

Employment Hardship Among Older Workers: Does Residential and Gender Inequality Extend Into Older Age?

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Objectives. The realities of a rapidly aging society make the employment circumstances of older workers an increasingly important social issue. We examine the prevalence and correlates of underemployment among older Americans, with a special focus on residence and gender, to provide an assessment of the labor market challenges facing older workers.

Methods. We analyzed data from the March Current Population Surveys for the years 2003, 2004, and 2005. We used descriptive statistics to explore the prevalence of underemployment among older workers and developed multivariate models to assess the impact of age, residence, and gender on the likelihood of underemployment, net of other predictors.

Results. We found clear disadvantages for older workers relative to their middle-aged counterparts, and particular disadvantages for older rural residents and women. Multivariate models showed that the disadvantages of older age held net of other predictors. The results also indicated that much of the disadvantage faced by older rural workers and women was explained by factors other than age, particularly education.

Discussion. In an aging society, underemployment among older workers comes at an increasing social cost. Policies aimed at supporting older workers and alleviating employment hardship among them are increasingly in the public interest.

Key Words: Underemployment—Rural-urban—Gender—Working poverty.

COMMON images of the elder years being a time of retirement and leisure neglect the considerable prevalence of employment among older Americans (see He, Sengupta, Velkoff, & DeBarros, 2005). At the microlevel, the reasons why older people work vary, but considering the relatively high incidence of poverty spells among elders (Rank & Hirschl, 1999), for many it is likely a matter of economic necessity. This is perhaps particularly true in the current context, when the risk associated with retirement benefits is increasingly shifting from employers to workers, health care costs are rising rapidly, and reforms to ensure the solvency of important entitlement programs for older Americans (i.e., Social Security and Medicare) are inevitable. At the macrolevel, in an era when people are living longer than ever before, nonwork and underemployment among older people come at an increasing social cost. This cost comes in the form of lost productivity and tax revenue, as well as public spending on entitlements to support older people after retirement. The aging of the baby boom cohort underscores this issue. According to the U.S. Census Bureau (He et al., 2005), between 2000 and 2030 the proportion of the U.S. population aged 65 and older is projected to double, swelling from 35 million to 72 million and coming to represent nearly one fifth of the entire U.S. population. In sum, the realities of a rapidly aging society make the employment circumstances of older workers a pressing concern for individuals and society alike.

Although considerable research attention has been devoted to problems associated with marginal employment among young and middle-aged workers, to date employment hardship among older workers has remained a relatively neglected topic. In this article we address this gap in the literature through an analysis of underemployment among older Americans. As a concept designed to assess employment hardship, underemployment goes beyond the standard measure of unemployment (those out of work but looking for a job) to also include those working full time for near-poverty-level wages, those working part time despite a preference for full-time work, and those who would like to be working but have given up looking for a job due to discouragement with their prospects. By exploring the prevalence and correlates of underemployment among older Americans we seek to provide a more comprehensive portrait of the labor market challenges faced by this increasingly important group of workers. Furthermore, by highlighting residence and gender as key axes of inequality, we extend the literature on both the economic circumstances of older workers (see Dorfman, 1998; Glasgow, Holden, McLaughlin, & Rowles, 1993; Jensen & McLaughlin, 1997; McLaughlin & Holden, 1993; McLaughlin & Jensen, 1993, 1995, 2000; Rank & Hirschl, 1999; Rife, 1995) and underemployment (see Clogg & Sullivan, 1983; Jensen, Findeis, Hsu, & Schachter, 1999; Jensen & Slack, 2003; Lichter & Costanzo, 1987; Slack & Jensen, 2002, 2004, 2007, in press; Sullivan, 1978), which has consistently shown rural residents and women to face persistent disadvantages in the American labor market.

The Economic Circumstances of Older Americans

Industrial restructuring and policy changes such as welfare reform have cast a spotlight on the precarious economic position of many American workers. Relatively neglected in these discussions, however, have been the unique circumstances of older workers. In an extensive review of the literature on elder employment, Rife (1995) called attention to this omission. Specifically, Rife noted:

Company downsizing, age discrimination, and negative stereotypes about the usefulness of older workers prevent many persons from obtaining stable employment after age fifty. While research indicates that more older adults are retiring early, others who need or want to work often face significant labor market obstacles when searching for a job. Company downsizing often results in unemployment for older workers. Workers over age fifty are more likely to be employed in companies which have experienced restructuring. (p. xv)

Quadagno and Hardy (1996) noted that in such a context the very distinction between voluntary and involuntary retirement becomes quite blurry. For example, is a worker whose job has been downsized and opts for a pension over unemployment really a voluntary retiree? In sum, although economic change has fueled increasing attention to the labor market circumstances of younger workers, there is reason to believe that impacts particular to older workers have occurred as well.

Despite the effects of industrial restructuring, however, economic well-being has generally improved among older Americans in recent decades, especially due to the support provided by Social Security and other entitlements (Bianchi, 1999; Hungerford, Rassette, Iams, & Koenig, 2001). Nevertheless, research has also shown that 40% of Americans will experience at least a year in poverty between the ages of 60 and 90, and nearly half will experience poverty at the 125% level (Rank & Hirschl, 1999). Furthermore, studies indicate that among workers aged 50 to 70 years, more than two thirds plan to remain in the labor force in their elder years, ranking the need for money and health benefits, respectively, as the two most important motivations for continued employment (AARP, 2005). It is also worth noting that for many workers retirement does not represent a permanent exit from the labor force. Rather, many occupy “bridge” jobs that span the period between career employment and permanent retirement (Quadagno & Hardy, 1996). Whether this work is full time or part time, bridge jobs tend to pay significantly lower wages compared to previous employment (Ruhm, 1989).

