



Hard Work?

Patterns in Physically Demanding Labor Among Older Workers

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About the Author

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Executive Summary

Employment in physically demanding jobs or in jobs with difficult working conditions is a major cause of early labor-market exit among older workers. Raising the retirement age is particularly concerning for near-retirement age workers with such jobs. Despite the fact that the retirement age increase is supposed to encourage workers to work longer, many workers would be physically unable to extend work lives in their jobs, and they would most likely be left with no choice but to receive reduced benefits.

An analysis of the Current Population Survey (CPS) and Occupational Information Network (O*NET) shows that in 2009 6.5 million workers age 58 and older (about 35 percent) had physically demanding jobs, while 5.0 million workers age 58 and older (about 27 percent) had jobs with difficult working conditions. More than 8.5 million workers age 58 and older (about 45 percent) were employed in difficult jobs (physically demanding jobs or jobs with difficult working conditions).

Physically demanding jobs include general physical activities, handling and moving objects, spending significant time standing, or having any highly physically demanding work. Highly physically demanding jobs involve such elements as dynamic or trunk strength, or kneeling or crouching. Difficult working conditions include cramped workspace, labor outdoors, or exposure to abnormal temperatures, contaminants, hazardous equipment, or distracting or uncomfortable noise.

An increase in the retirement age or other cuts in Social Security benefits are also likely to put a greater burden on demographic groups that have higher proportions of workers in difficult jobs. In particular, in 2009, physically demanding jobs and jobs that had difficult working conditions were more likely to be held by men, Latinos, the least educated (less than a high school diploma), immigrants, and the lowest wage earners.

Other findings include that in 2009:

- 37 percent of male workers age 58 and older had jobs that involved any general physical demand, compared to 32.2 percent of female workers age 58 and older.
- Out of 1.4 million Latino workers age 58 and older, about 54 percent had physically demanding jobs. Latino men had the largest share (62.4 percent) of older workers in physically demanding jobs.
- Among those age 58 and older, difficult jobs were held by 62.4 percent of Latino workers, 53.2 percent of black workers, 50.5 percent of Asian Pacific American workers, and 42.6 percent of white workers.
- Older workers with less than a high school diploma had the highest share of workers (77.2 percent) in difficult jobs. Those with an advanced degree had the lowest share of workers (22 percent) in difficult jobs.
- Immigrant workers age 58 and older were more likely (47.5 percent) than non-immigrant workers (33 percent) to have physically demanding jobs. Nearly 56 percent had difficult jobs.
- 56.4 percent of older workers in the bottom wage quintile had physically demanding jobs compared to only about 17 percent of those in the top quintile.
- 63.3 percent of older workers in the bottom wage quintile had difficult jobs compared to only about 25 percent of those in the top quintile.

Introduction

Legislators have recently expressed support for raising the normal retirement age (NRA) to as high as 70. Under current law, the normal retirement age – the age at which full retirement benefits are payable – is already scheduled to increase from 66 to 67 in two-month increments from 2017 to 2022. The current law was enacted in 1983 as a part of the Greenspan Commission’s efforts to improve Social Security’s solvency. A proposal for a further retirement age increase is one possible recommendation from President Obama’s Fiscal Commission, which is expected to issue a report in December.

Proponents of the retirement age increase often suggest that Americans now have higher life expectancies and are in better health than those of previous generations. The growth in average life expectancy, however, is mostly due to declines in child and teen mortality, and hence leads the workers to have longer working lives.¹ Furthermore, the longevity growth is disproportionately distributed across different socioeconomic groups.²

Raising the retirement age has important implications on more vulnerable populations, such as low-wage earners, less educated workers, and those in poor health or in physically strenuous jobs. Studies have found that such groups of workers are more likely to claim benefits at the early entitlement age (EEA) of 62.³ Other studies have found that lower-income retirees would be hit the hardest by the benefit reductions from raising the normal retirement age.⁴ Many workers would have to work longer to offset the impact of these benefit cuts – this would be particularly difficult for workers in physically strenuous jobs. For older workers, finding a new, less physically demanding job before retirement is becoming increasingly difficult, as they are more likely to face age discrimination and shortcomings in job training than in the past.⁵

This paper focuses on retirement and near-retirement age workers in physically demanding jobs or in jobs with difficult working conditions based on the evidence that employment in these jobs is strongly associated with early labor-market exit.⁶ Despite changing employment patterns in the twenty-first century,⁷ the findings of this paper show that in 2009, a significant share (45.3 percent)

1 See Rosnick (2010).

2 For further discussion on life expectancy, see Congressional Budget Office (April 2008), Morrissey and Garr (2009), and Rosnick (2010).

3 See Li, Hurd, and Loughran (2008) and Kingson and Brown (2009) for detailed analyses on the correlation between early retirement age and socioeconomic factors, such as education, health status, type of jobs held, income, and economic well-being.

4 Mermin and Steuerle (2006) find that while raising the retirement age may reduce benefits for high-income group at a larger rate than low-income group, it would push nearly 1.5 million people into poverty by 2050. For details on the impact of raising the retirement age for different income groups, see Baker and Rosnick (2010).

5 According to the Equal Employment Opportunity Commission, there has been a sharp increase (17 percent) in the age discrimination cases filed since the beginning of the recession. See <http://www.eeoc.gov/eeoc/statistics/enforcement/adea.cfm>; See also Frazis, Gittleman, Joyce (2000).

6 Holden (1988) suggests that workers in physically demanding jobs are more likely to either discontinue working past benefit-receipt or change jobs a few years prior to retirement. Filer and Petri (1988) find that workers are more likely to retire early if they are employed in difficult jobs that require intense physical demand or stress. See also Li, Hurd, and Loughran (2008).

