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Differential Impact of Involuntary Job Loss on Physical Disability Among Older Workers Does Predisposition Matter?

William T. Gallo
Yale University School of Medicine

Jennie E. Brand
University of California, Los Angeles

Hsun-Mei Teng and **Linda Leo-Summers**
Yale University School of Medicine

Amy L. Byers
Weill Cornell Medical College

Abstract

Older workers' share of involuntary job losses in the United States has grown fairly consistently in recent decades, prompting greater interest in the health consequences of involuntary unemployment among individuals nearing retirement. In this study, the authors applied the multifactorial model of geriatric health to investigate whether late-career involuntary job loss was associated with subsequent physical disability and whether the effect of involuntary job loss on physical disability varied by predisposition. Using data from the first four waves (1992 to 1998) of the Health and Retirement Survey, the authors measured predisposition with individual risk factors for functional disability and indices of aggregate risk. The results of gender-specific models fit with generalized estimating equations revealed that unmarried women and those with low predisplacement incomes had heightened risk for subsequent functional disability. No differential effects of job loss were found for men.

Keywords

job loss; *older workers*; *disability*; *Health and Retirement Survey*

William T. Gallo is a research scientist in the Department of Epidemiology and Public Health at the Yale University School of Medicine and a faculty affiliate at the Yale Program on Aging. An economist who was also trained in both social gerontology and epidemiology, his primary research interest is the health effects of involuntary job loss among U.S. workers nearing retirement. He has published widely in this area, with more recent publications in the *Journal of Gerontology: Social Sciences* and *Occupational and Environmental Medicine*.

Jennie E. Brand is an assistant professor of sociology at the University of California, Los Angeles, and a faculty affiliate at the California Center for Population Research. Her research focuses on the effects of social background, educational attainment, and labor market process and job conditions on socioeconomic attainment and well-being over the life course. She also studies the application and innovation of quantitative methods for analysis of panel data. Current research projects include evaluation of heterogeneity in the effects of early schooling, programs to assist disadvantaged students, and college completion on socioeconomic outcomes and the effects of employment insecurity, job loss, and job conditions on health and well-being.

Hsun-Mei Teng was a programmer/analyst in the Department of Epidemiology and Public Health at the Yale University School of Medicine at the time of this study.

Linda Leo-Summers is a senior programmer in the Program on Aging at Yale University School of Medicine.

Amy L. Byers is an instructor of epidemiology in the Department of Psychiatry at Weill Cornell Medical College and a faculty affiliate at the Weill Cornell Institute of Geriatric Psychiatry. She is an epidemiologist whose research focuses on methodological and biostatistical issues addressing complex clinical questions relevant to aging and mental health research. In 2007, she was awarded a Mentored Research Scientist Career Development Grant titled “The Complexity of Late Life Depression: Bridging Methods and Clinical Substance.”

In recent decades, economic downturns have prompted empirical interest in the relationship between involuntary unemployment and health, with the balance of research suggesting that the loss of employment is a major life event accompanied by sufficient emotional stress to provoke adverse changes in a range of health domains (McKee-Ryan et al. 2005). Job loss entails numerous potential consequences to threaten individuals' physical well-being, including loss of earnings (Fallick 1996; Jacobson, LaLonde, and Sullivan 1993) and job quality (Brand 2006), forfeiture of health and pension benefits (Beckett 1988), reduced social involvement (Brand and Burgard forthcoming), harmful health behaviors (Falba et al. 2005; Matoba, Ishitake, and Noguchi 2003), and increased anxiety and negative changes in mental health (Breslin and Mustard 2003; Broman et al. 1995; Burgard, Brand, and House 2007; Theodossiou 1997; Warr, Jackson, and Banks 1988).

Fairly recent evidence reveals that U.S. workers over age 50 have suffered a disproportionate share of involuntary job losses, with commensurate earnings effects (Couch 1998). Against a backdrop of escalating risk for chronic disease, such individuals face limited reemployment likelihood (Chan and Huff Stevens 2001; Hipple 1999), the severance of long-standing employment-based relationships, and the disruption of essential asset accumulation (Bernheim et al. 2000; Bernheim 1997), leaving them distinctly vulnerable to adverse health and chronic disease outcomes (Gallo, Bradley, Dubin, et al. 2006; Gallo et al. 2000; Gallo, Teng, et al. 2006).