Focusing on the economic circumstances of older people in the aggregate also masks the persistent disadvantages faced by particular subgroups of elders, including women and residents of rural areas (Dorfman, 1998; Glasgow et al., 1993; Jensen & McLaughlin, 1997; McLaughlin & Holden, 1993; McLaughlin & Jensen, 1993, 1995, 2000). Research has shown that workers in rural areas—and rural women in particular—consistently earn less than their urban counterparts during their working years, which translates into significant income disadvantages late in life (Dorfman, 1998). Not only do older rural residents earn less over the life course, they also receive lower Social Security benefits and less pension coverage (McLaughlin & Jensen, 1993). The disadvantaged work histories of rural elders relative to those of their urban counterparts are implicated in higher

poverty rates, greater odds of becoming poor, and greater difficulty in climbing out of poverty once poor (Jensen & McLaughlin, 1997; McLaughlin & Jensen, 1995, 2000). Research has also shown that the mechanisms that influence poverty among older men and women differ significantly due to gendered work and marital histories (McLaughlin & Jensen, 1995, 2000).

Underemployment Among Older Americans

Adequate employment is a key element for ensuring economic well-being among the nonwealthy. Conceptually, employment adequacy refers to the degree to which workers are employed full time, or else the number of hours they desire, at jobs that pay a living wage. An important measure of employment that does not meet this threshold is underemployment. Rooted in the Labor Utilization Framework, originally developed by Hauser (1974) for use in developing countries and later refined by Clogg and Sullivan for use in the United States (Clogg, 1979; Clogg & Sullivan, 1983; Sullivan, 1978), underemployment is most commonly defined as comprising workers in one of four mutually exclusive employment conditions: *sub-unemployed* or *discouraged workers* (those who would like to be employed but are out of work and not seeking a job because they believe their prospects are bleak); the *unemployed* (those who are not employed but are looking for work, or are on layoff with the expectation of being called back); *involuntary part-time workers* (those who are employed part time but would opt for full-time work were it available) and *low-income workers* or the *working poor* (those who are working full time but for very low pay). All other employed adults are defined as *adequately employed*.

Research on underemployment has consistently shown non-metropolitan (nonmetro) workers to be at a disadvantage relative to their metropolitan (metro) counterparts (see Lichter & Costanzo, 1987; Slack & Jensen, 2002). (Metro and nonmetro areas are county-level designations defined by the Office of Management and Budget based upon measures of population density and daily commuting patterns; see Economic Research Service, 2007.) Not only is the prevalence of underemployment consistently higher in nonmetro areas, but nonmetro workers also face a lower likelihood of regaining adequate employment once underemployed (Jensen et al., 1999). In part, this is due to the fact that workers in the service sector, and even more so those in extractive industries (i.e., agriculture, forestry, and fishing), economic mainstays in many rural areas, face significantly higher odds of being underemployed than do those employed in other sectors of the economy (Slack & Jensen, 2004). Studies have suggested that lower educational attainment among rural workers is also partly at play in explaining residential differences in underemployment (see Jensen et al., 1999; Slack & Jensen, 2002). Ultimately, though, the nonmetro disadvantage cannot be fully accounted for statistically. This body of research has also consistently shown rural women to suffer a double jeopardy in terms of their likelihood of being underemployed.

The underemployment literature has also revealed age to be a significant correlate of underemployment (see Jensen & Slack, 2003, for a descriptive overview). Specifically, research has shown that the age effect on underemployment is curvilinear (see Slack & Jensen, in press). That is, the odds of being underemployed are highest among the young, fall to the lowest levels among middle-aged persons, and then trend upward

again as people approach “retirement age” (i.e., 65 years). What is especially noteworthy for our purposes is that the research to date has focused on underemployment among those of “working age” (e.g., those aged 18–64 years) but has largely ignored the circumstances of older workers. We address this void in the literature by asking the following research questions: (a) How does the prevalence of underemployment among American workers vary by age, residence, and gender? and (b) To what extent can existing patterns of inequality related to age, residence, and gender be accounted for by other predictors of employment hardship?

METHODS

Data

In order to answer our two research questions, we analyzed data from the March Current Population Surveys (CPS) for the years 2003, 2004, and 2005. Collected by the Census Bureau on behalf of the Bureau of Labor Statistics, the CPS is a monthly survey of approximately 50,000 U.S. households that serves as the official national data source on the employment circumstances of American workers. The March CPS, or Annual Social and Economic Supplement, contains a wide variety of socioeconomic and demographic variables not included in the survey during other months of the year, making it a rich source of data not only on workers, but also their households.

To maximize the number of observations of working elders available for analysis, we concatenated data from 2003, 2004, and 2005 and treated them as a single data set. In order to yield realistic estimates of statistical significance, we divided population weights—needed to correct for the stratified sampling design used by the CPS—by their means to yield *N*s approximately equal to the sample size. In addition, because the sampling design of the CPS requires that newly sampled households be surveyed for 4 months, rotated out of the sample for 8 months, and then rotated back into the sample for a final 4 months, up to half of all households interviewed in a given March will be interviewed again the following March. Because this potentially violates the principle of statistical independence between observations, researchers typically either pool data across nonconsecutive years or eliminate overlapping cases. We used the second approach here. We utilized all of the available observations from 2004 (the central year of our data) but retained only outgoing observations for 2003 and newly incoming observations for 2005.

Measuring Underemployment

Another key advantage of the CPS is that it is uniquely suited to measure underemployment. Specifically, the four mutually exclusive states of employment hardship that together constitute underemployment were defined as follows:

1. *Sub-unemployed* (or discouraged) includes individuals who would like to be employed but are currently not working and did not look for work during the previous 4 weeks due to discouragement with their job prospects (official measures do not define these workers as “in the labor force,” as they are neither employed nor looking for work);
2. *Unemployed* is consistent with the official definition and includes those who are not working but who (a) have looked

for work in the previous 4 weeks, or (b) are currently on layoff but expect to be called back;

3. *Low hours* (or involuntary part time) is consistent with the official definition of those working “part time for economic reasons” (i.e., those working less than 35 hr per week only because they cannot find full-time employment); and
4. *Low income* (or working poor) includes full-time workers (i.e., 35 hr or more per week) whose individual average weekly earnings in the previous year were less than 125% of the individual poverty threshold.

