



LABOR AND POPULATION

# Working Conditions in the United States

Results of the 2015 American Working  
Conditions Survey

Nicole Maestas, Harvard University; Kathleen J. Mullen, RAND Corporation;  
David Powell, RAND Corporation; Till von Wachter, University of California,  
Los Angeles; Jeffrey B. Wenger, RAND Corporation

For more information on this publication, visit [www.rand.org/t/RR2014](http://www.rand.org/t/RR2014)

Published by the RAND Corporation, Santa Monica, Calif.

© Copyright 2017 RAND Corporation

**RAND**® is a registered trademark.

#### Limited Print and Electronic Distribution Rights

This document and trademark(s) contained herein are protected by law. This representation of RAND intellectual property is provided for noncommercial use only. Unauthorized posting of this publication online is prohibited. Permission is given to duplicate this document for personal use only, as long as it is unaltered and complete. Permission is required from RAND to reproduce, or reuse in another form, any of its research documents for commercial use. For information on reprint and linking permissions, please visit [www.rand.org/pubs/permissions](http://www.rand.org/pubs/permissions).

The RAND Corporation is a research organization that develops solutions to public policy challenges to help make communities throughout the world safer and more secure, healthier and more prosperous. RAND is nonprofit, nonpartisan, and committed to the public interest.

RAND's publications do not necessarily reflect the opinions of its research clients and sponsors.

#### Support RAND

Make a tax-deductible charitable contribution at  
[www.rand.org/giving/contribute](http://www.rand.org/giving/contribute)

[www.rand.org](http://www.rand.org)

## Preface

---

This report introduces the American Working Conditions Survey (AWCS), a survey of individuals designed to collect detailed information on a broad range of working conditions in the American workplace. The AWCS was fielded on the RAND American Life Panel (ALP) in 2015. The ALP is a nationally representative (when weighted) sample of individuals residing in the United States who have agreed to participate in regular online surveys. The survey instrument used by the AWCS was closely harmonized with the European Working Conditions Survey, also fielded in 2015 across a representative sample of workers in 35 countries in Europe.

This report presents detailed findings about the prevalence and distribution of working conditions across the American workforce by age, gender, and education. These findings may be of interest to social scientists, policymakers, employers, and workers themselves.

We are grateful to the Alfred P. Sloan Foundation and the Social Security Administration, via the Michigan Retirement Research Center, for funding this work. This research was undertaken within RAND Labor and Population. RAND Labor and Population has built an international reputation for conducting objective, high-quality, empirical research to support and improve policies and organizations around the world. Its work focuses on children and families, demographic behavior, education and training, labor markets, social welfare policy, immigration, international development, financial decisionmaking, and issues related to aging and retirement with a common aim of understanding how policy and social and economic forces affect individual decisionmaking and human well-being.

For more information on RAND Labor and Population, contact

Unit Director  
RAND Labor and Population  
1776 Main Street, P.O. Box 2138  
Santa Monica, CA 90407-2138  
(310) 393-0411

or visit the Labor and Population homepage at [www.rand.org/labor](http://www.rand.org/labor).



# Contents

---

<b>Preface</b> .....	iii
<b>Figures and Tables</b> .....	vii
<b>Summary</b> .....	ix
<b>Acknowledgments</b> .....	xv
<b>Abbreviations</b> .....	xvii
CHAPTER ONE	
<b>Introduction</b> .....	1
The Need for Data on Working Conditions .....	1
Introducing the American Working Conditions Survey .....	1
Structure of the Report .....	2
CHAPTER TWO	
<b>Data and Methods</b> .....	3
CHAPTER THREE	
<b>Employment, Hours, Pay, and Benefits</b> .....	11
Labor Force Participation .....	11
Hours .....	14
Pay and Benefits .....	16
CHAPTER FOUR	
<b>Characteristics of Work</b> .....	21
The Timing and Location of Work .....	21
Physical and Social Risks in the Workplace .....	28
Social Support at Work .....	34
Work Intensity .....	36
Autonomy .....	40
Creativity .....	40
Training, Opportunities for Advancement, and Meaning .....	43
CHAPTER FIVE	
<b>Preferences over Working Conditions</b> .....	49
Desired and Actual Working Conditions Among the Employed .....	49
Different Preferences for Older and Younger Workers .....	51
Desired Working Conditions Differ for Older, Nonworking Individuals .....	53
Working Conditions Affect Job Satisfaction .....	55

CHAPTER SIX

<b>Summary and Extensions</b> .....	59
Summary of Main Findings .....	59
Upcoming Extensions of the AWCS Data .....	60
<b>References</b> .....	61

## Figures and Tables

---

### Figures

3.1.	Physical and Mental Ability to Work in Same Job in Five or Ten Years, by Age and Education .....	13
3.2.	Percentage Ever Retired, by Age and Employment Status .....	13
3.3.	Percentage Who Would Return to Paid Employment or Become Self-Employed in Future Depending on Right Opportunity, Overall and by Age .....	14
3.4.	Earnings Components from Main Job, by Education .....	18
4.1.	Frequent and Unpredictable Changes to Work Schedule, by Age and Education .....	25
4.2.	Difficulty Arranging for Time Off During Work Hours to Take Care of Personal or Family Matters, by Age and Education .....	27
4.3.	Poor Fit of Working Hours with Family and Social Commitments, by Age and Education .....	28
4.4.	Any Reported Abuse, Harassment, or Violence at Work, by Age, Gender, and Education .....	33
4.5.	Any Reported Abuse, Harassment, or Violence at Work, by Gender, Education, and Frequency of Dealing Directly with Customers .....	34
4.6.	Any Reported Abuse, Harassment, or Violence at Work, by Gender, Education, and Whether One Has a Supportive Boss .....	36
4.7.	Percentage Reporting Not Enough Time to Finish Work, by Age, Gender, and Education .....	38
4.8.	Occupation and Industry Differences in Intensity, Autonomy, Creativity, and Monotony .....	39
4.9.	Need for Training in Current Job, by Age and Education .....	44
4.10.	Percentage Reporting No Sources of Meaningful Work, by Age, Gender, and Education .....	48
5.1.	Percentage Satisfied or Very Satisfied with Working Conditions, by Age, Gender, and Education .....	56

### Tables

2.1.	Sample Size and Restrictions .....	4
2.2.	Cumulative Distribution of Survey Completion Date .....	5
2.3.	Sample Characteristics .....	6
2.4.	Unweighted Sample Sizes, by Age, Gender, and Education .....	9
2.5.	Unweighted Sample Sizes, All Workers, by Age, Gender, and Education .....	9