7 Johnson, Mermin, and Resseger (2007) analyze and compare historical changes in work trends. They note that despite the long-term decline in the share of workers in physically demanding jobs, there has been a growth in stressful and cognitively challenging jobs.

of older workers was still in physically demanding jobs or in jobs that had difficult working conditions. Overall, physically demanding jobs and jobs that had difficult working conditions were more likely to be held by men, Latinos, the least educated (less than a high school diploma), immigrants, and the lowest wage earners.

Data and Definitions

There are a variety of ways in which researchers have defined physically demanding work in the past. Depending on worker perspectives, the term “physical demand” may be subject to different interpretations. This paper specifically applies definitions used by Johnson, Mermin, and Resseger (2007) and extends their methodology in analyzing older worker characteristics.

Johnson, Mermin, and Resseger use the comprehensive occupational data available from the Occupational Information Network (O*NET) database by the US Department of Labor/Employment and Training Administration (USDOL/ETA).⁸ The O*NET database provides useful information on worker and job characteristics as well as occupational requirements for more than 800 jobs analyzed. This paper uses the latest O*NET database (O*NET 14.0) available as of June 2010.

Selected job characteristics from O*NET are used to define jobs that are physically demanding or have difficult working conditions.⁹ Jobs are considered to be highly physically demanding if they involve any of the following elements: dynamic strength, explosive strength, static strength, trunk strength, bending or twisting, kneeling or crouching, quick reaction time, or gross body equilibrium. In addition to these measures, if jobs involve performing more general physical activities, handling and moving objects, or demand workers to spend significant time standing, walking and running, or making repetitive motions, they are considered as having any physical demand. Difficult working conditions are defined as cramped workspace, labor outdoors (exposed to the weather or covered) or indoors in not environment-controlled conditions, or exposure to abnormal temperatures, contaminants, hazardous conditions, hazardous equipment, or distracting or uncomfortable noise.

The O*NET-based job characteristics data are then used in conjunction with the data from the 2009 Outgoing Rotation Group (ORG) of the Current Population Survey. Released by the Census Bureau every month, CPS ORG includes detailed information about respondents’ demographics (such as age, gender, education level, and occupation) and earnings data. Using the procedures adapted from Johnson, Mermin, and Resseger, the O*NET job attribute data are merged with 2009 CPS ORG for an accurate overview of the labor-market participation of older workers in 2009.¹⁰

8 O*NET database had replaced Dictionary of Occupational Titles (DOT) in the early 1990s. Prior to O*NET, DOT provided information on occupational demands and was used by researchers to determine physically demanding jobs following the 1983 Social Security amendments. See US SSA (1986) and Holden (1988). The O*NET database is available for download at <http://www.onetcenter.org/database.html>.

9 O*NET uses nearly 300 standardized measures (or job descriptors) to describe each job analyzed. The job descriptors are developed and rated by occupational analysts, experts, and job incumbents, on the scale of one to five in the order of importance. A job is considered to require physical demand or difficult working conditions if any of the selected job descriptors has a score of four or more for each job attribute. See Johnson, Mermin, and Resseger (2007), pp. 5-7.

10 There are a number of differences between the O*NET-CPS matching procedure used in Johnson, Mermin, and Resseger (2007) and this paper. First, this paper uses the 2009 Current Population Survey Outgoing Rotation Group

This allows us to explore the demographic composition of jobs that are physically demanding or have difficult working conditions in 2009 by age, race/ethnicity, education level, immigrant status, and wage quintile. For each demographic group, and for four age subgroups within each group (age cohorts of 58-61, 62-65, 66-69, and 70 and older), participation in the physical labor market is examined more thoroughly. Four specific age groups were chosen to examine the labor market of near-retirees (ages 58-61), early retirement benefit eligibles (ages 62-65), full retirement benefit eligibles and potential future early benefit eligibles if the NRA were extended to 70 (ages 66-69), and those who would not likely be as directly affected by the proposed retirement age change (age 70 and older).

Are Older Workers Still in Physically Demanding Jobs?

For workers above age 58, employment rates decline sharply with age. Compared to a 61.3 percent employment rate among those between the ages of 58-61, only 43.8 percent of older workers between the ages of 62-65 – the ages at which early retirement benefits are paid – were employed in 2009. A lower share of those eligible for full retirement benefits were employed in 2009: 26.9 percent for those ages 66-69 and 10.3 percent of those age 70 and older (see **Table 1**). Despite the steep decline in the employment rate of older age groups, the share of older workers in physically demanding jobs differs minimally.

Table 1 and **Figure 1** provide a general overview of older workers in occupations that were physically demanding or had difficult working conditions in 2009. Out of 18.8 million workers age 58 and older, nearly 35 percent (that is, about 6.5 million) were in physically demanding jobs in 2009, about 5 percent of which required high physical demand. The pattern was fairly consistent across all age groups (about 34-36 percent of workers in physically demanding jobs; and about 5-6 percent of workers in highly physically demanding jobs). In addition, more than a quarter of workers age 58 and older (about 25-30 percent) were exposed to difficult work conditions.

More importantly, a large share of older workers (45.3 percent) held jobs that either required general physical effort or difficult working conditions in 2009. This also applies to the age groups eligible for full retirement benefits. Workers over 70 years old had the largest share of workers (48.2 percent) employed in physically or environmentally uncomfortable or unsafe occupations.