All workers who do not fall into one of the aforementioned categories were defined as *adequately employed*, whereas those who are not working and do not want to be working were defined as *not in the labor force*.

Analytic Strategy

We employed both descriptive and multivariate statistical techniques to answer our research questions. We used simple cross-tabulations to establish the prevalence of labor force participation and the prevalence of underemployment by age, gender, and metro/nonmetro residence. To verify and explain observed differences in underemployment, we estimated multivariate logistic regression equations to model the likelihood that a worker will be underemployed, net of other predictors. Independent variables employed in the regression analyses were measured straightforwardly and are discussed in greater detail as they enter into the analysis.

RESULTS

Prevalence of Labor Force Participation

Table 1 shows the percentage of adults who were in the labor force by age, gender, and metro/nonmetro residence. Official statistics define the labor force participation rate as the number of adults who are either employed or unemployed (in the labor force), divided by the total number of adults in the population. As noted previously, discouraged workers—those who would like to be employed but have given up the search for a job—are technically not unemployed and are therefore not typically included in the numerator of the labor force participation rate. Given our purposes here, however, the rates shown in Table 1 do include discouraged workers in the numerator.

The data in Table 1 reflected the curvilinear pattern of labor force participation over the life course. Rates were lower for the youngest age group (20–29) and rose thereafter as individuals moved into middle age. Rates of participation then dropped after peaking among those aged 40 to 49 years, and this drop was precipitous. Note, however, that labor force participation rates remained substantial even among those who were well into their older years. More than half (51.9%) of those aged 60 to 64 years participated in the labor force, as did more than one quarter (28.4%) of those aged 65 to 69 years. Even among those in their early 70s, 15.8% were in the labor force. The data also showed the well-known pattern of greater formal labor force participation among men compared to women, a difference that held across age groups.

With respect to residential differences, rates of labor force participation among those aged 20 to 49 years were roughly similar between metro and nonmetro areas. Among several

Table 1. Percentage of Adults Employed, Unemployed, or Discouraged by Age, Gender, and Residence

Age	Total			Metropolitan			Nonmetropolitan		
	Total	Men	Women	Total	Men	Women	Total	Men	Women
20–29	78.4	84.5	72.2	78.5	84.4	72.5	77.7	85.1	70.4
30–39	83.9	92.5	75.3	83.8	92.7	75.0	83.9	91.2	76.9
40–49	84.3	90.4	78.4	84.4	91.0	78.2	83.6	87.8	79.4
50–54	80.6	85.9	75.5	81.0	86.6	75.7	78.9	82.9	74.8
55–59	72.3	79.2	65.9	73.3	80.5	66.6	68.0	73.7	62.9
60–64	51.9	59.2	45.4	53.0	61.3	45.7	48.1	52.1	44.3
65–69	28.4	33.0	24.3	28.5	33.5	24.2	27.7	31.3	24.5
70–74	15.8	20.3	12.1	15.9	20.7	12.0	15.5	19.1	12.4
75+	6.3	9.0	4.5	6.1	8.4	4.6	6.9	11.0	4.2

Notes: The conventional definition of “in the labor force” includes only those who are either employed or unemployed. Here we also include “discouraged workers,” a group not normally counted in labor force participation rates.

Source: March Current Population Surveys, 2003–2005.

of the older age groups (notably 50–64 years) rates of participation were up to 5 percentage points higher in metro than in nonmetro areas, though these differences narrowed after age 70. It is important not to attribute all of the differences between age groups to residential differences in age effects, that is, to changes that occur because people are getting older. Because these data were cross-sectional, also embedded in these age group differences were metro/nonmetro differences between birth cohorts. In this case, although gender differences in labor force participation by residence are not as great today as they once were, the higher prevalence of metro labor force participation among those approaching their retirement years may have reflected a time when women’s participation was higher in urban than rural areas. Indeed, the results in Table 1 were somewhat consistent with this notion, with women’s labor force participation rates being slightly higher in nonmetro than metro areas for those aged 30 to 49 years and slightly lower among those aged 50 to 64 years. However, a definitive appraisal of this issue would require a cohort analysis.

Prevalence of Underemployment

Table 2 shows the percentage of individuals in the labor force (as defined previously) who were underemployed. Specifically, we calculated cell entries as the number of adults in the labor force who fell into any one of the four categories of underemployment, divided by the total number in the labor force (i.e., the sum of those adequately employed or underemployed). The results again suggested a curvilinear pattern across age groups. The “Total” columns show that the greatest

prevalence of underemployment was among those in the youngest age groups. Nearly one quarter (24.1%) of those aged 20 to 29 years were underemployed. The prevalence of underemployment then steadily dropped, hitting its lowest point (11.8%) among those aged 50 to 54 years. Thereafter, rates of underemployment began to rise monotonically with age. Although underemployment was rather high among the oldest age groups (e.g., 18.7% among those aged 75 years and older), readers should bear in mind that we calculated these rates on a sharply declining base of those actually in the labor force (see Table 1). If severity is to be considered in absolute terms, the actual number of underemployed adults aged 75 years and older was not particularly great. Still, even among those in the oldest age groups, the employment circumstances of those working or seeking work are worthy of attention. The data in Table 2 also showed the consistent labor market disadvantage faced by women relative to men. Across all age groups women faced higher rates of underemployment.

With regard to residential differences, the data in Table 2 showed that the higher prevalence of underemployment among nonmetro workers revealed in previous research carried over into older age. For example, among those aged 60 to 64 years, 17.5% of those in nonmetro areas were underemployed versus 13.0% of those in metro areas. Gender inequality in underemployment was noticeably greater in nonmetro areas, and within each age group it was nonmetro women who registered the highest rates of underemployment.