3.1.	Labor Force Status, by Age, Gender, and Education .....	12
3.2.	Employment and Hours, by Age, Gender, and Education.....	15
3.3.	Median Annual Earnings, by Age, Gender, and Education .....	17
3.4.	Employer Benefits Offered, by Age, Gender, and Education (Percentage).....	19
4.1.	Regularity of Work, by Age, Gender, and Education (Percentage) .....	22
4.2.	Freedom to Set Work Schedule, by Age, Gender, and Education (Percentage) .....	24
4.3.	Working in Free Time, by Age, Gender, and Education (Percentage) .....	26
4.4.	Physical Demands, by Age, Gender, and Education (Percentage) .....	29
4.5.	Physical Exposure Risks, by Age, Gender, and Education (Percentage) .....	31
4.6.	Abuse, Violence and Harassment, by Age, Gender, and Education (Percentage).....	32
4.7.	Social Support at Work, by Age and Gender (Percentage).....	35
4.8.	Intensity of Work, by Age, Gender, and Education (Percentage) .....	37
4.9.	Autonomy at Work, by Age, Gender, and Education (Percentage) .....	41
4.10.	Creative Work and Task Variation, by Age, Gender, and Education (Percentage).....	42
4.11.	Training and Prospects for Career Advancement, by Age, Gender, and Education (Percentage).....	45
4.12.	Meaningful Work, by Age, Gender, and Education (Percentage) .....	47
5.1.	Preferences for and Percentage Lacking Various Job Attributes.....	50
5.2.	Preferences for and Percentage Lacking Various Job Attributes, by Age.....	52
5.3.	Percentage Rating Job Attribute Essential or Very Important, by Age and Employment Status.....	54
5.4.	Effect of Working Conditions on Job Satisfaction (Regression Coefficients).....	57



## Summary

---

This report introduces the American Working Conditions Survey (AWCS), a survey of individuals designed to collect detailed information on a broad range of working conditions in the American workplace. The AWCS was fielded on the RAND American Life Panel (ALP) in 2015. The ALP is a nationally representative (when weighted) sample of individuals residing in the United States who have agreed to participate in regular online surveys. Respondents who do not have a computer at home are provided both a computer and Internet access so that the panel is representative of all individuals in the country, not just Internet users. The survey instrument used by the AWCS was closely harmonized with the European Working Conditions Survey (EWCS), also fielded in 2015 across a representative sample of workers in 35 countries in Europe.

This report presents detailed findings about the prevalence and distribution of working conditions across the American workforce by age, gender, and education. The AWCS findings indicate that the American workplace is very physically and emotionally taxing, both for workers themselves and their families. Positive findings include that workers appear to have a certain degree of autonomy, most feel confident about their skill set, and many receive social support on the job.

This summary shares our key findings on American working conditions today. After each key finding, we have listed the relevant data tables and figures, which appear later in the report.

### Schedule Predictability

A series of questions in the AWCS provide rich information about the predictability of work throughout the year and on a day-to-day basis. From these questions, we obtained the following findings:

- The clear majority of Americans (eight out of ten) have **steady and predictable work** throughout the year, but many fewer work the same number of hours on a day-to-day basis (54 percent) (Table 4.1).
- More than one in three Americans have **no control over their work schedules**. Another 11 percent can choose between several fixed schedules, while 38 percent can adapt working hours within certain limits. Just 15 percent can fully determine their own schedule. Choice over schedule is unequally distributed by education, with college graduates having substantially more control over their schedule than non-college graduates. Older,

college-graduate men stand out as having the most freedom to determine their schedules (Table 4.2).

- More than one in five non-college-graduate, prime-age workers (defined here as age 35–49) are subject to **frequent changes to their work schedule**, and more than half of the time, these changes are made with little or no notice (Figure 4.1).
- **Presence at the workplace during regular business hours is a requirement** for most American workers (78 percent), with the option to telecommute still only available for a minority of workers.

## Physical and Social Risks

A group of questions in the AWCS aimed to assess the physical and social work environment. From these questions, we obtained the following findings:

- Nearly three-fourths of Americans report either **intense or repetitive physical exertion on the job** at least one-quarter of the time. This burden is unequally distributed, with non-college graduates having substantially greater physical demands. But college graduates, older workers, and women are also affected (Table 4.4).
- More than one-half of Americans report exposure to **unpleasant and potentially hazardous working conditions**. Again, such exposure is highly unequally distributed, with a disproportionate burden falling on non-college-graduate workers and men. However, a nonnegligible fraction of college graduates are also affected (Table 4.5).
- A disturbingly high fraction of American workers—nearly one in five—are exposed to a **hostile or threatening social environment at work**. The incidence of hostile experiences varies in important ways by age, gender, and education, with younger and prime-aged women more likely to experience unwanted sexual attention, and younger men more likely to experience verbal abuse (Figure 4.4, Table 4.6). While verbal abuse and humiliating behavior occur more frequently for younger men without a college degree than for those younger men with a college degree, hostile experiences at work are generally more evenly distributed across education groups than physical demands (Table 4.4) and hazardous exposures (Table 4.5).

## Pace and Pressure at Work

Several questions in the AWCS provide a better understanding of the pace and intensity of the work environment than do measures of hours worked alone. From these questions, we obtained the following findings:

- Most Americans (two-thirds) frequently work at high speeds or under tight deadlines, and one in four perceives that they have **too little time to do their job**. This paints a picture of a work environment that is often stressful and potentially mentally taxing, in addition to being physically taxing (Table 4.8).

- Among all potentially adverse job attributes, this is an area where differences by education are not as clear cut, since non–college graduates more often must work at high speed, whereas college graduates more frequently face tight deadlines (Table 4.8).
- The **intensity of work** (pace, deadlines, and time constraints) differs across occupation groups, with white-collar workers experiencing greater work intensity than blue-collar workers (Figure 4.8).

## Spillovers to Personal Lives

The AWCS contains several questions that address how well job demands fit with personal commitments. From these questions, we arrived at the following findings:

- Time pressures at work spill over into the personal lives of many Americans. About one-half of American workers do some **work in their free time** to meet work demands (Table 4.3). These spillovers take different forms across education groups, with college graduates taking work home, and, as noted above, the less-educated facing more-frequent and unpredictable schedule changes (Table 4.3 and Figure 4.1).
- While many Americans regularly adjust their personal schedules to accommodate work matters, many are unable to adjust their work schedules to accommodate personal matters (31 percent). In general, women are more likely than men to report **difficulty arranging for time off** during work hours to take care of personal or family matters, younger workers report more difficulties than older workers, and non–college graduates report more difficulties than college graduates (Figure 4.2).
- Jobs **interfere with family and social commitments** outside of work. This is especially true for younger workers without a college degree; more than one in four reports a poor fit between their working hours and their social and family commitments (Figure 4.3).