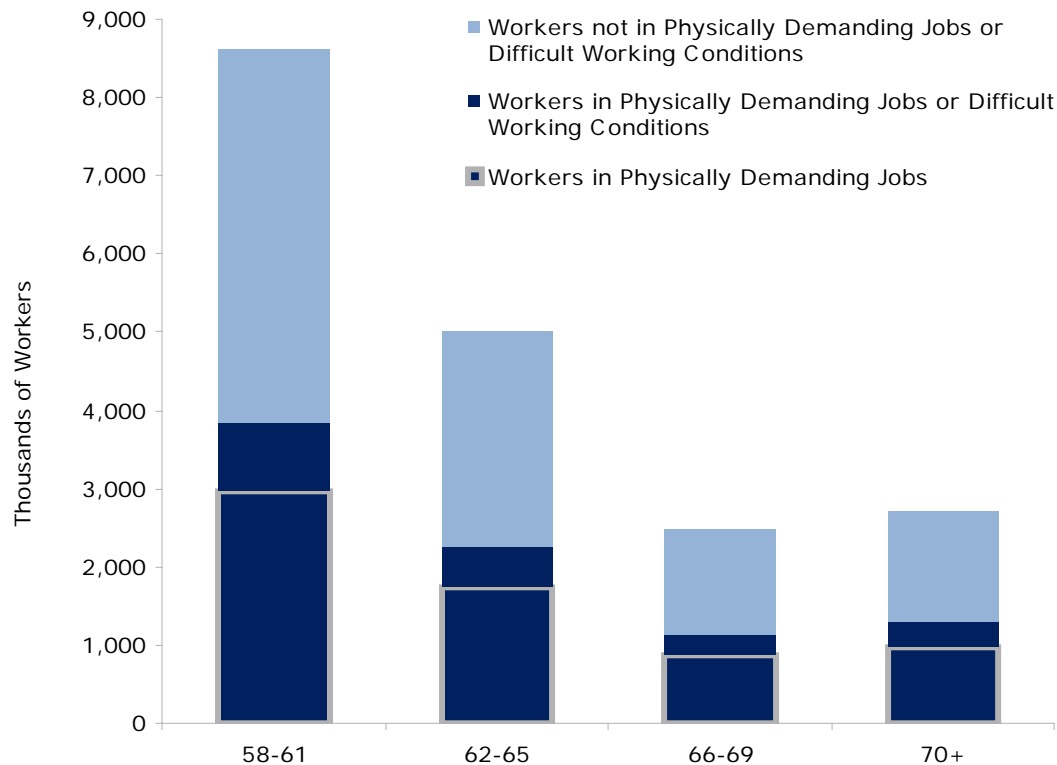
(ORG) instead of the 2006 CPS March Supplement. CPS ORG is useful in analyzing earnings data and has a bigger sample size. Second, this paper uses the latest O*NET database (O*NET 14.0) available as of June 2010 (O*NET adds new jobs information and updates their ratings every year). Third, minor changes were made in the programming for the match. In most cases, O*NET and CPS data were directly matched; in minority of cases where O*NET had more detailed jobs data than in the CPS, the matches were made using random assignment. During this procedure, we created a smaller, multiple-stage match to incorporate all the differences in data coming from O*NET 14.0 and CPS ORG. The program is available upon request. Despite the differences, the patterns represented by our data share close similarities to those of Johnson, Mermin, and Resseger. For example, using our programs and applying them to 2006 March Supplement, we find that almost 44 percent of all workers had physically demanding jobs, and 29.8 percent had difficult working conditions in 2006. Johnson, Mermin, and Resseger (2007) find that 46 percent of all workers had physically demanding jobs, and 24.8 percent had difficult working conditions in 2006.

TABLE 1
Workers in Physically Demanding Jobs or Difficult Working Conditions in 2009, Ages 58+

	Number of Workers (thousands)	Physical Demand (PD)		Difficult Working Conditions (DWC)	Difficult Job (PD or DWC)	Employment Rate
		Any	High			
All (58+)	18,799	34.8	5.1	26.8	45.3	30.9
58-61	8,617	34.4	5.0	26.5	44.5	61.3
62-65	5,011	34.7	4.9	25.6	44.8	43.8
66-69	2,470	35.2	5.8	27.1	45.8	26.9
70+	2,701	35.8	5.4	29.5	48.2	10.3

Sources: Author’s analysis of the latest Occupational Information Network (O*NET 14.0) and CEPR extract of 2009 Current Population Survey Outgoing Rotation Group (CPS ORG) data.

FIGURE 1
Workers in Physically Demanding Jobs or Difficult Working Conditions in 2009, Ages 58+



Sources: Author’s analysis of O*NET 14.0 and CEPR extract of 2009 CPS ORG data.

Table 2 lists the top fifteen physically demanding jobs held by workers age 58 and older in 2009. Within the top fifteen physically demanding jobs, four (janitors and building cleaners, maids and housekeeping cleaners, carpenters, and grounds maintenance workers) are rated as highly physically demanding; eight (janitors and building cleaners, cashiers, driver/sales workers and truck drivers, cooks, laborers and freight, stock, and material movers, carpenters, grounds maintenance workers, and construction laborers) are considered as having difficult work conditions; and three (janitors and building cleaners, carpenters, and grounds maintenance workers) are considered as both requiring high physical effort and having difficult working conditions.

