a financial perspective, as they are generally much better off financially than people who

are not married (Hirschl et al., 2003; Wilmoth & Koso, 2002; Zagorsky, 2005). In this study, people who had higher earnings before experiencing vision loss were more likely to continue working after vision loss, although this variable was not significant in the multiple logistic regression model. People who earn more may have jobs that can more easily be accommodated, thus enabling them to continue working. Another potential reason for a relationship between being married and job retention is the support and encouragement that a spouse can provide for working. A previous study found that the more sources of support an individual had for working, the greater the odds of returning to work or continuing to work after vision loss (McKnight et al., 2021).

A finding unique to this study was that women were more likely to continue working after vision loss than men. This finding does not align with studies of employment patterns for older adults in the general population (McDonough et al., 2017; Worts et al., 2016) or studies of late middle-aged or older people with visual impairments, although those studies either did not consider age of onset (Cavanaugh & Rogers, 2002) or were conducted in a different country and thus different work culture (Jeon et al., 2022). Meta-analysis results of the relationship between gender and employment for people with visual impairments indicate that, from 2010 through 2022, male gender was associated with slightly higher odds of employment (very small effect), but results varied considerably across studies, suggesting that the effect of gender differs depending on the sample (Daniëls et al., 2023). Given that men are more likely to perform physically demanding jobs, a possible explanation of our finding is that the women in our study had less physical jobs than the men, and those jobs may more readily accommodate vision loss.

Age was included in our final model but was not a significant predictor of job retention when adjusting for other variables. This finding coincides with previous studies that found no

relationship between age and employment for people with visual impairments (Daniëls et al., 2023). However, for the late middle-aged adults in this study, it might be reasonable to hypothesize that younger age would be associated with an increased likelihood of continuing to work, as older people may be in a better position, financially and psychologically, to retire upon experiencing vision loss. Higher education level, the factor that has consistently had the strongest relationship with employment for people with visual impairments (Daniëls et al., 2023; Lund & Cmar, 2019b, 2019a), was not significantly associated with job retention in the univariable or multiple logistic regression analyses. These findings provide a more nuanced understanding of the relationship between education and employment for this population, suggesting that education level is less important for job retention among late middle-aged workers than for obtaining employment for people with visual impairments.

### **Limitations**

The limitations of this study should be mentioned and considered when interpreting its results. The HRS data rely on self-report, as most national surveys do, which presents the potential for inaccuracies or bias in the results. Responses are collected every 2 years, and we cannot determine when the vision loss occurred during that time span. Some respondents may have recently experienced vision loss, while others may have experienced it approximately 2 years prior. We were unable to include some variables of interest in our analyses due to a large amount of missing data (predominantly resulting from inconsistent survey questions across waves and the use of skip logic in the surveys) and our small sample size. Finally, our inability to conduct weighted analyses limits the generalizability of our findings, which are not representative of the U.S. population. Our results generalize only to this study's somewhat narrow sample of interest: late middle-aged adults from the United States with late-onset visual

impairment. Results may not generalize to other age groups, countries, or people with earlier onset of visual impairment.

### **Practical Implications**

Our findings suggest that men, single people, and people in poor health are less likely to continue working after developing vision loss in late middle age. While all people who experience vision loss in adulthood can likely benefit from rehabilitation services, people with those characteristics may be especially in need of these services. For instance, some men who stop working after experiencing vision loss may have had physically demanding jobs that are not easily accommodated for vision loss. In such cases, VR services may be particularly beneficial in helping those individuals remain in the labor force. These services provide opportunities to learn alternative non-visual techniques for accomplishing work tasks and develop new skills to qualify for other jobs. Similarly, for people in poor health, VR service providers can evaluate their skills and identify viable jobs that are suitable for their health conditions. VR service providers can also assist individuals with identifying appropriate job accommodations and work with employers to implement the accommodations. In addition to facilitating the acquisition of new skills and alternative techniques, rehabilitation services afford an opportunity for social support, and this support may be particularly important for single people. For individuals without a spouse or partner to provide encouragement for working, rehabilitation providers, including social workers and counselors, can play a critical role in providing this support and encouragement, which is positively associated with employment for people with vision loss (McKnight et al., 2021).

Unfortunately, despite the availability of free rehabilitation services in every state through the state-federal VR system, many, if not most, people who develop vision loss in



adulthood do not obtain these services. Healthcare providers who encounter people with vision loss (e.g., optometrists, ophthalmologists, family doctors, nurse practitioners) must be aware of the available rehabilitation services and refer people to them. Receiving timely VR services is vital for job retention (Crudden et al., 2020), and the healthcare providers serving people with vision loss are in an ideal position to provide referrals for such services.