## Autonomy at Work

A key aspect of the AWCS is that it allows an in-depth view of how American workers perform their jobs. From these questions, we obtained the following findings:

- U.S. jobs feature a mix of both **monotonous tasks and substantial autonomy** in problem-solving. While a large proportion (62 percent) of Americans hold jobs whose tasks are typically monotonous, an overwhelming majority of American workers views “solving unforeseen problems” and “applying own ideas” as integral parts of their jobs (82 and 85 percent, respectively). Similar percentages say that their jobs involve **complex tasks** (70 percent) and **learning new things** (84 percent) (Tables 4.9 and 4.10).
- Despite substantial autonomy over how they do their jobs, only 57 percent of workers can **take breaks** when they want to, and just 31 percent can **choose with whom they work**.
- In an interesting piece of evidence regarding the gender wage gap, not only do women earn less, but younger and prime-age women also reported solving fewer unforeseen problems and complex tasks than similarly aged men. This result holds regardless of educational attainment.

- Workers in white-collar occupations have substantially greater autonomy over job tasks than those in blue-collar occupations (Figure 4.8).

## Social Support at Work and Prospects for Advancement

Several questions in the AWCS speak to social and professional support at work, as well as prospects for advancement. From these questions, we obtained the following findings:

- While work is a place of hostile social interactions for a significant proportion of workers, for most others, the workplace is an important source of **professional and social support**. More than one-half (58 percent) of American workers describe their boss as supportive, and 56 percent say that they have very good friends at work (Table 4.7).
- Overall, a large proportion (75 percent) of American workers received some form of **training** to improve their skills during the past year, partly by their own initiative and partly paid for by employers. However, there are important differences across the population by age and education. Younger workers are more likely than prime-age and older workers to receive all forms of training; the same is true for college graduates compared to non-college graduates (Table 4.11).
- Only 38 percent of workers state that their job offers good **prospects for advancement**. This implies that training does not necessarily correspond to aspirations. Moreover, perceived prospects for advancement vary in complex ways in the population—with younger, college-graduate men being most optimistic. All workers, regardless of education, become less optimistic with age, with only about one in four older workers saying that their job offers good prospects for career advancement (Table 4.11).

## Meaningful Work

The AWCS asks respondents how often their work provides them with the following: “satisfaction of work well done,” “feeling of doing useful work,” “sense of personal accomplishment,” “make positive impact on community/society,” “opportunities to fully use talents,” and “goals to aspire to.” From this question, we obtained the following core findings:

- Four out of five American workers report that their job provides at least one of these sources of meaning always or most of the time.
- There were no significant age or gender differences among non-college-graduate workers, but older college-graduate men are significantly more likely than younger college-graduate men or comparable college-graduate women to report at least one source of meaningful work (Figure 4.10).

## Desired Versus Actual Working Conditions

Besides asking employed workers for conditions on the current job, the AWCS asks workers and nonworkers about the working conditions they desire. From these questions, we obtain the following core findings:

- The most important job attribute, reported by nearly nine out of ten American workers, is the **ability to provide financially** for oneself and one's family. Job security and benefits—particularly health insurance and paid vacation—were also rated highly by American workers (Table 5.1).
- Nearly two-thirds of workers experience at least some degree of **mismatch between their desired and actual working conditions**, and this fraction rises to nearly three-quarters when taking job benefits into account (Table 5.1).
- The job attribute least likely to match workers' preferences is "the right number of hours." Some 70 percent of workers report actual work hours that are more than 5 percent higher or lower than their ideal number of hours, and more than half of these (39 percent of the working population) rate having the right number of hours as essential or very important (Table 5.1).
- Older workers, especially those who are unemployed or not in the labor force but who would consider reentering, are more likely to declare nonmonetary job attributes as essential or very important than younger workers (Table 5.3).
- These results raise the question of whether working conditions could play an important role in unleashing the **substantial work potential of retired workers or those close to retirement** (Figures 3.2 and 3.3).

## Working Conditions and Job Satisfaction

The AWCS contains standard questions on job satisfaction as well. From these questions, we obtained the following findings:

- Many of the job attributes analyzed in Chapter Four are correlated with job satisfaction in the expected fashion. This implies that working conditions matter substantially for American workers (Table 5.4 and Figure 5.3).
- Among those variables that have a precisely measured effect, several work characteristics that emerge as key aspects of American jobs stand out; some reduce job satisfaction (frequent long work hours and job intensity, harassment, physical exposure to adverse working conditions), and some increase job satisfaction (autonomy and creative work, social support at work, meaningfulness of work) (Table 5.4).

These findings represent important new insights into the working lives of Americans, how working conditions vary in the population, and the potential for working conditions to explain employment patterns, especially the employment patterns of older workers. In addition, this descriptive analysis helps to demonstrate the wealth of data available in the AWCS. The available data promise to shed light on many salient aspects of American working conditions, how they may be affected by public policy, and how they compare across developed countries.



## Acknowledgments

---

We are grateful to the Alfred P. Sloan Foundation and the Social Security Administration, via the Michigan Retirement Research Center, for funding this work. We thank Diana Lavery, Cate Yoon, and Melody Harvey for excellent research assistance.





## Abbreviations

---

ALP	RAND American Life Panel
AWCS	American Working Conditions Survey
CPS	Current Population Survey
EWCS	European Working Conditions Survey



## Introduction

---

### The Need for Data on Working Conditions

Most Americans between the ages of 25 and 71 spend most of their available time in a given day, week, or year working. The characteristics of jobs and workplaces—including wages, hours worked, and benefits, as well as the physical demands and risk of injury, the pace of work, the degree of autonomy, prospects for advancement, and the social work environment, to name a few—are important determinants of American workers' well-being. Some of these job characteristics also affect workers' social and family lives. Beyond that, job attributes can affect individual workers' productivity—and, thus, the well-being of their coworkers, their employer, and the economy at large.

Given the potential importance of working conditions, it is surprising that there is little systematic, representative, and publicly available data about the characteristics of American jobs today. There are, of course, several sources of information on some crucial aspects of jobs, such as earnings, wages, and hours worked; and some, though often partial, information is available on formal benefits, such as health insurance or pension plans. Although they are the focus of many insightful studies, these job characteristics can only give a partial view of working conditions and, hence, an incomplete view of well-being and productivity.

This lack of information may prevent us from fully understanding the situation of American workers and their families today. For example, the analysis of employment trends among women, older workers, less-educated workers, and workers with disabilities would substantially benefit from information about working conditions; similarly, typical measures of inequality can only be partial without an assessment of working conditions. The lack of comprehensive data on working conditions and job characteristics also risks limiting our understanding of the impact of many public policies that either directly or indirectly affect working conditions. These may include, among others, occupational safety regulations, mandated overtime pay for certain classifications of employees, mandated sick or parental leave, and such broader policies as the minimum wage or the Earned Income Tax Credit.

### Introducing the American Working Conditions Survey

In this report, we introduce the American Working Conditions Survey (AWCS), which was fielded on the RAND American Life Panel (ALP) in 2015. The main advantage of the AWCS is that it not only collects data on standard person and job characteristics, but it also contains detailed information on a broad range of working conditions in the American workplace.