In this study, we evaluated the effect of involuntary job loss on physical disability from the perspective of the multifactorial model of geriatric health (Gill, Williams, and Tinetti 1999; Inouye and Charpentier 1996; Inouye et al. 2007; Tinetti, Doucette, and Claus 1995; Tinetti, Inouye, et al. 1995). This model views job loss as a potentially negative influence that arises distinct from other risk factors but whose effect may be aggravated by such factors. Using data combined from the first four waves of the Health and Retirement Survey (HRS), we assessed the impact of job loss up to two years after separation in the presence of established health and medical predisposing risk factors (Stuck et al. 1999), as well as social stratification variables. We then investigated whether such predisposing factors modify the relationship between job loss and disability. Determining the relevance of modifying factors is important for targeting interventions to those who are at greatest risk for functional losses after involuntary job loss, because functional decline has been linked to a range of negative outcomes[1] among community-dwelling older individuals (Fried and Guralnick 1997; Lum and Lightfoot 2005; Manton 1988; Schnittker 2005).

Conceptual Model and Study Hypotheses

The multifactorial model of geriatric health posits that among older individuals, changes in health result from a process owing to both predisposition and precipitating events. That is, although health declines are fundamentally determined by numerous factors that characteristically underlie risk for such changes (i.e., predisposition), additional decrements may result from situational (or precipitating) events, such as job loss. The impact of a precipitating event was hypothesized to be more pronounced among individuals with greater predisposition to the outcome prior to the occurrence of the precipitating event.

Figure 1 illustrates a modified form of the multifactorial model in the context of involuntary job loss. The principal determination of physical disability is depicted by line a, in which the causal process of disablement is a function of recognized risk factors. Involuntary job loss may influence functional disability directly (line b) and/or through its interaction with predisposition (line c), in which case the effect of job separation on physical disability will vary according to

[1]These include inactivity, cognitive deterioration, affective health problems, physical morbidity, and mortality.

the type and/or level of predisposition. The dotted line between predisposition and involuntary job loss (line d) is a modification to the multifactorial model. Because we could not reasonably assume that job loss is entirely independent of baseline risk factors, line d symbolizes the potential endogeneity of the precipitating event.

In our application of the model, predisposition was measured both by individual and by conceptually linked combinations of risk factors. The analysis of separate risk factors permitted the identification of specific groups for which the effect of job loss might be especially detrimental, whereas the analysis of combined factors made possible the determination of whether the situational challenge of job loss worsens as risk accumulates. Our statistical profiles were evaluated separately for men and women. Numerous theoretical motivations underlie gender stratification, including sex differences in overall morbidity, labor force attachment and status, workplace exposure to health risks, and economic hardship (Bird and Rieker 1999; Leana and Feldman 1991).

Among individual risk factors, we anticipated that the effect of job loss on physical disability would be greater for individuals with higher predisplacement physical disability and among participants whose sociodemographic attributes are most likely to place them at risk for financial strain[2] following separation. We viewed factors affecting deprivation as those that could plausibly modify the stress response to job loss and alter potential physical changes in health. For combined risk factors, we expected a graded effect in each of the multifactor domains considered (i.e., behavioral, physical, and medical), so that a higher number of predisposing factors would be associated with more severe effects of job loss on physical disability.

Methods

Data

We used longitudinal data from the first four waves (1992 to 1998) of the HRS, a national biennial survey that was designed to investigate the health and economic experiences of late-career workers as they enter retirement. Its sample, drawn using a multistage stratified cluster design, comprises 12,652 individuals from 7,702 households; it includes a target cohort of individuals born between 1931 and 1941 and their spouses, regardless of age. The HRS is elsewhere described in greater detail (Juster and Suzman 1995).