Recognizing that underemployment comprises four different types, Tables 3, 4, and 5 replicate Table 2 but differentiate

Table 2. Percentage of Adults Underemployed by Age, Gender, and Residence

Age	Total			Metropolitan			Nonmetropolitan		
	Total	Men	Women	Total	Men	Women	Total	Men	Women
20–29	24.1	23.6	24.7	23.5	23.3	23.7	27.4	24.9	30.2
30–39	14.1	12.7	15.8	13.6	12.5	14.9	17.3	14.2	20.8
40–49	12.6	11.2	14.2	12.1	10.8	13.5	15.2	13.2	17.4
50–54	11.8	10.5	13.1	11.3	10.0	12.7	13.6	12.6	14.9
55–59	12.3	11.1	13.6	11.6	10.7	12.6	15.4	12.8	18.2
60–64	13.9	12.1	16.0	13.0	11.1	15.4	17.5	16.6	18.4
65–69	15.9	14.5	17.0	14.9	14.3	15.6	18.8	17.3	20.5
70–74	17.2	15.5	19.4	15.9	14.8	17.5	21.5	18.4	25.5
75+	18.7	16.4	21.5	18.3	15.7	21.2	19.7	18.3	22.1

Notes: The denominator includes those who are either adequately employed or underemployed. Those who are not in the labor force are excluded from these calculations.

Source: March Current Population Surveys, 2003–2005.

Table 3. Percentage of Adults Underemployed by Low Income or Other Reasons by Age and Residence

Age	Total			Metropolitan			Nonmetropolitan		
	Low Income	Other	Ratio	Low Income	Other	Ratio	Low Income	Other	Ratio
20–29	10.1	14.0	0.7	9.9	13.6	0.7	11.7	15.7	0.7
30–39	5.2	8.9	0.6	4.9	8.7	0.6	7.0	10.2	0.7
40–49	4.7	7.9	0.6	4.3	7.8	0.6	6.5	8.7	0.7
50–54	4.4	7.4	0.6	3.9	7.4	0.5	6.3	7.4	0.9
55–59	5.0	7.3	0.7	4.3	7.2	0.6	7.7	7.7	1.0
60–64	6.5	7.4	0.9	5.7	7.3	0.8	9.5	8.0	1.2
65–69	8.9	7.0	1.3	7.9	7.0	1.1	12.3	6.4	1.9
70–74	9.9	7.2	1.4	8.8	7.2	1.2	13.4	7.5	1.8
75+	10.3	8.3	1.3	10.4	7.9	1.3	9.9	9.9	1.0

Notes: The denominator includes those who are either adequately employed or underemployed. Those who are not in the labor force are excluded from these calculations.

Source: March Current Population Surveys, 2003–2005.

between those underemployed by low income versus those underemployed for other reasons (i.e., discouraged, involuntary part-time, and unemployed workers combined). In addition, these tables show the ratio of these two sets of percentages in order to gauge age and residential differences in the prevalence of underemployment by low income relative to other types of underemployment. Two results stood out. First, the prevalence of low-income work relative to other types of underemployment increased across age groups. For example, among those aged 30 to 39 years the percentage underemployed by low income (5.2%) was less than the percentage underemployed for other reasons (8.9%), whereas among 65- to 69-year-olds the prevalence of low-income work (8.9%) exceeded the prevalence of all other types of underemployment (7.0%). Second, the results revealed that both the prevalence and share of underemployment due to low income were generally greater among women than men. The results also showed that the predominance of working poverty as a form of underemployment was especially pronounced among nonmetro women, particularly among those of older age (those aged 75 years and older being the sole exception).

Multivariate Models of Underemployment

The descriptive results showed clear disadvantages in terms of underemployment for older workers relative to their middle-aged counterparts as well as for rural residents and women. In this section we present logistic regression models in an attempt to account for these differences and to provide a more nuanced assessment of the correlates of underemployment among older

workers. We restricted the multivariate analysis to those aged 50 years and older. This was in keeping with the literature on elder employment, which suggests that age 50 marks the beginning of employment vulnerability due to older age (Rife, 1995). Furthermore, we restricted the models to those who were either adequately employed or underemployed. The dependent variable was a dichotomy measuring whether a worker was underemployed (1 = yes) or not. We estimated models for the entire sample, and then separately by residence and gender.

Table 6 shows results from logistic regression models of underemployment among adults aged 50 years and older for the entire sample. Model I included the key independent variables of interest (age, residence, and gender) as predictors of underemployment. The results showed that although the odds of underemployment did not differ significantly for those in their late 50s compared to those in their early 50s, the likelihood of being underemployed increased monotonically from age 60 on. Model I also confirmed a statistically significant disadvantage associated with nonmetro residence and being female.

Model II added the effects of education, marital status, race/ethnicity, nativity, industry of employment, union membership, and region. Past studies of underemployment have shown each of these variables to be significant predictors of underemployment (see Clogg & Sullivan, 1983; Jensen et al., 1999; Jensen & Slack, 2003; Lichter & Costanzo, 1987; Slack & Jensen, 2002, 2004, 2007, in press; Sullivan, 1978). Specifically, the expectation was that the less educated would face greater odds of being underemployed, as would those who are

Table 4. Percentage of Men Underemployed by Low Income or Other Reasons by Age and Residence

Age	Total			Metropolitan			Nonmetropolitan		
	Low Income	Other	Ratio	Low Income	Other	Ratio	Low Income	Other	Ratio
20–29	9.1	14.5	0.6	9.0	14.3	0.6	9.3	15.6	0.6
30–39	3.8	9.0	0.4	3.8	8.7	0.4	3.7	10.5	0.4
40–49	3.2	8.0	0.4	3.0	7.8	0.4	4.2	9.0	0.5
50–54	3.1	7.4	0.4	2.8	7.2	0.4	4.3	8.2	0.5
55–59	3.4	7.7	0.4	3.0	7.7	0.4	5.1	7.7	0.7
60–64	4.3	7.8	0.6	3.6	7.4	0.5	7.2	9.4	0.8
65–69	7.3	7.7	0.9	6.4	8.0	0.8	10.6	6.7	1.6
70–74	8.3	7.2	1.2	7.7	7.1	1.1	10.6	7.9	1.3
75+	8.9	7.5	1.2	8.3	7.4	1.1	10.9	7.5	1.5

Notes: The denominator includes those who are either adequately employed or underemployed. Those who are not in the labor force are excluded from these calculations.