TABLE 2
Top Fifteen Physically Demanding Jobs Held by Workers in 2009, Ages 58+

Rank	Physically Demanding (PD) Occupations	PD		DWC	Share of workers (%)
		Any	High		
1	First-line supervisors/managers of retail sales workers	√			2.5
2	Retail salespersons	√			2.4
3	Janitors and building cleaners	√	√	√	2.1
4	Elementary and middle school teachers	√			2.0
5	Cashiers	√		√	1.3
6	Maids and housekeeping cleaners	√	√		1.0
7	Customer service representatives	√			0.8
8	Driver/sales workers and truck drivers	√		√	0.8
9	Cooks	√		√	0.8
10	Laborers and freight, stock, and material movers, hand	√		√	0.8
11	Stock clerks and order fillers	√			0.6
12	Carpenters	√	√	√	0.6
13	Grounds maintenance workers	√	√	√	0.6
14	Construction laborers	√		√	0.5
15	Food service managers	√			0.5
	<i>Rest of Occupations, Total</i>				17.1
	Total Share of Workers, Ages 58+, in Physically Demanding Occupations				34.8

Notes: PD refers to Physically Demanding; DWC refers to Difficult Working Conditions.

Sources: Author's analysis of O*NET 14.0 and CEPR extract of 2009 CPS ORG data.

Demographic Composition of Workers in Physically Demanding Jobs

Table 3 presents overall demographic information of workers age 58 and older who had difficult jobs (physically demanding jobs or jobs with difficult working conditions) in 2009. A large proportion of difficult jobs were concentrated among male (62.7 percent), white (74.8 percent), less educated (51.3 percent), or low-wage (51.6 percent) workers. Immigrant workers constituted almost 15 percent of all workers with difficult jobs, and 23.4 percent of all workers with highly physically demanding jobs.

TABLE 3
Distribution of Physically Demanding Jobs or Difficult Working Conditions Held by Older Workers in 2009, Ages 58+

	Physical Demand (PD)		Difficult Working Conditions (DWC)	Difficult Job (PD or DWC)
	Any	High		
Total (thousands)	6,540	961	5,036	8,510
Gender				
Men	56.7	62.4	76.0	62.7
Women	43.3	37.6	24.0	37.3
Race/Ethnicity				
White	72.4	60.9	74.0	74.8
Black	10.2	15.8	10.0	9.6
Hispanic	11.5	17.8	11.5	10.2
Asian	5.2	4.6	3.7	4.6
Other	0.8	1.0	0.9	0.8
Education				
Less than high	14.4	21.2	16.5	13.6
High school	37.9	42.0	41.1	37.7
Some college	24.5	23.9	25.8	25.4
College	14.9	9.6	11.7	15.1
Advanced	8.3	3.3	5.0	8.2
Immigrants	16.6	23.4	15.3	14.9
Wage Quintile				
Bottom	30.6	34.4	26.0	27.9
Second	25.0	26.9	23.4	23.7
Middle	19.5	17.7	20.9	20.1
Fourth	15.7	14.6	19.2	17.4
Top	9.2	6.5	10.6	10.9

Sources: Author's analysis of O*NET 14.0 and CEPR extract of 2009 CPS ORG data.

The subsequent sections below examine detailed labor-market situations of older workers in selected demographic groups, by gender, race/ethnicity, education level, immigrant status, and wage quintile. The analyses look at four age groups (58-61, 62-65, 66-69, 70 or older) and their participation in each category of difficult jobs.

Gender

Table 4 shows that in 2009, 37 percent of male workers age 58 and older had jobs that involved any general physical demand, compared to 32.2 percent of female workers age 58 and older. Over half (53.3 percent) of male workers age 58 and older worked in difficult jobs, compared to 36.1 percent of female workers.

For men, a smaller share of workers in the oldest age group was in physically demanding jobs (34.7 percent) than in the youngest age group (38.3 percent). For women, a greater share of workers in the oldest age group was in physically demanding jobs (37.2 percent) than in the lowest age group (30.2 percent). A similar pattern can be observed for highly physically demanding jobs; for jobs with difficult working conditions, the male worker share remained fairly consistent across all age groups

(about 37 to 39 percent), while the female worker share was the largest for the age group of 70 or older (17.6 percent¹¹).

TABLE 4
Workers in Physically Demanding Jobs or Difficult Working Conditions in 2009, Ages 58+, by Gender

	Number of Workers (thousands)	Physical Demand (PD)		Difficult Work Conditions (DWC)	Difficult Job (PD or DWC)
		Any	High		
Men					
All	10,012	37.0	6.0	38.2	53.3
58-61	4,521	38.3	6.0	38.9	54.0
62-65	2,662	36.9	5.8	36.5	52.5
66-69	1,341	35.8	6.5	38.3	52.3
70+	1,488	34.7	5.8	39.1	53.4
Women					
All	8,787	32.2	4.1	13.8	36.1
58-61	4,096	30.2	3.8	12.8	34.0
62-65	2,349	32.1	3.9	13.3	36.0
66-69	1,129	34.4	4.9	13.9	38.1
70+	1,213	37.2	4.8	17.6	41.8

Sources: Author's analysis of O*NET 14.0 and CEPR extract of 2009 CPS ORG data.

Table 5 below lists the top fifteen physically demanding occupations held by male or female workers age 58 and older. While many men worked as construction laborers, freight, stock, and material movers, grounds maintenance workers, or taxi or bus drivers, many women worked as cashiers, maids and housekeeping cleaners, cooks, hairstylists, nursing aids, or medical assistants.

11 17.6 percent of female workers of age 70 or older amount to only about 5,000 workers. Due to its small sample size, it is rather difficult to reach an accurate conclusion based on this number.