The sample analyzed in this study (n = 6,496 observations) comprised individuals who were over 50 years of age but had not yet reached age eligibility for early retirement with federal Social Security benefits. Such individuals were thus assumed to have strong attachments to the labor force and to therefore be at risk for somatic health declines following job loss. The study sample consisted of HRS participants who experienced involuntary job loss (n = 403 observations [6.2%])[3] and a comparison group of participants who remained continuously employed (n = 6,093 [93.8%]) during a relevant 2-year follow-up period. It was selected from a working sample (n = 6,809 observations) that was created by repeated selection of the exposed and comparison groups (n = 3,245 in 1992 to 1994, n = 2,090 in 1994 to 1996, and n = 1,474 in 1996 to 1998) from eligible participants, with the goal of maximizing statistical power.[4]

[2]Financial strain may operate through any of the demographic variables, all of which were tested. For example, age may signify outdated human capital or increased likelihood of job discrimination, each of which could lengthen unemployment and accelerate financial difficulties. Higher predisplacement income or liquid wealth could delay the onset of economic strain. Quality marriages provide access to vital financial assets, in addition to emotional support. Educational attainment, which has been linked to reduced anxiety via more positive appraisal of the job loss experience, also has numerous patent economic and social benefits. Minority race could proxy employment discrimination, skill, or local-area economic conditions.

[3]Between 1992 and 1994, 205 sample members experienced involuntary job losses; 124 and 74 lost jobs from 1994 to 1996 and from 1996 to 1998, respectively.

Three hundred thirteen observations (4.6%) with missing data were excluded from the working sample.[5]

Measures

Outcome—The outcome was a summary measure of physical disability based on responses to 14 tasks constituting basic activities of daily living, strength, and mobility tasks.[6] Response choices for the disability items varied from the baseline survey (4-point response) to later waves (2-point response) and were thus dichotomized to identify respondents who reported any difficulties performing particular activities. In general, individuals who reported no difficulty with a given task were assigned a value of 0; those who either reported difficulty or an inability ("can't do") were assigned a value of 1. Dichotomized values were summed to arrive at a single physical functioning score,[7] ranging from 0 to 14, with higher values indicating greater physical disability.[8]

Predisposition—Predisposing factors for physical disability were considered from five domains: (1) demographic and socioeconomic (age, race, marital status, educational attainment, annualized earned income before job loss, and nonhousing net worth), (2) health behaviors (smoking, problem alcohol use, and physical activity), (3) mental health (depressive symptoms), (4) physical and medical (difficulty with vision or hearing, pain, and self-reported medical conditions), and (5) functional (baseline physical disability). The Appendix provides greater detail. Risk factors were selected for analysis on the basis of existing evidence that such factors influence physical disability (Stuck et al. 1999).

Predisposition was represented both by individual risk factors and indices that combine theoretically congruent variables from the two multifactor health-related domains (health behaviors, physical and medical). Variables in the demographic and socioeconomic domain were not combined into indices, because doing so requires the arbitrary categorization of continuous variables, which results in considerable information loss. The two indices represented domain-level aggregate risk for functional decline and were measured by the number of risk factors per domain. They were constructed by summing dichotomized risk factors within these two domains. A higher number of factors implies greater predisposition.

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[4]Eligible individuals (n = 4,175 in 1992, n = 3,023 in 1994, and n = 1,960 in 1996) consisted of respondents from the HRS birth cohort (aged 51 to 61 years) who were not self-employed, and reported 2 or more years of continuous employment. The job-tenure requirement was applied to eliminate seasonal workers and those with unstable work histories.

[5]Missing data resulted from the 14-item physical disability outcome measure (n = 158), the lagged physical disability measure (n = 129), race (n = 8), occupation code (n = 7), and person-level analysis weight (n = 23). Participants excluded because of missing data were older ($p < .001$) and less educated ($p < .001$) than members of the sample; they were more likely to be non-White ($p < .05$), hold blue-collar occupations ($p < .05$), and have diabetes ($p < .05$).

[6]Activities used to construct the physical disability measure included walking several blocks; walking one block; climbing several flights of stairs; climbing one flight of stairs; getting up from a chair; lifting or carrying weight over 10 pounds; stooping, kneeling, or crouching; pulling or pushing large objects; extending the arms above the shoulders; walking across a room; getting in and out of bed; bathing; dressing; and eating.