Source: March Current Population Surveys, 2003–2005.

Table 5. Percentage of Women Underemployed by Low Income or Other Reasons by Age and Residence

Age	Total			Metropolitan			Nonmetropolitan		
	Low Income	Other	Ratio	Low Income	Other	Ratio	Low Income	Other	Ratio
20–29	11.4	13.4	0.9	10.8	12.9	0.8	14.4	15.8	0.9
30–39	7.0	8.9	0.8	6.2	8.7	0.7	10.9	9.9	1.1
40–49	6.3	7.9	0.8	5.8	7.8	0.7	9.0	8.4	1.1
50–54	5.7	7.4	0.8	5.1	7.6	0.7	8.6	6.3	1.4
55–59	6.7	7.0	1.0	5.8	6.8	0.9	10.4	7.8	1.3
60–64	9.0	7.0	1.3	8.2	7.2	1.1	12.0	6.4	1.9
65–69	10.9	6.1	1.8	9.7	5.9	1.6	14.4	6.1	2.4
70–74	12.2	7.2	1.7	10.3	7.3	1.4	18.4	7.1	2.6
75+	12.1	9.4	1.3	12.9	8.3	1.6	8.1	14.0	0.6

Notes: The denominator includes those who are either adequately employed or underemployed. Those who are not in the labor force are excluded from these calculations.

Source: March Current Population Surveys, 2003–2005.

unmarried, non-White, Hispanic, and/or noncitizens. Furthermore, we expected those employed in the extractive, service, or trade sectors to be disadvantaged relative to their counterparts employed in other sectors of the economy, and we expected union membership to protect workers from underemployment. Finally, we included region in the models because residents of the South have traditionally been disadvantaged, though regional effects have been changing due to industrial restructuring.

The results in Model II conformed to these expectations, showing that the risk of underemployment was significantly higher among the less educated; the unmarried; non-Whites and Hispanics; noncitizens; those who were not members of a labor union; and workers whose current or most recent job was in the extractive, service, or trade sector. The effects of region of residence were modest but suggested a slight disadvantage for those residing in the Midwest and West. The inclusion of these variables helped to explain some of the disadvantage owing to older age, rural residence, and being female. Intervening models assessing the effect of each control variable individually (not shown) indicated that lower educational attainment, in particular, reduced the effects of age, residence, and gender. Nonetheless, even with all of the predictors included in the model, a statistically significant pattern showing a monotonic increase in the odds of underemployment after age 60 and disadvantages associated with nonmetro residence and being female persisted.

Table 7 shows results from residence-specific models of underemployment among adults aged 50 years and older, with an eye toward understanding whether and how the pattern of determinants differs for metro versus nonmetro elders. Model I, which included only the effects of age and gender, showed similar results for those residing in metro and nonmetro areas. In both residential contexts older workers and women were disadvantaged relative to their counterparts. One difference between the models was that in nonmetro areas those in their late 50s were significantly more likely than those in their early 50s to be underemployed, whereas the metro model showed no differences among those in their 50s. However, tests for statistical significance between the corresponding coefficients in the metro and nonmetro models (see Clogg, Petkova, & Haritou, 1995; Paternoster, Brame, Mazerolle, & Piquero, 1998) indicated that this across-models difference was not statistically notable.

Model II included the full range of control variables for the residence-specific models. Although the control variables

ameliorated some of the disadvantage associated with being older and being female, significant relationships consistent with the substantive results from Model I generally persisted (the lone exception was that in the nonmetro model the inclusion of the control variables eliminated the statistical significance of being aged 70 years and older). Intervening models (not shown) indicated that comparatively low educational attainment among nonmetro elders aged 70 years and older was driving the changes between Model I and Model II in nonmetro areas. Tests for statistical significance in the differences between the corresponding metro and nonmetro models again showed no significant differences in the effects of age and gender by residence. The results did indicate particular disadvantages faced by nonmetro Blacks and significant regional differences.

As for whether and how the etiology of underemployment differs for older women and men, Table 8 shows results from gender-specific models. For both men and women, the results from Model I confirmed the disadvantages of being older and a nonmetro resident. Model II included the full range of control variables for the gender-specific models. Notably, although the age effects held among male elders, among female elders the inclusion of the control variables greatly reduced the effects associated with age. The results also showed that the detrimental effect of being aged 70 to 74 years compared to being aged 50 to 54 years was significantly less for female workers. Again, intervening models (not shown) indicated that educational attainment was largely at play in ameliorating age effects among female elders. In that vein, Model II also showed that attaining a bachelor's degree or more exerted significantly greater downward pressure on underemployment among women compared to men. Furthermore, female noncitizens, those employed in the transportation/utilities/construction and trade sectors and those who were residents of the South and West were disadvantaged relative to their male counterparts. Conversely, men who had never been married or were separated/divorced, who were Black or members of other non-White/non-Hispanic groups, were disadvantaged relative to their female counterparts.

DISCUSSION

Our results show that contrary to popular images of the elder years being a time of retirement and leisure, labor force participation among older Americans is substantial. Our results also reveal a greater prevalence of underemployment among older workers relative to their middle-aged counterparts, and particular

Table 6. Logistic Regression Models Predicting Underemployment Among Adults Aged 50+