### **Conclusion**

Given that the prevalence of visual impairment increases with age, particularly among people in their late 50s or older (Flaxman et al., 2021), many people will experience vision loss while working. Much research has investigated predictors of employment for people with visual impairments; however, very little research has focused on job retention among people who experience vision loss while working, and this is the first study to focus specifically on job retention for late middle-aged adults. We determined that self-perceived poor health was the strongest predictor of job retention after vision loss, and number of chronic conditions was also associated with job retention. Our findings provide additional evidence that health concerns, more than vision loss, may prompt people to leave the labor force (Crudden et al., 2023; Crudden & McKnight, 2022). Contrary to previous research, we found that women in our study were more likely to continue working than men. In accord with previous research, people who were married/partnered were more likely to retain jobs after vision loss, and the effect in this study was larger than in previous studies. Our findings support the importance of timely VR services to help people who experience vision loss retain their employment (Crudden et al., 2020), particularly those with risk factors identified in this study.

### **Declaration of Conflicting Interests**

The authors declare that there is no conflict of interest.

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**Table 1**

*Independent Variables Used in Statistical Analyses*

Construct	Independent variable	Scale	Response options/Range	Source
Demographics	Age (centered)	Continuous	44–64	RAND
	Gender	Dichotomous	Male Female	RAND
	Race	Categorical	White/Caucasian Black/African American Other	RAND
	Marital status	Categorical	Married/Partnered Separated/Divorced/ Widowed/Never Married	RAND
	Highest level of education	Dichotomous	College degree No college degree	RAND
	Self-reported health rating	Categorical	Excellent/Very good Good Fair Poor	HRS
	Number of days in bed	Continuous	0–31	RAND
Number of chronic health conditions	Continuous	0–7	RAND	

Mental health	Ever emotional, nervous, or psychiatric problems	Dichotomous	Yes No	HRS
Earnings <sup>†</sup>	Earnings (in thousands; centered)	Continuous	0–160	RAND
Job tenure <sup>†</sup>	Number of years worked (centered)	Continuous	1–48	RAND

*Note.* HRS = Health and Retirement Study.

<sup>†</sup> In wave directly preceding first report of visual impairment.

**Table 2***Descriptive Statistics for the Full Sample and by Job Retention After Onset of Visual Impairment*

Variable	Full sample ( <i>N</i> = 248)	Working ( <i>n</i> = 169)	Not working ( <i>n</i> = 79)
<i>Cohort, n (%)</i>			
Original HRS	45 (18.2%)	15 (8.9%)	30 (38.0%)
War Babies	11 (4.4%)	6 (3.6%)	5 (6.3%)
Early Baby Boomers	39 (15.7%)	23 (13.6%)	16 (20.3%)
Mid Baby Boomers	88 (35.5%)	69 (40.8%)	19 (24.1%)
Late Baby Boomers	65 (26.2%)	56 (33.1%)	9 (11.4%)
Age, <i>M (SD)</i>	57.40 (4.17)	56.91 (4.28)	58.46 (3.75)
<i>Gender, n (%)</i>			
Male	109 (44.0%)	68 (40.2%)	41 (51.9%)
Female	139 (56.1%)	101 (59.8%)	38 (48.1%)
<i>Race, n (%)</i>			
White/Caucasian	141 (56.9%)	94 (55.6%)	47 (59.5%)
Black/African American	54 (21.8%)	35 (20.7%)	19 (24.1%)
Other	51 (20.6%)	40 (23.7%)	11 (13.9%)
Not reported	2 (0.8%)	0 (0.0%)	2 (2.5%)
<i>Ethnicity, n (%)</i>			
Not Hispanic	174 (70.2%)	121 (71.6%)	53 (67.1%)
Hispanic	74 (29.8%)	48 (28.4%)	26 (32.9%)
<i>Marital status, n (%)</i>			