[7]The internal consistency of the 14-item disability measure was reasonable (α = .75). The factor structure of the physical disability revealed limited evidence of three underlying components (basic activities of daily living, strength, and mobility). However, a low prevalence of difficulty for many of the individual items, particularly the activities of daily living, precluded our investigating the effect of job loss on separate functional domains.

[8]For participants who reported that they did not perform a task ("don't do") after baseline assessment, we imputed responses (n = 326) on the basis of the previous wave's response to minimize the extent of missing data. If the prior response was "can't do," we assigned a value of 1 to indicate the discontinuation of a previously problematic task. Similarly, if the previous assessment reflected "no difficulty," we assigned a value of 1, assuming that the termination of a task implies incident difficulty. For all other prior-wave responses, we assigned a missing value. The proportions of imputed values in the job loss group (5.2%) and comparison group (5.0%) were comparable. Sensitivity analyses were run to assess the potential effect of imputing outcome values. Estimated coefficients were stable across samples, and standard errors generally increased in relation to the reduction in sample associated with the omission of the observations with imputations (5%). One important difference from the reported results, however, is the statistical significance of the interaction between involuntary job loss and nonmarried civil status in the sample of women. This effect, which was found to be significant in the tabled results, is only suggestive ($p < .10$) in the sample that does not include the imputed outcome values.

Precipitating event: involuntary job loss—Participants who reported that they were laid off or lost their jobs in business or plant closings were defined as involuntary job losers. The variable representing involuntary job loss was a dichotomous variable, where 1 = job loss and 0 = continuous employment.

Statistical Analysis

We described the study sample using means and standard deviations (Table 1). Generalized estimating equations (Ware 1985;Wolfinger and O'Connell 1993;Zeger and Liang 1986) was used to assess differential changes in disability, up to two years after job loss, between participants who experienced involuntary job loss and those who remained continuously employed. This technique both accounts for within-subject correlation, due to repeated measurements of the same individuals, and accommodates negative binomial-distributed data (Byers et al. 2003), which was indicated by residual analysis. The xtgee routine in Stata 9.0 was used to estimate the models.

Our inferential statistical approach was guided by the multifactorial model. Thus, for the gender-specific samples, we first estimated the effect of involuntary job loss on disability in the presence of all predisposing factors: individual risk factors from the demographic and socioeconomic and single-variable domains, and indices of behavioral and physical and medical risk. Next, we tested for effect modification, by adding multiplicative interaction terms of job loss with individual predisposing factors and the two domain-level indices of predisposition. At this stage, the gender-specific models were sequentially pruned to eliminate nonsignificant ($p > .10$) interactions. For this reason, the final models did not include the same variables for men and women. Time was included in all specifications, and age, education, income, and net worth were centered at their means.

Results

Table 1 presents descriptive statistics by gender. Information on individual predisposing factors and the indices is given. Table 2 contains the gender-stratified results of the generalized estimating equations analyses. Three models are presented for men and women. Models 1 and 4, which evaluated the effect of involuntary job loss as a precipitating event, indicate that both women and men who experienced involuntary job loss had, on average, higher subsequent physical disability at two-year follow-up than those who remained continuously employed. The result was statistically significant ($p < .05$) for women (model 1) and marginally statistically significant ($p = .057$) for men (model 4). Models 2 and 5, which evaluated the full set of interactions, suggest a limited modifying impact of predisposing risk on the effect of job loss. Among women (model 2), the effect of involuntary job loss on physical disability was weaker for those with higher predisplacement earnings than those with lower earnings. After iterative pruning of nonsignificant ($p > .10$) interaction terms, the results further suggested a less potent effect for those who were married than those who were not married (model 3). No differential effects, at $p < .05$, were observed for men (models 5 and 6).