Independent Variable	Model I			Model II		
	<i>b</i>	OR	<i>SE</i>	<i>b</i>	OR	<i>SE</i>
Age						
50–54 (ref.)						
55–59	0.050	1.05	0.03	0.061	1.06	0.03
60–64	0.192***	1.21	0.03	0.166**	1.18	0.04
65–69	0.344***	1.41	0.04	0.254***	1.29	0.05
70–74	0.448***	1.57	0.05	0.332***	1.39	0.07
75+	0.540***	1.72	0.07	0.372***	1.45	0.07
Nonmetro (1 = yes)	0.281***	1.32	0.03	0.243***	1.28	0.03
Gender (1 = male)	–0.256***	0.77	0.03	–0.178***	0.84	0.03
Education						
Less than high school (ref.)						
High school				–0.474***	0.62	0.04
Some college				–0.687***	0.50	0.05
College or more				–1.007***	0.37	0.04
Marital status						
Married (ref.)						
Widowed				0.318***	1.38	0.05
Other				0.471***	1.60	0.03
Race/ethnicity						
White (ref.)						
Black				0.365***	1.44	0.04
Hispanic				0.320***	1.38	0.05
Other				0.267***	1.31	0.06
Nativity						
Native born (ref.)						
Foreign born, citizen				–0.022	0.98	0.05
Foreign born, noncitizen				0.357***	1.43	0.06
Industry						
Services (ref.)						
Extractive				0.379***	1.46	0.07
Manufacturing				–0.085*	0.92	0.04
Transportation/utilities/construction				–0.251***	0.79	0.06
Wholesale/retail trade				0.014	1.01	0.04
Finance, insurance, and real estate				–0.406***	0.66	0.06
Labor union (1 = yes)				–1.251***	0.29	0.12
Region						
Northeast (ref.)						
Midwest				0.135***	1.14	0.04
South				–0.045	0.96	0.04
West				0.134**	1.14	0.04
Intercept	–1.946***		0.03	–1.540***		0.06
–2LL	41,635			39,905		
Pseudo <i>R</i> ²	0.011			0.070		

Notes: *N* = 50,619. OR = odds ratio.

Source: March Current Population Surveys, 2003–2005.

p* < .05; *p* < .01; ****p* < .001.

disadvantages in this regard among older rural residents and women. Multivariate logistic regression models estimating the likelihood of underemployment show that the disadvantage of older age holds net of other predictors. However, the multivariate results also indicate that much of the disadvantage faced by older rural workers and women is explained by factors other than age, particularly educational attainment.

This research extends the literature in two key ways. First, we contribute to the literature on underemployment (see Clogg & Sullivan, 1983; Jensen et al., 1999; Jensen & Slack, 2003; Lichter & Costanzo, 1987; Slack & Jensen, 2002, 2004, 2007,

in press; Sullivan, 1978) by drawing attention to the neglected issue of employment hardship among older workers. Although the literature to date has uncovered a significant curvilinear age effect on underemployment—the prevalence of underemployment is highest among the young, falls in middle age, and then rises again among elders—it has largely ignored the unique circumstances of those working past age 65. The findings presented here show that many elders work, and among those who do, many suffer from underemployment. Second, this research extends the literature on the economic disadvantages faced by older rural residents, and rural female elders in

Table 7. Residence-Specific Logistic Regression Models Predicting Underemployment Among Adults Aged 50+

Independent Variable	Metropolitan						Nonmetropolitan					
	Model I			Model II			Model I			Model II		
	<i>b</i>	OR	<i>SE</i>	<i>b</i>	OR	<i>SE</i>	<i>b</i>	OR	<i>SE</i>	<i>b</i>	OR	<i>SE</i>
Age												
50–54 (ref.)												
55–59	0.028	1.03	0.03	0.037	1.04	0.04	0.140*	1.15	0.07	0.150*	1.01	0.07
60–64	0.168***	1.18	0.04	0.150***	1.16	0.04	0.294***	1.34	0.08	0.243**	1.09	0.08
65–69	0.325***	1.38	0.04	0.237***	1.27	0.06	0.381***	1.46	0.10	0.277**	1.07	0.10
70–74	0.412***	1.51	0.06	0.324***	1.38	0.08	0.559***	1.75	0.13	0.336*	1.07	0.14
75+	0.565***	1.76	0.08	0.467***	1.60	0.09	0.469***	1.60	0.14	0.125	0.84	0.15
Gender (1 = male)	–0.251***	0.78	0.03	–0.164***	0.85	0.03	–0.261***	0.77	0.05	–0.216***	0.72	0.06
Education												
Less than high school (ref.)												
High school				–0.498***	0.61	0.05				–0.414***	0.57	0.08
Some college				–0.734***	0.48	0.06				–0.574***	0.47	0.10
College or more				–1.003***	0.37	0.05				–1.081***	0.28	0.09
Marital status												
Married (ref.)												
Widowed				0.315***	1.37	0.06				0.338**	1.13	0.11
Other				0.495***	1.64	0.03				0.405***	1.32	0.07
Race/ethnicity												
White (ref.)												
Black				0.330***	1.39	0.05				0.571***†	1.44	0.11
Hispanic				0.328***	1.39	0.06				0.281	0.99	0.15
Other				0.289***	1.34	0.07				0.121	0.81	0.17
Nativity												
Native born (ref.)												
Foreign born, citizen				–0.020	0.98	0.06				–0.057	0.61	0.22
Foreign born, noncitizen				0.370***	1.45	0.06				0.015	0.65	0.23
Industry												
Services (ref.)												
Extractive				0.473***	1.61	0.11				0.330***	1.14	0.10
Manufacturing				–0.048	0.95	0.04				–0.200*	0.70	0.08
Transportation/utilities/construction				–0.237***	0.79	0.06				–0.289*	0.59	0.12
Wholesale/retail trade				0.045	1.05	0.04				–0.092	0.77	0.08
Finance, insurance, and real estate				–0.434***	0.65	0.07				–0.263	0.58	0.14
Labor union (1 = yes)				–1.197***	0.30	0.13				–1.500***	0.12	0.33
Region												
Northeast (ref.)												
Midwest				0.170***	1.19	0.05				–0.055†	0.79	0.09
South				–0.006	0.99	0.04				–0.277**†	0.63	0.10
West				0.147**	1.16	0.05				0.007	0.81	0.11
Intercept	–1.935***		0.03	–1.568***		0.06	–1.713***†		0.05	–1.105***†		0.12
–2LL	32,459			31,031			8,999			8,664		
Pseudo <i>R</i> ²	0.076			0.071			0.009			0.061		

Notes: Metro *N* = 38,171; nonmetro *N* = 12,155. OR = odds ratio. SE = standard error.

Source: March Current Population Surveys, 2003–2005.

p* < .05; *p* < .01; ****p* < .001.