Due to its sample size, representativeness, and the availability of individual characteristics, the AWCS allows one to study the level and distribution of a range of working conditions in the population. Thereby, the AWCS will serve as an important complement to standard data sets such as the Current Population Survey (CPS), the National Compensation Survey, and the Employee Benefits Survey.

The AWCS has several other important advantages as well.

1. The survey instrument used by the AWCS was closely harmonized with the European Working Conditions Survey (EWCS), also fielded in 2015 across a representative sample of workers in 35 countries in Europe. This allows comparison of working conditions in the United States with those in a broad array of European countries.
2. To gauge the effect of working conditions on employment, the AWCS not only solicits current working conditions from those employed, but also desired working conditions and self-assessed willingness to work from those who are unemployed and not in the labor force. Third, another, closely related advantage is that the ALP has a panel component, so that subsequent employment decisions can be directly related to their working conditions.
3. The data on working conditions from the AWCS will be linked with detailed information on worker preferences over job characteristics, allowing an assessment of the value of job characteristics and possible mismatches between worker needs and the job offerings in the labor market.

## **Structure of the Report**

This report presents descriptive findings about the prevalence and distribution of working conditions across the American workforce in 2015. These results paint a stark picture of American working conditions and represent important findings in their own right. In addition, our descriptive analysis provides an introduction to the data for interested potential users.

The report is organized as follows. In Chapter Two, we describe the AWCS in more detail and find that its sample matches the characteristics of the representative CPS quite well. In Chapter Three, we describe basic patterns in wages, hours, and benefits. These patterns comprise both well-known and lesser-known facts, all of which are better understood by our subsequent analysis of working conditions. Chapter Four, which contains our main results, provides an in-depth description of working conditions in the United States, with analyses by gender, age, and education. In Chapter Five, we relate actual working conditions to desired job characteristics and provide a preliminary assessment of how working conditions can affect employment choices and job satisfaction. Chapter Six summarizes the findings and describes upcoming extensions of the data.

## Data and Methods

---

The AWCS data come from a survey fielded between July 15 and October 14, 2015, to participants in the ALP. The ALP is a nationally representative (when weighted) sample of individuals residing in the United States who have agreed to participate in regular online surveys. Respondents who do not have a computer at home are provided both a computer and Internet access so that the panel is representative of all individuals in the country, not just Internet users. Since its inception in 2006, the ALP has fielded over 450 surveys on a wide variety of topics, including health, employment, and financial decisionmaking. The AWCS was the 436th survey fielded in the ALP. Two follow-up surveys were planned, for six and 12 months later, respectively. All surveys, including the AWCS and its follow-up surveys, are publicly available (after an embargo period) and can be linked to one another.<sup>1</sup> For more details about the ALP, see <https://alpdata.rand.org> (RAND American Life Panel, 2015a).

The AWCS is harmonized with the concurrently fielded 6th EWCS. The EWCS began in 1991, collecting data every five years from a representative sample of workers in European countries. For more about the EWCS, see Eurofound, 2015. Unlike the EWCS, the AWCS also includes information on nonworkers, as well as workers.

The AWCS included two components:

1. a screener to ascertain current work status
  - a. If working for pay, basic information on occupation, industry, and self-employment status was collected.
  - b. If not working for pay, information on when the individual last worked, why they left their last job, current job search activities if any, perceived barriers to finding work, and preferences over job attributes were collected.<sup>2</sup>
2. conditional on working for pay, a longer questionnaire asking detailed questions about numerous dimensions of working conditions.

Upon being invited via email to complete the survey, ALP participants clicked on a link and logged in to the survey web page, which contained the following introductory text:

“This survey asks you about your current or most recent job, and about work in the future. You will earn \$4 for completing this survey, and may be eligible to earn additional rewards.”

Immediately after completing the screener, respondents who said they were working for pay were invited to answer the longer survey with the following text:

---

<sup>1</sup> Not all surveys were fielded to all panel members.

<sup>2</sup> The screener also collected information from all respondents on total household income, time use, and life satisfaction.

“We would now like to ask you some questions about THE WORKING CONDITIONS ON YOUR MAIN JOB. Topics include your working time arrangements, how much autonomy you have at work, opportunities for skill development, work-life balance, earnings and financial security, as well as work and health. **You will earn an extra \$10** if you complete this portion of the survey. Would you like to take the rest of the survey?”

Median completion time was 8.8 minutes for those who completed the screener only and 33.5 minutes for those who completed the entire survey (including the screener).

Table 2.1 shows the response rate and sample restrictions we applied to obtain the AWCS sample. We invited 4,917 panel members ages 18–71 drawn from a probability-based sample.<sup>3</sup> Of those, we received 3,131 responses, representing a 63.7-percent response rate. While we also surveyed respondents ages 18–24, in this report we exclude these respondents from our sample to focus on individuals who have completed schooling. This gives us a final sample of 3,066 respondents, including those working for pay, unemployed and searching for work, and not in the labor force (defined as not working for pay and not looking for paid work). Of these respondents, 2,066 (67 percent) reported that they were working for pay at the time of the survey, and, of these, 2,032 (98 percent) agreed to answer the additional questions after the screener.

To ensure that the reported estimates are representative of the national population, we created raked survey weights. Raking is an iterative method of creating survey weights such that, when weighted, the marginal distributions of certain variables match the known distributions of a target population.<sup>4</sup> We created weights to match the distributions of age, gender, and interactions of age and gender with race/ethnicity, education, family income, marital status, working status, occupation (white collar/blue collar), and industry (manual/nonmanual) observed in the July 2015 CPS.<sup>5</sup>

**Table 2.1**  
**Sample Size and Restrictions**

Sample	Number of Observations	% of Previous Number of Observations
Invited ALP panel members, ages 18–71	4,917	
AWCS survey respondents	3,131	63.7%
Excluding respondents ages 18–24	3,066	97.9%
Working for pay only	2,066	67.4%
Agreed to additional questions	2,032	98.4%

<sup>3</sup> The ALP also includes some respondents drawn from non-probability-based convenience samples (e.g., referrals from current respondents). Before fielding the AWCS to probability-based respondents, we pilot-tested the survey on a small ( $N = 62$ ) sample of non-probability-based respondents in May 2015.

<sup>4</sup> Raked survey weights are discussed at RAND American Life Panel, 2015b. The programs used to generate the weights are available on request.

<sup>5</sup> We define blue-collar occupations as those that typically do not require a college degree, corresponding with two-digit Standard Occupation Classification codes of 31 or higher. We define manual industries as those with two-digit North American Industry Classification System codes of 48 or lower.