Discussion

In this study, we applied the multifactorial model of geriatric health to the problem of late-career involuntary job loss. Using multiple person-spells on a gender-stratified sample, we first investigated whether involuntary job loss was associated with physical disability, after a wide array of established risk factors for disability were controlled. We then considered whether specific factors, including predisplacement functional status and attributes that proxy low social support or financial resources, placed displaced workers at higher risk for functional decline and whether individuals who had higher combined risk for functional decline suffered more pronounced health consequences after experiencing involuntary job loss than workers

with lower combined risk. The results suggest that involuntary job loss has an appreciable effect on physical disability for both women and men, although the effect for men is only suggestive. Our results also reveal evidence, albeit limited, that individual predisposing risk factors modify the relationship between job loss and disability for women but not for men.

Among women, we found that marriage has a protective effect against functional health changes resulting from job loss. This result could suggest that critical social and financial support provided by a marital partner reduces psychological stress and changes in affective health during unemployment, obstructing the theorized causal pathway between employment changes and functional health (Price, Choi, and Vinokur 2002). Marriage may also encourage health-promoting behaviors, such as physical activity, while discouraging stress-related negative behaviors, including excessive alcohol use and smoking. The results also suggest that for women, prior earnings may act as a buffer against health declines after job loss. Although higher earnings can be an obstacle to reemployment, which could aggravate the effect of job loss, we found that women with higher incomes before job loss are protected against health declines following job loss. This may be due to income's purchasing power. Income is not only vital to sustaining a household's basic requirements during unemployment but also critical to purchasing necessary health services. Higher incomes before job loss may also signify workers' ability to succeed in the labor market.

On the other hand, no significant ($p < .05$) differential effects of job loss were observed among men. Although it is uncertain why this is so, several hypotheses could be put forward. One idea is that loss of role is the dominant first-order mediating influence for men, whereas for women, it is economic deprivation. If this is the case, it could reasonably be argued that for late-career workers, the severance of workplace identity is stable across sociodemographic categories, in which case effect modification would not be observed for men. Nevertheless, even under the assumption that financial distress prevails among the possible mediators, there remain other reasons for the gender differences. For example, there is evidence for a gendered response to stress (Bird and Rieker 1999; Kessler and McLeod 1984) in general and economic distress in particular, perhaps because of women's burden of unpaid homemaking and familial obligations, including caretaking of dependent children or elderly relatives (Bird and Rieker 1999). One dyadic study of spouses with financial distress found that women were more likely than men to report somatic complaints (Conger et al. 1993). Men also have more economic resources (Doyal 1995; Shaw 1988) and thus may place less financial reliance on their spouses' incomes after job loss, which could help explain why we did not find a modifying effect of marriage.

There are notable advantages to this research. The major strength is the identification of social variables that affect the relationship between an economic exposure, such as job loss, and a functional outcome linked to considerable morbidity and mortality. Previous studies have given scant attention to the effect of social variables on functional decline, much less the modifying effect of such variables. Our findings suggest that both marital status and income may alter the somatic impact of job loss for women. These factors may thus be used to direct intervention resources after late-career job loss. In addition, our sample was nationally representative of workers nearing retirement, which permits more extensive geographical and occupational application of our findings to older workers. Finally, in this study, we adopted a rigorous approach to the statistical estimation of the hypothesized relationships, adjusting for both repeated sampling and highly skewed outcome data. Failure to make either correction would result in erroneous inferences, which, as we know from sensitivity analysis, would suggest a wider set of modifying risk factors than those reported in our tables.

There are also two limitations of our study to discuss. The first is the potential endogeneity of job loss. Whereas other applications of the multi-factorial model may more realistically assume that predisposing risk factors are noncausally related to precipitating events, our study cannot

confidently support this notion. Several of the risk factors for physical disability, notably baseline disability status, may in some measure determine job loss status. By this we mean that employers could consider such factors, which may lessen productivity, in sorting individuals for layoff.

A second limitation relates to the use of repeated-measures data collected over six years. Although such an approach generates enough person-spells to investigate effect modification by gender, it also obscures time-related variance in the effect of job loss (Brand and Xie 2007). We thus present an average effect of job loss, which does not account for conditions and events that may alter the salience of an involuntary work departure. An ever more prominent culture of layoff, strong job creation, advancing age proximity to employer- and government-sponsored retirement benefits, and enhanced resilience from previous job losses (Gallo, Bradley, Teng, et al. 2006) are some examples of unmeasured factors that could diminish the impact of job loss over the observation period.