TABLE 5
Top Fifteen Physically Demanding Occupations Held by Older Workers in 2009, Ages 58+, by Gender

Rank	Physically Demanding (PD) Occupations	PD		DWC	Share of workers (%)
		Any	High		
<i>Men</i>					
1	Janitors and building cleaners	√	√	√	2.9
2	First-line supervisors/managers of retail sales workers	√			2.7
3	Retail salespersons	√			2.1
4	Driver/sales workers and truck drivers	√		√	1.5
5	Carpenters	√			1.2
6	Laborers and freight, stock, and material movers, hand	√		√	1.1
7	Grounds maintenance workers	√	√	√	1.1
8	Construction laborers	√		√	1.0
9	Elementary and middle school teachers	√			0.9
10	Taxi drivers and chauffeurs	√	√		0.8
11	Electricians	√			0.8
12	Security guards and gaming surveillance officers	√			0.7
13	Maintenance and repair workers, general	√			0.7
14	Automotive service technicians and mechanics	√	√		0.6
15	Bus drivers	√	√		0.6
	<i>Below Top-15 Occupations, Total</i>				18.2
	Total Share of Male Older Workers in Physically Demanding Occupations				37.0
<i>Women</i>					
1	Elementary and middle school teachers	√			3.4
2	Retail salespersons	√			2.7
3	First-line supervisors/managers of retail sales workers	√			2.2
4	Cashiers	√		√	2.2
5	Maids and housekeeping cleaners	√	√		2.0
6	Customer service representatives	√			1.3
7	Janitors and building cleaners	√	√	√	1.2
8	Cooks	√		√	1.2
9	Hairdressers, hairstylists, and cosmetologists	√		√	1.0
10	Nursing, psychiatric, and home health aids	√	√		0.9
11	Stock clerks and order fillers	√			0.7
12	Medical assistants and other healthcare support occupations	√		√	0.6
13	Secondary school teachers	√			0.6
14	Food service managers	√			0.5
15	Waiters and waitresses	√			0.5
	<i>Below Top-15 Occupations, Total</i>				11.4
	Total Share of Female Older Workers in Physically Demanding Occupations				32.3

Sources: Author's analysis of O*NET 14.0 and CEPR extract of 2009 CPS ORG data.

Race/Ethnicity

Table 6 shows that the proportion of difficult jobs held by older workers also vary by race and ethnicity. Latino workers across all age groups had the highest share in physically demanding jobs. Out of 1.4 million Latino workers age 58 and older, 54.3 percent had physically demanding jobs, 12.3 percent of which were in heavily physically demanding jobs. Latino men had by far the largest share, 62.4 percent, of older workers in physically demanding jobs; and Latino women had a smaller share (43.6 percent, while still a high share compared to other racial/ethnic groups) of older workers in these jobs (see also **Figure 2**). While not shown in the table, the figures were even more striking for male Latino workers in physically demanding jobs or in jobs with difficult working conditions: 74.7 percent of male Latino workers (age 58 and older) had these jobs in 2009.

African American and Asian Pacific American (APA) workers also had fairly large shares of older workers in physically intensive jobs (43.3 percent for blacks; 44 percent for APAs). Interestingly, a greater share of physical jobs were held by white and black workers as they got older, while a slightly smaller share of physical jobs were held by Latino and Asian Pacific American workers as they aged. Similar differences can be observed in shares in difficult work conditions.

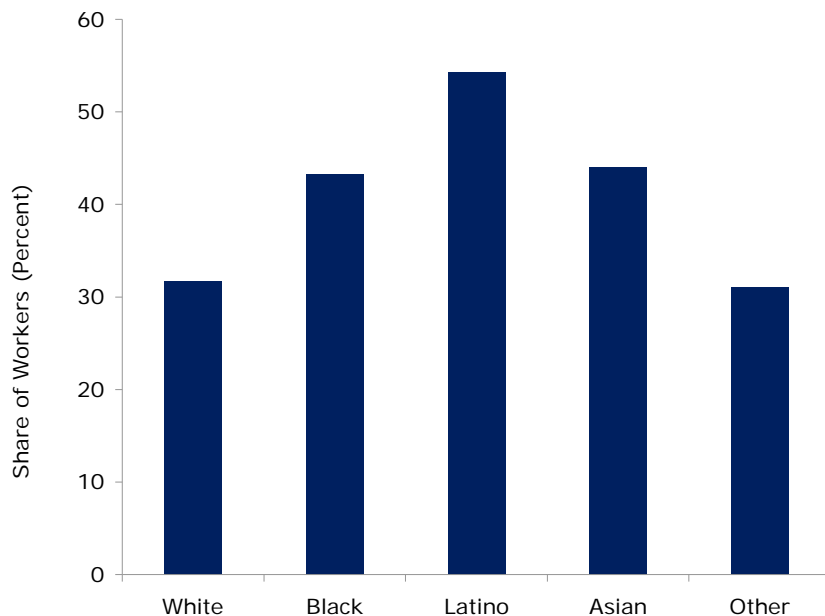
Gender differences within physically demanding jobs in each racial group stood out for Asian Pacific American Workers. Generally, the pattern has been that older male workers across racial groups had less participation in physically demanding jobs, while more older female workers were in the physical job market (This was true for white and Latino workers; for black workers, the proportion of male workers in physically demanding jobs stayed consistent across age groups). For APA workers, it is the exact opposite – a higher proportion of men had physically demanding jobs as they got older than women did. In both cases, however, there was a big drop in the share of workers doing physical labor for those ages 66-69, the ages during which full retirement benefits become available, when compared to younger age groups.