Table 2.2 shows the distribution of survey completion date over the three-month window between mid-July and mid-October 2015. More than one-third of the sample (34 percent) completed the survey on the first day, and nearly two-thirds (64 percent) completed the survey within the first week. More than three-quarters (78 percent) completed the survey within two weeks, by July 27. Less than 5 percent of the sample completed the survey in the final month, including a small percentage of respondents (2 percent) who did not finish the survey (i.e., answer the last question) before the survey closed on October 15. (Of the 52 people who did not finish the survey, 38 reported that they were working for pay, and 28 answered at least one additional question after the initial screener.) For completeness, we include responses from individuals who did not complete the entire survey in our tabulations. Note also that respondents could skip questions throughout the survey if they chose to do so. We tried to minimize skipping by prompting respondents who did so with the following text:

“You did not answer the previous question. Your answers are important to us. Please hit the “Back” button and answer the previous question. If you are unable or unwilling to answer the question, please indicate why.” (Response categories were “Not applicable,” “Don’t know,” and “Refuse to answer.”)

Table 2.3 presents summary statistics of the AWCS sample, unweighted and weighted, and in comparison with the CPS. As can be seen from the table, the AWCS compares well with the CPS on most demographic and employment measures when weighted, with some exceptions discussed below.<sup>6</sup> Twenty-three percent of respondents in the weighted sample are younger than 35, 33 percent are between 35 and 49 years old (with the remaining 44 percent age 50 or older), 51 percent of respondents are female, 65 percent are white non-Hispanic, 13 percent are black non-Hispanic, 15 percent are Hispanic, and 34 percent have a college degree (bachelor’s degree or higher). The same proportions of AWCS and CPS respondents report working for pay (69 percent) and participating in the labor force—either working for pay or, if not employed, searching for work (72 percent).

**Table 2.2**  
**Cumulative Distribution of Survey Completion Date**

Completion Date	<i>N</i>	%
By July 15 (one day)	1,047	34.2%
By July 21 (one week)	1,968	64.2%
By July 27 (two weeks)	2,389	77.9%
By August 14 (one month)	2,673	87.2%
By September 14 (two months)	2,923	95.3%
By October 14 (three months)	3,014	98.3%
Did not finish survey	52	1.7%

Sample: Ages 25–71, *N* = 3,066.

<sup>6</sup> Although the aggregate fractions of workers in manual and nonmanual industries and blue-collar and white-collar occupations, respectively, match those in the CPS, the individual fractions for some industries and occupations differ from their CPS counterparts. Differences that are statistically significant ( $p < 0.05$ ) are indicated in bold type in Table 2.3.

**Table 2.3**  
**Sample Characteristics**

Characteristic	CPS	RAND AWCS	
	July 2015	Unweighted	Weighted
% ages 25–34	23.2	14.2	23.2
% ages 35–49	32.7	27.2	32.7
% female	51.4	58.5	51.4
% white non-Hispanic	64.3	64.9	64.9
% black non-Hispanic	12.4	11.9	12.5
% Hispanic	15.8	11.1	15.3
% high school graduate or less	37.6	17.4	39.3
% some college or associate’s degree	28.2	36.5	26.9
% bachelor’s degree or higher	34.2	46.1	33.7
% in labor force	72.3	76.8	72.3
% working for pay	69.4	67.4	69.4
Industry (%):*			
Agriculture, forestry, fishing, hunting	1.7	0.9	1.4
Mining	0.7	0.5	0.5
Utilities	1.0	0.7	1.2
Construction	7.2	2.9	5.7
Manufacturing	11.1	7.4	10.0
Wholesale trade	2.6	2.2	3.4
Retail trade	9.7	8.2	8.7
Transportation and warehousing	4.9	4.0	5.6
Information	2.1	3.3	3.2
Financial activities	7.0	8.8	7.8
Professional and business services	11.6	15.7	14.4
Education and health services	23.0	26.0	20.9
Leisure and hospitality	7.7	4.7	3.9
Other services (excluding public administration)	4.8	5.3	4.9
Public administration	5.0	9.5	8.3
Employment by establishment size (%):*			
10 or fewer employees	N/A	32.8	31.8
11–49 employees	N/A	22.9	24.5
50–249 employees	N/A	23.6	22.7
250+ employees	N/A	20.8	21.0
% self-employed*+	6.9	13.2	11.4
% with multiple jobs*^	4.4	15.2	13.8



Table 2.3—continued

Characteristic	CPS	RAND AWCS	
	July 2015	Unweighted	Weighted
% working part time (less than 35 hours)*	14.8	22.9	<b>18.7</b>
Average hours per week (main job)*	39.8	38.5	39.7
Average hours per week (all jobs)*	39.7	40.6	<b>41.9</b>
Median annual earnings (main job)*	40,000	41,779	42,000
Average annual earnings (main job)*	52,931	58,071	53,199
Occupation (%):*			
Management	12.6	14.1	<b>10.7</b>
Business and financial operations	5.0	7.3	5.9
Computer and mathematical	3.0	3.1	2.8
Architecture and engineering	2.2	2.5	2.0
Life, physical, and social science	1.0	2.1	1.4
Community and social service	1.5	4.3	<b>2.7</b>
Legal	1.2	2.3	1.8
Education, training, and library	5.7	9.7	5.8
Arts, design, entertainment, sports, and media	2.3	3.0	1.9
Health care practitioners and technical	6.3	6.1	<b>4.5</b>
Health care support	2.5	4.3	<b>4.3</b>
Protective service	2.0	2.0	<b>2.7</b>
Food preparation and serving related	4.1	2.0	<b>2.2</b>
Building and grounds cleaning	3.3	1.9	<b>2.3</b>
Personal care and service	3.4	2.4	<b>2.0</b>
Sales and related	9.7	8.5	10.6
Office and administrative support	12.4	13.7	<b>14.1</b>
Farming, fishing, and forestry	0.8	0.4	0.8
Construction and extraction	5.8	1.8	<b>4.7</b>
Installation, maintenance, and repair	3.5	1.9	3.7
Production	5.9	2.7	5.5
Transportation and material moving	6.1	3.6	6.8
Number of observations	13,000	3,066	3,066

Sample: Ages 25–71; **bold** represents statistically significant difference between weighted AWCS and CPS ( $p < 0.05$ ). Source for CPS: July 2015 Outgoing Rotation Group file, weighted using ORG weight. See text for differences in question wording across surveys. Annual earnings data from the March 2015 CPS.

\* Conditional on working for pay. + Note that in the CPS, self-employment is only unincorporated self-employment. Statistical significance not tested due to definitional differences. ^ Recall period is reference week in CPS; last year in AWCS. Statistical significance not tested due to definitional differences.

Among those working for pay, the top three industries represented in the AWCS are education and health services (21 percent of workers), professional and business services (14 percent), and manufacturing (10 percent); these same three industries are the most-represented in the CPS (at 23 percent, 12 percent, and 11 percent of workers, respectively). Slightly fewer than one-third of workers are employed in an establishment with ten or fewer employees, approximately one-quarter are employed in an establishment with 11–49 employees, 23 percent work in an establishment with 50–249 employees, and 21 percent work in an establishment with 250 or more employees.<sup>7</sup> The top three occupation groups in both surveys are office and administrative support, management, and sales and related occupations.