Older workers are vulnerable to an array of adverse health and behavioral outcomes following job loss. Health maintenance programs for such workers must therefore be multifaceted, addressing the various burdens of joblessness and the protections achieved by returning such workers to the labor force. Our results suggest that interventions promoting functional health after job loss should be directed to unmarried women and those with low earnings, groups that appear to experience a differentially negative effect of separation. Health care providers should also be conscious of the potential capacity of sociodemographic factors to exacerbate the functional impact of late-career unemployment.

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Appendix Variable Details for Selected Predisposing Factors

Variable Name/Original HRS Survey Question	Coding Algorithm
Nonhousing net worth: Sum of the following household nonhousing asset amounts reported by respondents at the 1992 survey: values of checking and savings accounts; certificates of deposit, bonds, and Treasury bills; individual retirement accounts; stock and mutual funds; vehicles; business equity; equity in real estate other than respondents' primary assets; and other reported nonhousing assets. It was divided by 100,000 for scalar consistency with the outcome.	Continuous variable
No vigorous physical activity: "How often do you participate in vigorous physical exercise or sports—such as aerobics, running, swimming, or bicycling? (Would you say 3 or more times a week, 1 or 2 times a week, 1 to 3 times a month, less than once a month, or never?)"	1 = physical activity < 3 times/ week, 0 = physical activity ≥3 times/week
Problem alcohol use (CAGE): "Have you ever felt you should cut down on your drinking? Have people ever annoyed you by criticizing your drinking? Have you ever felt bad or guilty about drinking? Have you ever taken a drink first thing in the morning to steady your nerves or get rid of a hangover?" The CAGE score is the sum of positive responses.	1 = CAGE score > 2, 0 = CAGE score < 2
CES-D-8 score: Short form of Center for Epidemiologic Studies Depression Scale battery. Statements indicated whether respondent felt depressed; felt everything he or she did was an effort; experienced restless sleep; "could not get going"; felt lonely; felt sad; enjoyed life; and was happy. Score ranges from 0 to 8; Cronbach's $\alpha = .83$.	Sum of eight items (final two items of battery reverse coded)
Vision impaired: "(With your eyeglasses) is your eyesight excellent, very good, good, fair, or poor?"	1 = rates vision fair or poor, 0 = rates vision excellent, very good, or good
Hearing impaired: "(Using your hearing aid) is your hearing excellent, very good, good, fair, or poor?"	1 = rates hearing fair or poor, 0 = rates hearing excellent, very good, or good
Pain: Are you often troubled with pain?	1 = often has pain, 0 = otherwise.
Medical conditions (hypertension, diabetes, arthritis or rheumatism, stroke): "Has a doctor ever told you that you have [common medical condition]?"	1 = reports condition indicated by doctor, 0 = otherwise.