TABLE 6
Workers in Physically Demanding Jobs or Difficult Working Conditions in 2009, Ages 58+, by Race/Ethnicity

	Number of Workers (thousands)	Physical Demand (PD)				Difficult Work Conditions (DWC)	Difficult Job (PD or DWC)
		Any		High			
		All	Male			Female	
White							
All (58+)	14,940	31.7	33.0	30.1	3.9	24.9	42.6
58-61	6,719	31.2	34.0	28.0	3.7	24.3	41.6
62-65	4,021	31.4	32.7	30.0	3.6	23.8	42.0
66-69	1,992	32.1	32.4	31.8	4.6	25.7	43.5
70+	2,208	33.3	31.3	35.9	4.5	28.1	46.2
Black							
All (58+)	1,542	43.3	49.3	38.2	9.8	32.6	53.2
58-61	780	42.0	49.4	35.5	8.7	33.4	51.7
62-65	377	43.2	48.8	38.4	8.7	26.9	52.3
66-69	177	45.0	48.9	42.1	15.1	34.9	53.7
70+	208	46.8	50.4	44.0	11.6	38.1	59.7
Latino							
All (58+)	1,384	54.3	62.4	43.6	12.3	41.8	62.4
58-61	667	53.3	64.6	39.0	12.0	41.5	61.8
62-65	372	55.0	62.6	44.8	15.0	43.8	63.1
66-69	163	60.0	60.8	58.8	11.9	41.1	65.1
70+	182	51.2	55.2	46.1	8.4	39.4	60.7
APA							
All (58+)	765	44.0	47.1	40.6	5.7	24.2	50.5
58-61	368	44.8	45.6	43.9	5.9	25.2	52.0
62-65	201	46.4	52.2	39.4	6.5	25.2	51.8
66-69	111	38.3	41.2	33.7	3.4	19.5	45.7
70+	86	42.5	50.0	36.2	6.1	23.5	47.4
Other							
All (58+)	168	31.1	32.6	29.8	5.7	26.5	42.7
58-61	83	31.1	33.2	29.3	7.8	24.6	41.4
62-65	41	31.3	28.3	33.1	2.0	32.2	45.9
66-69	27	31.0	25.5	38.2	5.2	24.1	46.7
70+	17	30.5	51.7	12.2	5.6	25.9	34.6

Sources: Author's analysis of O*NET 14.0 and CEPR extract of 2009 CPS ORG data.

FIGURE 2
Share of Workers in Physically Demanding Jobs in 2009, Ages 58+, by Race/Ethnicity



Education

Table 7 presents findings by educational attainment level. The least educated workers age 58 and older had the highest share of workers (62.8 percent) in physically demanding jobs, while the most educated workers age 58 and older had the lowest share of workers (17 percent) in these jobs (see also **Figure 3**). The results were even more striking for workers in highly physical jobs – 13.6 percent of workers age 58 and older with less than a high school diploma held jobs involving intense use of body muscles and stamina, while only 1.0 percent of workers age 58 and older with an advanced degree held such jobs. Difficult jobs (either physically demanding jobs or jobs with difficult working conditions) were held by 77.2 percent of older workers with less than a high school diploma, and by 22 percent of older workers with an advanced degree.

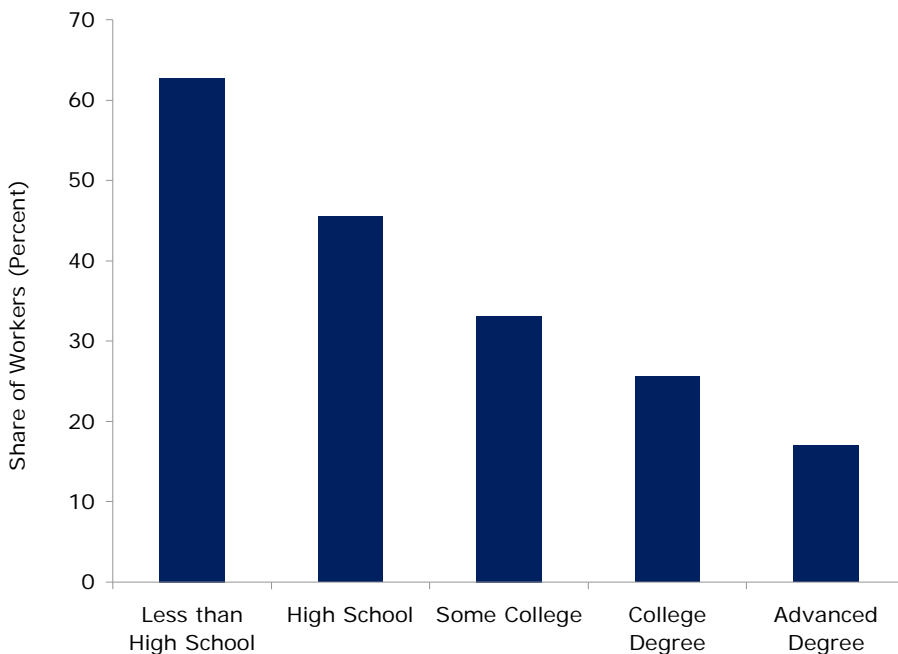
Workers in all educational levels, except those with some college or a college degree, were less likely to have difficult jobs as they got older. For example, 65.3 percent of workers ages 58-61 with less than a high school degree had physically demanding jobs, compared to 59.6 percent of workers over 70 years of age. For workers with a college degree, 25.6 percent of workers ages 58-61 had physically demanding jobs, compared to 28 percent of workers over 70 years of age. For the most educated group (those with an advanced degree), the share of workers in physically demanding jobs declined for both men and women.