More AWCS respondents report that they are self-employed (11 percent of workers) than CPS respondents (7 percent), but this is not surprising because the CPS only counts unincorporated self-employment. The most notable difference between the two surveys is the percentage of employed respondents who report multiple jobs—14 percent in the AWCS compared with 4 percent in the CPS, although the difference is not statistically significant. Some of this difference is likely due to differences in question wording and positioning within the survey. In the AWCS, respondents were asked whether they “currently have more than one job, including part time, evening or weekend work.” In contrast, in the CPS, respondents were asked, “LAST WEEK, did you have more than one job (or business), including part-time, evening, or weekend work?” Unlike the CPS question on holding multiple jobs, the AWCS question did not include a reference period and immediately followed a question about how many weeks *per year* respondents usually worked in their main paid job. As a result, AWCS respondents may have inferred a reference period of a year (rather than a week), leading to a higher prevalence rate. Additionally, it is worth noting that, given their regular participation in ALP surveys, some ALP respondents may consider panel participation itself a job and thus may be more likely to respond that they hold multiple jobs than the average American worker.

Although more AWCS respondents report working part time (defined as fewer than 35 hours per week) than in the CPS, the two surveys track quite closely in terms of hours and earnings on the main job. The average time spent working in one’s main job is 39.7 hours per week in the AWCS (and 39.8 hours per week in the CPS). Consistent with the higher prevalence of holding multiple jobs in the AWCS, the average hours worked per week across all jobs is higher in the AWCS (41.9 hours per week) than in the CPS (39.7 hours per week).<sup>8</sup> Median (average) annual earnings from the main paid job (before any taxes or deductions) are \$42,000 (\$53,199) for workers in the AWCS, compared with \$40,000 (\$52,931) for workers in the CPS.<sup>9</sup>

The remainder of the report describes employment patterns and working conditions for American workers ages 25–71, including the self-employed, overall and by gender, age, and education. In addition to dividing respondents by gender, we divide them into three age groups—under 35 (“younger”), 35–49 (“prime age”) and 50–71 (“older”)—and two education groups—those with a bachelor’s degree (“college graduates”) and those without a bachelor’s

<sup>7</sup> Comparable numbers for establishment size are not available in the July CPS.

<sup>8</sup> Note that the CPS asks about “usual” hours per week on the main job and actual hours last week for all jobs. The AWCS asks about usual hours per week in the main job and, if applicable, in “job(s) OTHER than your main paid job.”

<sup>9</sup> Earnings figures were taken from the March 2015 CPS conditional on being employed in March ( $N = 78,799$ ) and reference the 2014 calendar year. Note that the CPS asks about total earned income (not just in the main job) and includes losses for the self-employed. We top-code earnings at \$280,000, consistent with the CPS.

degree (“non–college graduates”). Tables 2.4 and 2.5 present unweighted sample sizes for all respondents and the subsample of workers, respectively, by age, gender and education.

**Table 2.4**  
**Unweighted Sample Sizes, by Age, Gender, and Education**

	All			Non–College Graduate		College Graduate	
	Overall	Men	Women	Men	Women	Men	Women
All ages, 25–71	3,066	1,271	1,795	623	1,031	648	764
Under age 35	436	142	294	74	172	68	122
Ages 35–49	834	322	512	175	300	147	212
Ages 50+	1,796	807	989	374	559	433	430

**Table 2.5**  
**Unweighted Sample Sizes, All Workers, by Age, Gender, and Education**

	All			Non–College Graduate		College Graduate	
	Overall	Men	Women	Men	Women	Men	Women
All ages, 25–71	2,032	879	1,153	405	613	474	540
Under age 35	329	123	206	62	112	61	94
Ages 35–49	628	261	367	133	202	128	165
Ages 50+	1,075	495	580	210	299	285	281



## Employment, Hours, Pay, and Benefits

---

In this chapter, we summarize the evidence from the AWCS regarding employment patterns, hours, amount and structure of pay (such as the prevalence of incentive pay), and formal job benefits (including health, dental, life, and disability insurance). The goals of this chapter are threefold. First, it connects the evidence from the AWCS to other data collection efforts, which have concentrated on employment and compensation. However, a key purpose of the AWCS is to paint a more-detailed picture of American working conditions than just employment and earnings. Thus, the findings in this chapter also place our more detailed analysis of working conditions (Chapters Four and Five) in broader context. Finally, we highlight known patterns in employment and earnings that foreshadow our main findings in Chapters Four and Five to illustrate how less-detailed data may miss important aspects of working conditions.

The main findings in this and the next chapter are for workers. Yet, two key goals of public policy are to raise labor force participation of older workers and reintegrate the unemployed into the work force. An important innovation of the AWCS is that it includes information on the desire to work, as well as preferred job attributes among those not employed (see Chapter Five). Hence, we begin this chapter by briefly discussing basic findings on labor force participation and employment patterns. The population described is Americans ages 25–71.

### Labor Force Participation

Table 3.1 presents statistics on labor force participation by gender, age, and education. While most of the evidence on employment in the tables is well known, some demographic patterns are particularly relevant for what follows. Individuals with a college degree have higher employment rates than less-educated individuals. The difference is particularly pronounced for younger men (ages 25–34)—97 percent of younger college-graduate men are employed, compared with just 83 percent of younger non-college-graduate men. The relatively low employment rate for younger men without a college degree may partly reflect low-quality working conditions for this demographic, which we document in Chapter Four.

It is well known that employment declines with age. It is unknown whether the set of people who remain employed at older ages have more preferred working conditions than those who depart the labor force at younger ages, but the strong possibility of differential selection based on working conditions is important to bear in mind when interpreting the findings throughout this report. As one example of this possibility, there are important education differences in the degree to which workers consider themselves fit to continue doing their same job for another five to ten years. At least 80 percent of workers ages 50–59 say that they will be able