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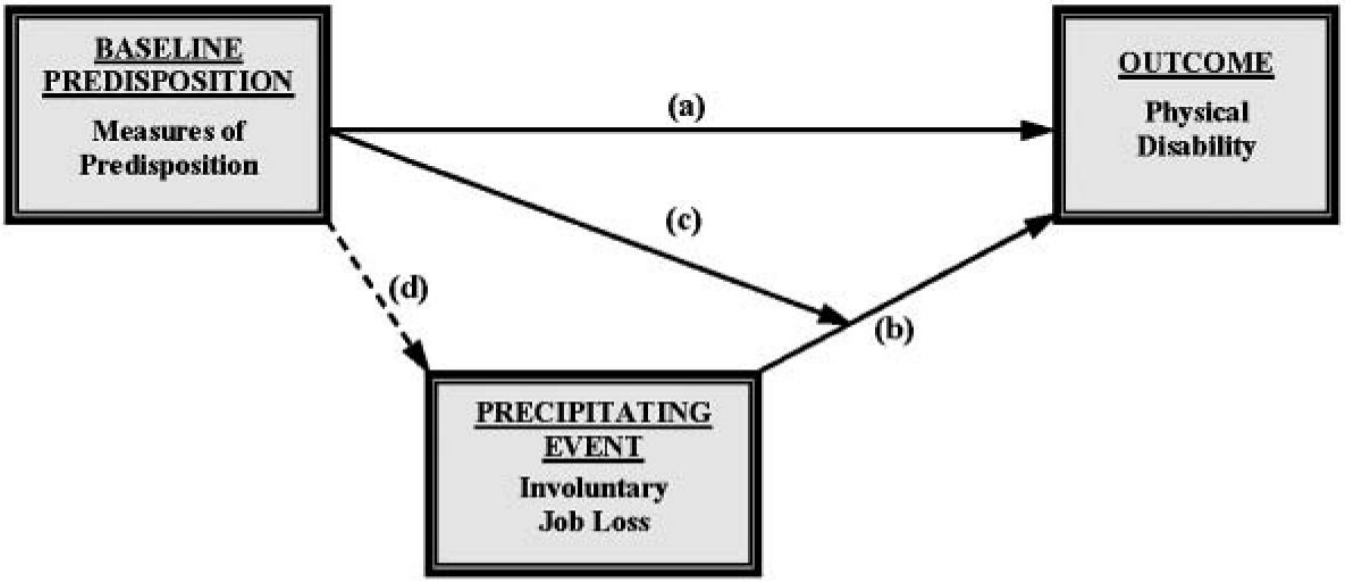

Figure 1.
Conceptual Model

Table 1

Risk Factors for Physical Disability: Means and Standard Deviations by Gender

Predisposing Factor	Women (*n* = 3,158)		Men (*n* = 3,338)	
	Displaced	Not Displaced	Displaced	Not Displaced
Demographic/socioeconomic				
Age (years)	55.45 (2.86)	54.92 (2.86)	55.14 (2.94)	55.87 (2.88)
Female	—	—	—	—
White race	0.64 (0.48)	0.73 (0.44)	0.78 (0.41)	0.76 (0.42)
Unmarried civil status	0.32 (0.47)	0.35 (0.47)	0.16 (0.36)	0.11 (0.32)
Educational attainment (years)	11.81 (3.05)	12.79 (2.65)	12.30 (3.09)	12.65 (3.25)
Earned income (U.S. dollars)	18,036 (15,061)	21,824 (14,777)	35,475 (30,629)	39,138 (31,457)
Nonhousing net worth (U.S. dollars)	98,684 (306,359)	113,482 (285,572)	76,200 (134,789)	107,422 (269,563)
Health behaviors				
Smoking	0.28 (0.45)	0.22 (0.42)	0.32 (0.47)	0.24 (0.43)
Problem alcohol use (CAGE score)	0.07 (0.26)	0.05 (0.22)	0.22 (0.42)	0.18 (0.38)
No vigorous physical activity	0.89 (0.31)	0.88 (0.32)	0.90 (0.29)	0.82 (0.38)
Health behaviors index	1.24 (0.68)	1.16 (0.59)	1.43 (0.69)	1.24 (0.74)
Mental health				
CES-D-8 score	0.79 (1.52)	0.56 (1.10)	0.52 (0.96)	0.44 (0.88)
Physical/medical				
Vision impaired	0.13 (0.35)	0.08 (0.26)	0.13 (0.34)	0.08 (0.27)
Hearing impaired	0.09 (0.28)	0.05 (0.23)	0.16 (0.37)	0.16 (0.37)
Pain	0.19 (0.39)	0.17 (0.38)	0.14 (0.35)	0.13 (0.33)
Hypertension	0.38 (0.49)	0.35 (0.48)	0.32 (0.47)	0.36 (0.48)
Diabetes	0.09 (0.29)	0.07 (0.26)	0.11 (0.31)	0.07 (0.26)
Arthritis/rheumatism	0.42 (0.49)	0.36 (0.48)	0.28 (0.45)	0.27 (0.44)
Stroke	0.02 (0.29)	0.01 (0.10)	0.03 (0.18)	0.02 (0.13)
Physical/medical index	1.32 (1.25)	1.10 (1.08)	1.17 (1.16)	1.10 (1.05)
Functional				
Baseline physical disability	2.44 (2.41)	2.11 (2.09)	1.34 (1.94)	1.25 (1.79)

Note: CES-D-8 = Center for Epidemiologic Studies Depression Scale eight-item short form. Means for binary variables represent proportions of sample with characteristics or conditions.