†coefficient is significantly different (*p* < .05) from the corresponding coefficient in the metro model.

particular (see Dorfman, 1998; Glasgow et al., 1993; Jensen & McLaughlin, 1997; McLaughlin & Holden, 1993; McLaughlin & Jensen, 1993, 1995, 2000), by demonstrating how residential and gender inequalities are manifested in employment hardship.

Despite these contributions, there a number of important limitations associated with this study. We chose to explore the issue of underemployment among older workers by using the well-established Labor Utilization Framework (see Jensen & Slack, 2003, for a review of its development and application).

This measure holds that someone who is out of work but looking for a job (unemployed), someone who would like a job but has given up trying to find one (discouraged), someone who is working part time only because he or she cannot find full-time work (involuntary part time), or someone who is working full time for near-poverty-level wages (low income) is underemployed relative to those who are working full time for a living wage or are working part time voluntarily. However, a legitimate criticism of the Labor Utilization Framework is that

Table 8. Gender-Specific Logistic Regression Models Predicting Underemployment Among Adults Aged 50+

Independent Variable	Men						Women					
	Model I			Model II			Model I			Model II		
	<i>b</i>	OR	<i>SE</i>	<i>b</i>	OR	<i>SE</i>	<i>b</i>	OR	<i>SE</i>	<i>b</i>	OR	<i>SE</i>
Age												
50–54 (ref.)												
55–59	0.062	1.06	0.05	0.116	1.02	0.05	0.039	1.04	0.04	0.021	0.94	0.04
60–64	0.160**	1.17	0.05	0.205***	1.10	0.06	0.222***	1.25	0.05	0.152*	1.05	0.05
65–69	0.399***	1.49	0.07	0.431***	1.34	0.07	0.287***	1.33	0.07	0.113	0.97	0.07
70–74	0.443***	1.56	0.09	0.428***	1.54	0.09	0.454***	1.58	0.09	0.250*†	1.28	0.10
75+	0.492***	1.64	0.10	0.348***	1.42	0.11	0.591***	1.80	0.10	0.421***	1.52	0.10
Nonmetro (1 = yes)	0.276***	1.32	0.04	0.203***	1.23	0.05	0.287***	1.33	0.04	0.276***	1.32	0.04
Education												
Less than high school (ref.)												
High school				–0.421***	0.66	0.06				–0.564***	0.57	0.05
Some college				–0.615***	0.54	0.07				–0.779***	0.46	0.06
College or more				–0.842***	0.43	0.06				–1.193***†	0.30	0.06
Marital status												
Married (ref.)												
Widowed				0.460***	1.60	0.11				0.216***	1.24	0.06
Other				0.713***	2.04	0.04				0.268***†	1.31	0.04
Race/ethnicity												
White (ref.)												
Black				0.523***	1.69	0.06				0.259***†	1.30	0.05
Hispanic				0.302***	1.35	0.08				0.365***	1.44	0.07
Other				0.417***	1.52	0.09				0.103†	1.11	0.08
Nativity												
Native born (ref.)												
Foreign born, citizen				–0.056	0.95	0.08				0.017	1.02	0.07
Foreign born, noncitizen				0.235**	1.27	0.09				0.526***†	1.69	0.08
Industry												
Services (ref.)												
Extractive				0.507***	1.66	0.08				0.178	1.19	0.13
Manufacturing				–0.032	0.97	0.05				–0.172**	0.84	0.06
Transportation/utilities/construction				–0.338***	0.71	0.07				–0.069†	0.93	0.08
Wholesale/retail trade				–0.114	0.89	0.06				0.121*†	1.13	0.05
Finance, insurance, and real estate				–0.284**	0.75	0.09				–0.512***	0.60	0.07
Labor union (1 = yes)				–1.469***	0.23	0.18				–1.035***	0.36	0.14
Region												
Northeast (ref.)												
Midwest				0.088	1.97	0.06				0.186**	1.20	0.05
South				–0.252***	0.78	0.06				0.148***†	1.16	0.05
West				0.004	1.00	0.06				0.261***†	1.30	0.06
Intercept	–2.200***		0.03	–1.804***		0.08	–1.642***†		0.03	–1.446***†		0.08
–2LL	20,278			19,659			20,977			200,060		
Pseudo <i>R</i> ²	0.033			0.075			0.009			0.073		

Notes: Men, *N* = 27,043; women, *N* = 23,576. OR = odds ratio; *SE* = standard error.

Source: March Current Population Surveys, 2003–2005.

p* < .05; *p* < .01; ****p* < .001.

†coefficient is significantly different (*p* < .05) from the corresponding coefficient in the male model.

it fails to recognize variations in family and/or household contexts that are undoubtedly important in determining individual economic well-being. It also does not take into account sources of income other than earnings that an individual might enjoy. In the case of elders, these limitations may call into question the validity of the low-income component of underemployment in particular. Ancillary analyses of CPS data for 2004, the middle year of the sample we analyzed here, offer some insight into this issue. The results show that of the elders we defined as underemployed by low income, nearly a quarter (24.2%) had

total family incomes of 400% of the poverty threshold or higher. In other words, although underemployed, these individuals hailed from families that were fairly well off. In contrast, 46.2% of those underemployed by low income had total family incomes of less than 200% of the poverty threshold. That is, these individuals were members of families that were decidedly not affluent. Regardless, these limitations suggest that one should view this analysis as a springboard for the development of alternative measures of employment hardship that might be better tailored to the unique circumstances of older workers.

Other directions for future research include the consideration of longitudinal data. We focused here on the determinants of underemployment among older workers for a single cross-section of time. However, longitudinal research on elder underemployment would allow researchers to tease out the factors that cause elders to slip into underemployment and, once underemployed, the factors that aid them in regaining adequate employment. Research using panel data would also provide insight into the duration of spells of elder underemployment. More broadly, the realities of an aging society call for researchers to devote greater attention to the labor market challenges particular to older workers and to provide information upon which public policy can be devised to ameliorate such challenges.