**Table 3.1**  
**Labor Force Status, by Age, Gender, and Education**

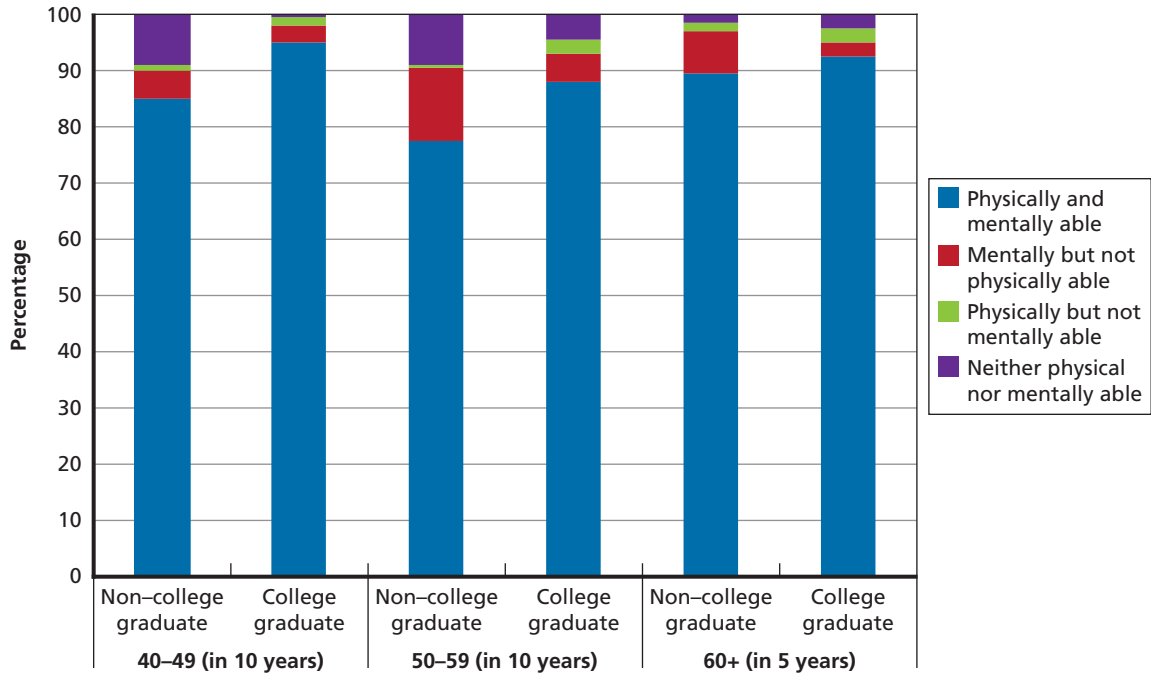
	All			Non-College Graduate		College Graduate	
	Overall	Men	Women	Men	Women	Men	Women
<b>A. All ages, 25–71</b>							
% working for pay	69.4	77.0	62.1	74.9	58.1	81.4	69.6
% unemployed	3.0	3.1	2.8	3.6	3.2	2.2	2.0
% not in the labor force	27.7	19.8	35.1	21.5	38.6	16.5	28.4
<b>B. Under age 35</b>							
% working for pay	76.1	89.1	63.4	83.2	57.9	97.4	72.8
% unemployed	4.3	4.9	3.8	6.9	4.6	1.9	2.4
% not in the labor force	19.6	6.1	32.8	9.9	37.5	0.7	24.7
<b>C. Ages 35–49</b>							
% working for pay	78.5	85.7	71.5	83.1	68.4	94.0	77.7
% unemployed	3.2	2.9	3.4	3.1	3.7	2.3	2.9
% not in the labor force	18.4	11.4	25.1	13.9	27.9	3.7	19.4
<b>D. Ages 50+</b>							
% working for pay	59.1	63.9	54.6	63.7	50.8	64.2	62.0
% unemployed	2.1	2.4	1.9	2.5	2.2	2.2	1.2
% not in the labor force	38.8	33.7	43.5	33.8	47.0	33.6	36.8

Sample: Ages 25–71,  $N = 3,066$ . Results weighted using raked sample weights.

to perform the same job in ten years. Self-assessed future ability is higher among college graduates in this age group than non-college graduates, with non-college graduates more likely to expect future physical limitations and college graduates more likely to expect future mental limitations (Figure 3.1). This somewhat nuanced finding foreshadows findings in Chapter Four that document a greater burden of physical demands and exposure risks among non-college graduates than college graduates.

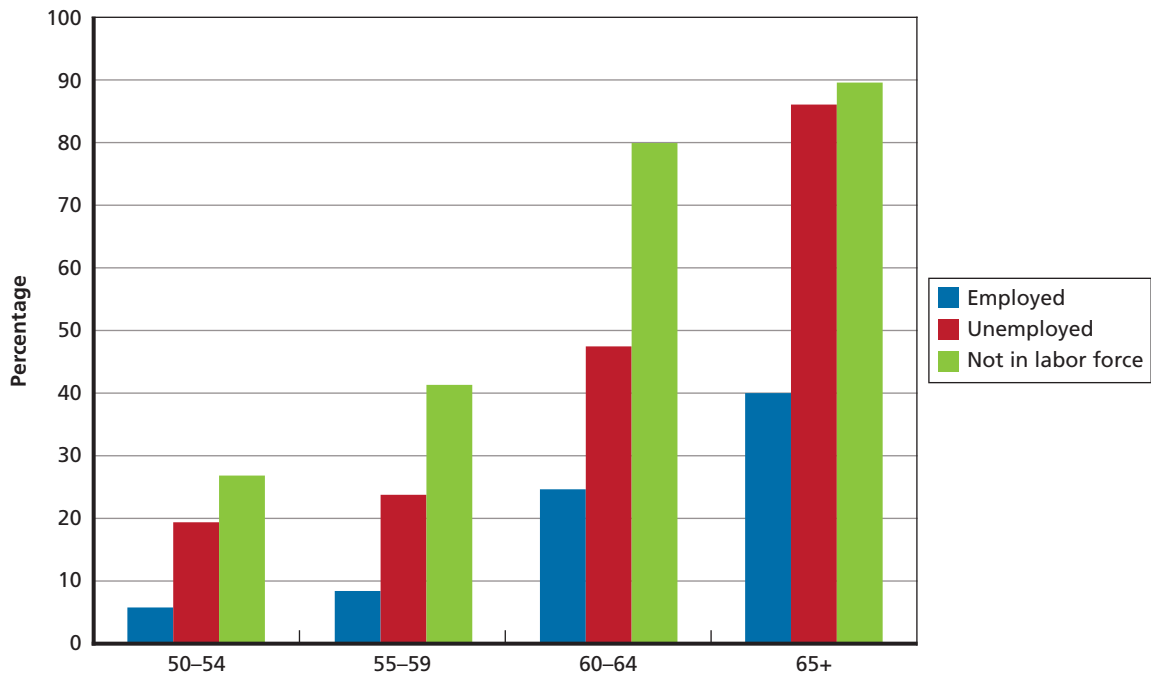
In general, we find that employment transitions among older individuals are highly fluid. Figure 3.2 documents the percentage of individuals age 50 and older who say they “ever retired or partially retired from a job or business” by age group and employment status. As expected, the percentage reporting they have ever retired increases with age. However, it is noteworthy that even among those currently employed or unemployed (and thus searching for work) a substantial proportion report having previously retired—that is, they reentered the labor force at some point after initiating a retirement transition. Indeed, 39 percent of employed individuals age 65 and older say that they had retired at some point previously. The fact that these individuals have access to Social Security benefits and possibly other retirement income suggests