TABLE 7
Workers in Physically Demanding Jobs or Difficult Working Conditions in 2009, Ages 58+, by Education

	Number of Workers (thousands)	Physical Demand (PD)				Difficult Work Conditions (DWC)	Difficult Job (PD or DWC)
		Any		High			
		All	Male			Female	
Less than High School							
All (58+)	1,497	62.8	64.5	60.3	13.6	55.5	77.2
58-61	567	65.3	68.6	60.0	14.6	61.4	80.3
62-65	385	63.1	67.7	57.0	12.3	52.5	76.5
66-69	223	60.3	57.7	64.0	13.9	50.4	72.6
70+	322	59.6	57.8	62.1	13.4	52.1	75.9
High School							
All (58+)	5,452	45.5	51.1	40.4	7.4	37.9	58.9
58-61	2,414	45.6	53.5	38.6	7.5	38.5	58.3
62-65	1,404	46.0	51.8	40.6	7.5	37.4	59.6
66-69	776	46.2	50.4	42.2	7.9	37.1	59.6
70+	859	43.6	43.6	43.5	6.6	38.0	58.7
Some College							
All (58+)	4,849	33.1	40.6	25.6	4.7	26.8	44.5
58-61	2,364	33.6	43.2	23.6	4.6	27.2	44.6
62-65	1,302	31.6	37.0	26.6	4.9	25.8	43.2
66-69	601	33.1	39.7	27.1	5.4	26.5	44.3
70+	582	34.3	38.8	29.8	4.4	27.8	47.3
College Degree							
All (58+)	3,820	25.6	26.3	24.6	2.4	15.4	33.6
58-61	1,858	24.4	24.6	24.2	2.5	14.7	32.5
62-65	1,033	25.8	28.5	22.1	2.3	15.1	33.1
66-69	429	27.2	26.5	28.2	2.1	13.8	34.2
70+	499	28.0	27.6	28.8	2.8	19.7	38.2
Advanced Degree							
All (58+)	3,181	17.0	13.5	22.6	1.0	7.8	22.0
58-61	1,414	17.5	13.6	22.8	0.6	6.5	22.0
62-65	887	19.4	15.4	26.0	0.9	7.2	23.4
66-69	441	13.7	11.5	17.6	1.9	11.6	21.3
70+	438	13.8	11.8	18.6	1.3	9.6	19.8

Sources: Author's analysis of O*NET 14.0 and CEPR extract of 2009 CPS ORG data.

FIGURE 3
Share of Workers in Physically Demanding Jobs in 2009, Ages 58+, by Education



Immigration Status

Physically demanding jobs were more often held by immigrant workers than US-born workers in 2009. As **Table 8** shows, 47.5 percent of immigrant workers age 58 and older had physically demanding jobs, while 33.8 percent of these workers worked under difficult conditions. For US-born workers, the figures were relatively low – 33 percent of workers age 58 and older had physically demanding jobs, while 25.8 percent of them worked under difficult conditions. Both male and female immigrant workers were less likely to work in physical jobs as they got older; for non-immigrants, only the male workers had decreased participation in the physical job market.

For immigrant workers, there was more than a 5 percentage-point drop in the share of workers ages 66-69 in physical or difficult jobs (56.6 percent for workers ages 62-65; 51.2 percent for those ages 66-69). This implies that many workers in these jobs chose to retire as soon as full retirement benefits were made available.

TABLE 8
Workers in Physically Demanding Jobs or Difficult Working Conditions in 2009, Ages 58+, by Immigrant Status

	Number of Workers (thousands)	Physical Demand (PD)				Difficult Work Conditions (DWC)	Difficult Job (PD or DWC)
		Any			High		
		All	Male	Female			
Immigrant							
All (58+)	2,282	47.5	52.2	41.8	9.8	33.8	55.7
58-61	1,086	47.8	53.0	28.6	10.1	35.0	56.8
62-65	607	48.9	53.7	30.7	10.6	34.1	56.6
66-69	302	44.5	50.0	34.1	9.4	30.5	51.2
70+	287	46.2	48.2	36.4	8.0	32.2	54.0
Non-immigrant							
All (58+)	16,517	33.0	34.9	31.0	4.5	25.8	43.8
58-61	7,531	32.5	36.1	41.9	4.2	25.3	42.7
62-65	4,405	32.7	34.5	42.9	4.2	24.4	43.1
66-69	2,168	33.9	33.7	36.9	5.2	26.6	45.1
70+	2,414	34.5	33.0	43.8	5.1	29.2	47.5

Sources: Author's analysis of O*NET 14.0 and CEPR extract of 2009 CPS ORG data.

Wage Quintile

Table 9 displays the main findings for older workers in each of the five wage quintiles.¹² This table uses only the subset of employees – that is, it excludes the self-employed, who do not report wages in CPS Outgoing Rotation Group.

In the bottom quintile, 56.4 percent of workers age 58 and older had physically demanding jobs in 2009. In the middle quintile, about 36 percent had physically demanding jobs; in the top quintile, only about 17 percent of older workers had physically demanding jobs (see also **Figure 4**).

In the bottom quintile, the data show that a larger share of workers had physically demanding jobs in the age groups of 62-65 and 66-99 than in other age groups. This was mainly due to the rise in the share of female workers in these age groups in physical labor. There was a steep decline in the share of lowest-paid men in the age groups of 62-65 (the ages at which workers become eligible for reduced retirement benefits), 66-69 (the ages at which workers can receive full retirement benefits under the current law), and for those over the age of 70 (the age at which workers might start collecting full retirement benefits with a further retirement age increase). Compared to about 63 percent of 58-61 year old men in physical labor, only about 47 percent of those age 70 and older were in physical labor.