Married/Partnered	161 (64.9%)	119 (70.4%)	42 (53.2%)
Separated/Divorced/Widowed	70 (28.2%)	42 (24.9%)	28 (35.4%)
Never married	17 (6.9%)	8 (4.7%)	9 (11.4%)
Education, <i>n</i> (%)			
Less than high school	61 (24.6%)	37 (21.9%)	24 (30.4%)
High school graduate or GED	91 (36.7%)	59 (34.9%)	32 (40.5%)
Some college	62 (25.0%)	46 (27.2%)	16 (20.3%)
College and above	34 (13.7%)	27 (16.0%)	7 (8.9%)
Number of days in bed <sup>a</sup> , <i>M</i> ( <i>SD</i> )	1.68 (4.95)	0.80 (3.21)	3.59 (7.11)
Self-reported health, <i>n</i> (%)			
Excellent/Very good	45 (18.2%)	40 (23.7%)	5 (6.3%)
Good	63 (25.4%)	53 (31.4%)	10 (12.7%)
Fair	77 (31.1%)	54 (32.0%)	23 (29.1%)
Poor	63 (25.4%)	22 (13.0%)	41 (51.9%)
Chronic health conditions, <i>n</i> (%)			
High blood pressure	151 (60.9%)	91 (53.9%)	60 (76.0%)
Diabetes	82 (33.1%)	42 (24.9%)	40 (50.6%)
Cancer	21 (8.5%)	12 (7.1%)	9 (11.4%)
Pulmonary disease	26 (10.5%)	16 (9.5%)	10 (12.7%)
Heart disease	43 (17.3%)	19 (11.2%)	24 (30.4%)
Stroke	22 (8.9%)	11 (6.5%)	11 (13.9%)
Emotional, nervous, or psychiatric problems	58 (23.4%)	27 (16.0%)	31 (39.2%)

Arthritis	110 (44.4%)	65 (38.5%)	45 (57.0%)
Number of chronic health conditions, <i>M (SD)</i>	2.04 (1.56)	1.67 (1.43)	2.84 (1.52)
Earnings (in U.S. dollars), <i>M (SD)</i>	26,450 (26,613)	29,125 (27,473)	20,729 (23,845)
Number of years worked, <i>M (SD)</i>	22.43 (12.88)	21.38 (12.17)	24.68 (14.11)

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*Note.* HRS = Health and Retirement Study.

<sup>a</sup> One missing value.

**Table 3***Univariable Logistic Regressions Predicting Job Retention After Onset of Visual Impairment*

Variable	Wald $\chi^2$	<i>p</i>	Unadjusted OR [95% CI]
Age	7.20	.007	0.91 [0.85, 0.97]
Female gender	2.95	.086	1.60 [0.94, 2.74]
Race <sup>a</sup> (ref. = Other)			
White/Caucasian	2.42	.120	0.55 [0.26, 1.17]
Black/African American	2.35	.126	0.51 [0.21, 1.21]
Married/Partnered	6.92	.009	2.10 [1.21, 3.64]
Highest level of education (College degree)	2.24	.134	1.96 [0.81, 4.71]
Number of days in bed <sup>b</sup>	10.44	.001	0.88 [0.82, 0.95]
Self-reported health (ref. = Poor)			
Excellent/Very good	24.76	<.001	14.91 [5.14, 43.22]
Good	27.79	<.001	9.88 [4.22, 23.14]
Fair	16.52	<.001	4.38 [2.15, 8.92]
Number of chronic health conditions	26.86	<.001	0.60 [0.50, 0.73]
Emotional, nervous, or psychiatric problems	15.39	<.001	0.29 [0.16, 0.54]
Earnings (in thousands of U.S. dollars)	5.21	.022	1.01 [1.00, 1.03]
Number of years worked	3.52	.061	0.98 [0.96, 1.00]

*Note.* *N* = 248. OR = odds ratio. CI = confidence interval.

<sup>a</sup> Two missing values. <sup>b</sup> One missing value.

**Table 4***Multiple Logistic Regression Predicting Job Retention After Onset of Visual Impairment*

Variable	<i>B</i>	<i>SE</i>	Wald $\chi^2$	<i>p</i>	Adjusted <i>OR</i> [95% CI] <sup>a</sup>
Intercept	-1.05	0.59	3.19	.074	
Age	-0.06	0.04	2.06	.151	0.94 [0.87, 1.02]
Female gender	0.99	0.36	7.48	.006	2.70 [1.33, 5.51]
Married/Partnered	1.09	0.36	8.88	.003	2.96 [1.45, 6.04]
Self-reported health					
Excellent/Very good vs. Poor	2.16	0.62	12.27	.001	8.68 [2.59, 29.08]
Good vs. Poor	2.03	0.48	17.51	<.001	7.58 [2.94, 19.58]
Fair vs. Poor	1.42	0.41	12.26	.001	4.13 [1.87, 9.14]
Excellent/Very good vs. Fair	0.74	0.58	1.63	.202	2.10 [0.67, 6.57]
Good vs. Fair	0.61	0.45	1.78	.182	1.84 [0.75, 4.48]
Number of chronic health conditions	-0.26	0.12	4.76	.029	0.77 [0.61, 0.97]

*Note.* *N* = 248. OR = odds ratio. CI = confidence interval.

<sup>a</sup> Adjusted for all other variables in this table.

**Figure 1**

*Flow Diagram of Participants*