Table 2

Generalized Estimating Equations Estimates of the Effect of Involuntary Job Loss (UL) for Women, Adjusted for Predisposition, Fully Interacted Model, and Pruned Interaction Model

	Women (n = 3,158)			Men (n = 3,338)		
Variable	**Model 1**	**Model 2**	**Model 3[a]**	**Model 4**	**Model 5**	**Model 6[a]**
IJL	.15[a] (.08)	.06 (.24)	.02 (.13)	.20 (.11)	.07 (.35)	.26[a] (.12)
Age	.01 (.009)	.01 (.009)	.01 (.01)	.007 (.01)	.01 (.01)	.01 (.01)
White race	−.06 (.06)	−.08 (.06)	−.06 (.06)	.16 (.09)	.15 (.09)	.16 (.09)
Unmarried civil status	.08 (.06)	.05 (.06)	.05 (.06)	−.06 (.11)	−.02 (.11)	−.02 (.11)
Educational attainment	−.03*** (.01)	−.03*** (.01)	−.03** (.01)	−.04** (.01)	−.04** (.01)	−.04** (.01)
Earned income	−.006 (.02)	−.001 (.01)	−.001 (.01)	−.05 (.02)	−.04 (.03)	−.04 (.02)
Nonhousing net worth	−.001 (.001)	−.0003 (.001)	−.001 (.001)	.001 (.001)	.001 (.001)	.001 (.001)
CES-D-8 score	.05* (.02)	.05* (.02)	.05* (.02)	.09** (.03)	.09** (.03)	.09** (.03)
Health behaviors index	.03 (.04)	.03 (.05)	.02 (.04)	.12* (.05)	.12* (.05)	.12* (.05)
Physical/medical index	.17*** (.02)	.18*** (.02)	.17*** (.02)	.30*** (.03)	.29*** (.03)	.30*** (.03)
Baseline physical disability	.22*** (.01)	.22*** (.01)	.23*** (.01)	.22*** (.02)	.23*** (.02)	.22*** (.02)
Interactions						
IJL × Age	—	−.001 (.02)	—	—	−.05 (.03)	—
IJL × White Race	—	.11 (.18)	—	—	.18 (.24)	—
IJL × Unmarried Civil Status	—	.31 (.15)	.31* (.15)	—	−.43 (.24)	−.46 (.25)
IJL × Educational Attainment	—	.01 (.03)	—	—	.03 (.04)	—
IJL × Earned Income	—	−.13* (.06)	−.10* (.05)	—	−.01 (.05)	—
IJL × Nonhousing Net Worth	—	−.003 (.003)	—	—	.01 (.01)	—
IJL × CES-D-8 Score	—	−.02 (.04)	—	—	.01 (.09)	—
IJL × Health Behaviors Index	—	−.08 (.11)	—	—	−.02 (.20)	—
IJL × Physical/Medical Index	—	−.05 (.06)	—	—	.14 (.08)	—
IJL × Baseline Physical Disability	—	−.03 (.03)	−.04 (.02)	—	−.05 (.05)	—
Time	.13*** (.02)	.13*** (.02)	.13*** (.02)	.13*** (.03)	.13*** (.03)	.13*** (.03)
Intercept	−.69*** (.09)	−.69*** (.10)	−.68*** (.09)	−1.39*** (.13)	−1.38*** (.13)	−1.39*** (.13)

Note: CES-D-8 = Center for Epidemiologic Studies Depression Scale eight-item short form. Values are estimated coefficients, with standard errors in parentheses.

[a] Interaction terms with p values > .10 were sequentially pruned from these model specifications.

* $p < .05$.

** $p < .01$.

*** $p < .001$.