In the top quintile, only about 17 percent of older workers were in physically demanding jobs. Only a tiny fraction – 1.8 percent – of the highest-paid workers had highly physically demanding jobs, and 13.5 percent of these workers worked in difficult working conditions.

Across all wage groups, there was a significant share of older workers in jobs with physical demands or difficult work conditions: in the bottom quintile, 63.3 percent of older workers were in such

¹² Wage quintile is calculated using hourly wage information available through CEPR extract of CPS ORG..

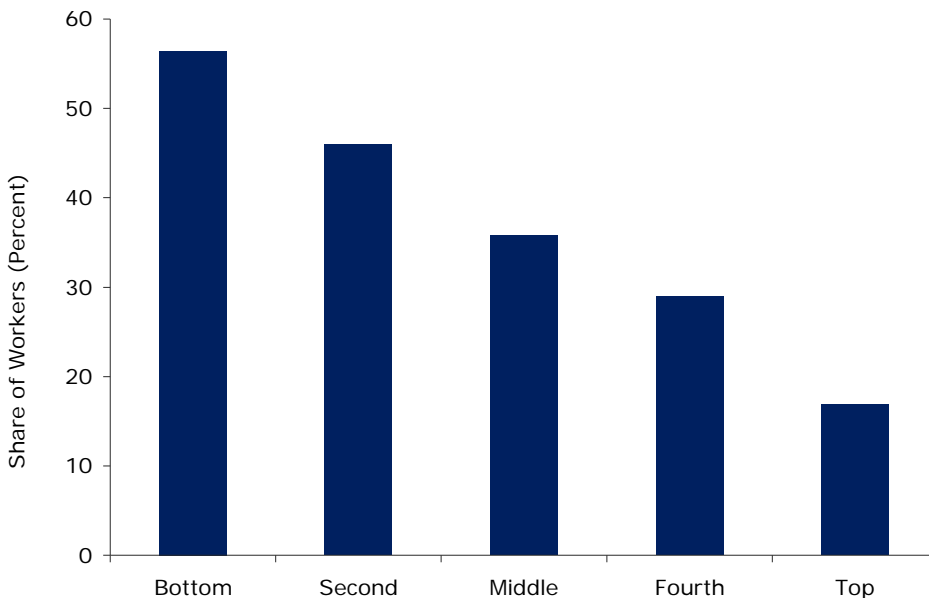
difficult jobs; in the middle quintile, 45.6 percent; and, in the top quintile, 24.7 percent had such jobs.

TABLE 9
Workers in Physically Demanding Jobs or Difficult Work Conditions in 2009, Ages 58+, by Wage Quintile

	Number of Workers (thousands)	Physical Demand (PD)				Difficult Work Conditions (DWC)	Difficult Job (PD or DWC)
		All	Male	Female	High		
Bottom							
All (58+)	2,558	56.4	58.7	54.7	9.4	33.4	63.3
58-61	930	55.3	63.1	50.4	8.6	31.4	61.0
62-65	634	57.0	61.8	53.8	8.5	30.7	62.8
66-69	427	58.2	59.0	57.7	10.8	32.8	65.3
70+	567	54.8	47.3	59.6	8.7	36.9	63.4
Second							
All (58+)	2,844	46.0	56.9	38.1	7.2	29.8	53.4
58-61	1,218	40.7	54.3	31.2	5.6	29.5	49.9
62-65	760	44.7	56.5	36.6	7.8	27.6	52.2
66-69	403	52.7	56.3	49.6	10.7	35.3	60.1
70+	464	53.1	58.4	48.6	8.5	33.7	61.6
Middle							
All (58+)	2,881	35.8	46.9	26.7	4.9	27.0	45.6
58-61	1,443	34.5	46.5	23.6	4.7	28.1	45.1
62-65	771	38.0	45.3	32.1	4.5	25.9	47.5
66-69	360	39.4	47.8	31.5	6.6	28.4	47.4
70+	307	43.5	51.4	37.3	7.1	34.2	55.0
Fourth							
All (58+)	3,101	29.0	36.3	20.3	4.0	24.6	39.5
58-61	1,638	29.1	36.7	19.4	4.2	24.7	39.4
62-65	882	29.1	37.2	18.7	4.2	25.7	39.8
66-69	304	29.9	38.1	14.0	3.5	22.1	38.4
70+	277	30.0	36.4	22.6	6.0	26.9	40.0
Top							
All (58+)	3,535	16.9	17.8	15.1	1.8	13.5	24.7
58-61	1,945	16.9	16.7	17.2	2.0	14.4	25.4
62-65	961	16.5	17.7	11.0	1.2	11.9	23.9
66-69	340	15.3	17.6	21.2	1.6	11.9	22.8
70+	288	17.6	16.0	23.4	1.6	9.0	22.0

Sources: Author's analysis of O*NET 14.0 and CEPR extract of 2009 CPS ORG data.

FIGURE 4
Share of Workers in Physically Demanding Jobs in 2009, Ages 58+, by Wage Quintile



Conclusion

This paper shows that many older workers (6.5 million) were employed in physically demanding jobs in 2009. Furthermore, as many as 8.5 million workers were employed either in physically demanding jobs or in jobs that had difficult working conditions. Among the older workers, physically demanding jobs or jobs with difficult working conditions were most likely to be held by men, racial/ethnic minorities, immigrants, the less educated, or the less affluent. These findings suggest that raising Social Security's normal retirement age higher than already scheduled would place a greater burden on older workers in occupations that require physically demanding work, as they may not be able to continue to work in their jobs into their mid-to-late 60s. Due to the difficult demands and conditions of their jobs, many may have no other option but to leave the workforce before they hit the normal retirement age and receive reduced benefits.

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