Crafting policies aimed at supporting the work efforts of older people and alleviating employment hardship among them is increasingly in the public interest, especially given the exceptional size of the aging baby boom cohort. In an era when people are living longer than ever before, dated ideas about what constitutes working age must be reevaluated. On an individual level, older people continue to work due to both lifestyle preferences and economic necessity. The latter reason is especially salient as workers are being forced to assume more of the risk associated with their pension plans and health care costs are continuing to rise. Furthermore, it is difficult to believe that imminent reforms to the nation's largest entitlement programs for older Americans (i.e., Social Security and Medicare) will not call for increasing the age at which individuals become eligible for such benefits, thus requiring that greater numbers of Americans continue to work at older ages. On an organizational level, firms will need to develop strategies for retaining and retraining older workers, or else they will face severe labor shortages. And on a macrolevel, both in terms of lost productivity and tax revenue, society pays an increasing price for the underutilization of older workers. In sum, the demographic and political realities of an aging society demand that greater attention be paid to the unique circumstances of older workers.

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REFERENCES

- AARP. (2005). *The business case for workers age 50+: Planning for tomorrow's needs in today's competitive environment*. Washington, DC: AARP Knowledge Management.
- Bianchi, S. M. (1999). Feminization and juvenilization of poverty: Trends, relative risks, causes, and consequences. *Annual Review of Sociology*, 25, 307–333.

- Clogg, C. C. (1979). *Measuring underemployment: Demographic indicators for the United States*. New York: Academic Press.
- Clogg, C. C., Petkova, E., & Haritou, A. (1995). Statistical methods for comparing regression coefficients between models. *American Journal of Sociology*, 100, 1261–1293.
- Clogg, C. C., & Sullivan, T. A. (1983). Demographic composition of underemployment trends, 1969–1980. *Social Indicators Research*, 12, 117–152.
- Dorfman, L. T. (1998). Economic status, work, and retirement among the rural elderly. In R. T. Coward & J. A. Krout (Eds.), *Aging in rural settings: Life circumstances and distinctive features* (pp. 47–66). New York: Springer.
- Economic Research Service. (2007). *Measuring rurality*. Retrieved April 25, 2007, from <http://www.ers.usda.gov/Briefing/Rurality/>
- Glasgow, N., Holden, K. C., McLaughlin, D. K., & Rowles, G. D. (1993). The rural elderly and poverty. In Rural Sociological Society Task Force on Persistent Poverty (Ed.), *Persistent poverty in rural America* (pp. 259–291). Boulder, CO: Westview Press.
- Hauser, P. M. (1974). The measurement of labor utilization. *Malayan Economic Review*, 19, 1–17.
- He, W., Sengupta, M., Velkoff, V. A., & DeBarros, K. A. (2005). 65+ in the United States: 2005. *Current Population Reports: Special Studies*. Washington, DC: U. S. Census Bureau.
- Hungerford, T., Rasette, M., Iams, H., & Koenig, M. (2001). Trends in the economic status of the elderly, 1976–2000. *Social Security Bulletin*, 64, 12–22.
- Jensen, L., Findeis, J. L., Hsu, W. L., & Schachter, J. P. (1999). Slipping into and out of underemployment: Another disadvantage for non-metropolitan workers? *Rural Sociology*, 64, 417–438.
- Jensen, L., & McLaughlin, D. K. (1997). The escape from poverty among rural and urban elders. *The Gerontologist*, 37, 462–468.
- Jensen, L., & Slack, T. (2003). Underemployment in America: Measurement and evidence. *American Journal of Community Psychology*, 32, 21–31.
- Lichter, D. T., & Costanzo, J. A. (1987). Nonmetropolitan underemployment and labor force composition. *Rural Sociology*, 52, 329–344.
- McLaughlin, D. K., & Holden, K. C. (1993). Nonmetropolitan elderly women: A portrait of economic vulnerability. *Journal of Applied Gerontology*, 12, 320–334.
- McLaughlin, D. K., & Jensen, L. (1993). Poverty among older Americans: The plight of nonmetropolitan elders. *Journal of Gerontology: Social Sciences*, 48, S44–S54.
- McLaughlin, D. K., & Jensen, L. (1995). Becoming poor: The experiences of elders. *Rural Sociology*, 60, 202–223.
- McLaughlin, D. K., & Jensen, L. (2000). Work history and U.S. elders' transitions into poverty. *The Gerontologist*, 40, 469–479.
- Paternoster, R., Brame, R., Mazerolle, P., & Piquero, A. (1998). Using the correct statistical test for the equality of regression coefficients. *Criminology*, 3, 859–866.
- Quadagno, J., & Hardy, M. (1996). Work and retirement. In R. H. Binstock & L. K. George (Eds.), *Handbook of aging and the social sciences* (pp. 325–345). San Diego, CA: Academic Press.
- Rank, M. R., & Hirschl, T. A. (1999). Estimating the proportion of Americans ever experiencing poverty during their elder years. *Journal of Gerontology: Social Sciences*, 54B, S184–S193.
- Rife, J. C. (1995). *Employment of the elderly: An annotated bibliography*. Westport, CT: Greenwood Press.
- Ruhm, C. (1989). Why older Americans stop working. *The Gerontologist*, 29, 294–300.
- Slack, T., & Jensen, L. (2002). Race, ethnicity, and underemployment in non-metropolitan America: A 30-year profile. *Rural Sociology*, 67, 208–233.
- Slack, T., & Jensen, L. (2004). Employment adequacy in extractive industries: An analysis of underemployment, 1974–1998. *Society and Natural Resources*, 17, 129–146.
- Slack, T., & Jensen, L. (2007). Underemployment across Immigrant Generations. *Social Science Research*, 36, 1415–1430.
- Slack, T., & Jensen, L. (in press). Birth and fortune revisited: A cohort analysis of underemployment, 1974–2004. *Population Research and Policy Review*.
- Sullivan, T. A. (1978). *Marginal workers, marginal jobs: Underutilization of the U. S. work force*. Austin: University of Texas Press.

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