**Figure 3.1**  
**Physical and Mental Ability to Work in Same Job in Five or Ten Years, by Age and Education**



RAND RR2014-3.1

**Figure 3.2**  
**Percentage Ever Retired, by Age and Employment Status**



RAND RR2014-3.2

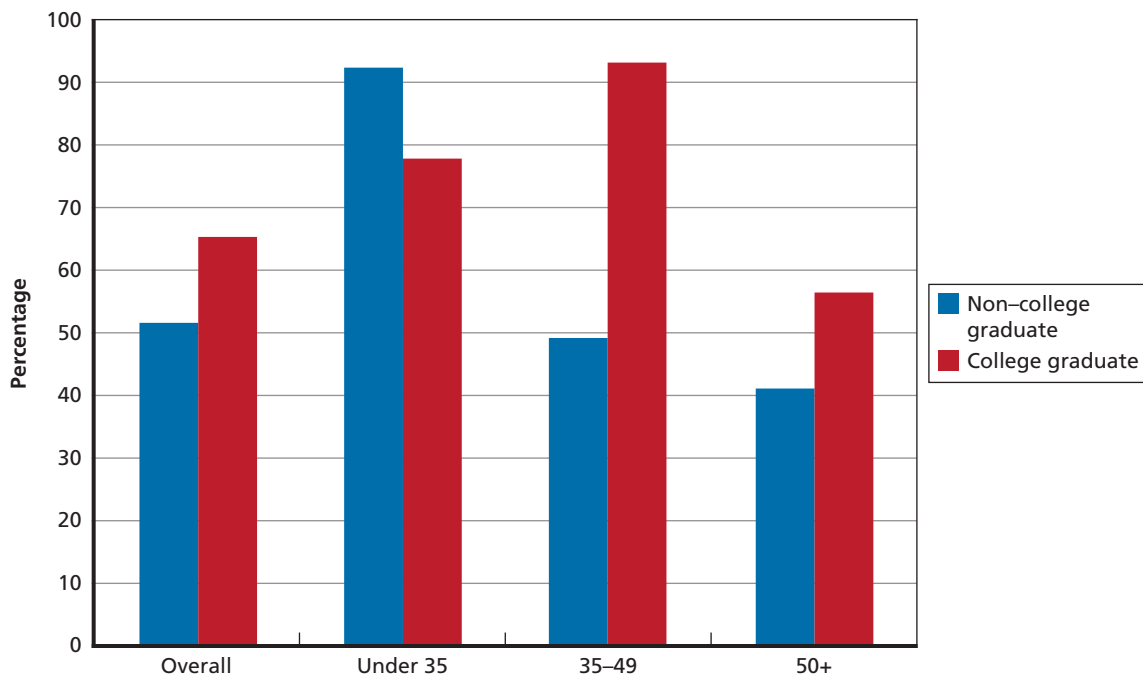
they can afford to demand working conditions that more closely match their preferences in order to participate in employment.

Another innovative feature of our survey asks those who are out of the labor force, “Is it possible you would return to paid employment or become self-employed in the future if you had the right opportunity?” We find that 56 percent of those who are not working and not searching for work report that they would work in the future if the right opportunity came along, and this fraction is higher among college graduates than non-college graduates (Figure 3.3). While younger labor force nonparticipants are more likely to want to work in the future, a substantial proportion of older nonparticipants (ages 50 and up) would also work if the right opportunity came along. Among older labor force nonparticipants, nearly 40 percent of non-college graduates and 60 percent of college graduates say that they would return to paid employment if the right opportunity presented itself. In Chapter Five, we use the detailed data from the AWCS to document how the desired job characteristics of nonworkers differ in important ways from those who are currently in the labor force.

## Hours

Our analysis of hours in Table 3.2 highlights several important features of the American workplace and foreshadows key findings of our more detailed analysis of working conditions in Chapter Four. For example, while women have lower employment rates than men, they have a much higher prevalence of part-time employment (26 versus 13 percent). To the degree that part-time jobs have less desirable working conditions, this may explain part of the gender gap

**Figure 3.3**  
Percentage Who Would Return to Paid Employment or Become Self-Employed in Future Depending on Right Opportunity, Overall and by Age





**Table 3.2**  
**Employment and Hours, by Age, Gender, and Education**

	All			Non-College Graduate		College Graduate	
	Overall	Men	Women	Men	Women	Men	Women
<b>A. All ages, 25–71</b>							
% self-employed	11.4	12.5	10.2	12.4	9.5	12.5	11.2
% with multiple jobs	13.8	12.5	15.2	11.9	14.1	13.7	17.1
% working part time (< 35 hours)	18.7	12.9	25.6	12.8	30.3	13.0	18.3
Average hours per week (main job)	39.7	41.8	37.3	41.5	36.2	42.4	38.9
Average hours per week (all jobs)	41.9	44.0	39.5	44.0	38.4	44.1	41.3
% working long hours (48+/week)	26.0	31.5	19.5	31.0	16.3	32.6	24.4
% working frequent long days*	18.1	23.7	11.6	27.8	10.6	15.9	13.0
<b>B. Under age 35</b>							
% self-employed	9.0	11.1	6.1	14.7	4.1	6.6	8.9
% with multiple jobs	15.8	16.2	15.3	17.6	15.3	14.5	15.4
% working part time (< 35 hours)	13.1	6.7	22.2	6.1	28.1	7.3	14.3
Average hours per week (main job)	41.5	44.3	37.7	44.3	35.6	44.3	40.3
Average hours per week (all jobs)	45.3	48.6	40.6	50.5	39.1	46.3	42.5
% working long hours (48+/week)	33.7	42.0	22.0	44.9	17.7	38.4	27.8
% working frequent long days*	20.9	26.4	13.2	33.4	14.0	17.9	12.2
<b>C. Ages 35–49</b>							
% self-employed	9.3	10.2	8.3	11.2	8.6	7.2	7.6
% with multiple jobs	13.7	10.5	17.4	11.2	17.2	8.8	17.6
% working part time (< 35 hours)	18.5	12.5	25.3	13.7	29.1	9.4	18.7
Average hours per week (main job)	39.8	41.3	38.1	40.9	37.8	42.3	38.6
Average hours per week (all jobs)	41.7	42.6	40.7	42.3	40.2	43.3	41.4
% working long hours (48+/week)	23.9	25.7	21.7	25.6	21.7	26.2	21.8
% working frequent long days*	17.0	21.4	11.9	24.4	12.1	13.0	11.5

Table 3.2—continued

	All			Non-College Graduate		College Graduate	
	Overall	Men	Women	Men	Women	Men	Women
<b>D. Ages 50+</b>							
% self-employed	15.1	15.8	14.4	12.3	13.5	22.5	15.8
% with multiple jobs	12.4	11.7	13.1	9.0	10.3	16.8	17.6
% working part time (< 35 hours)	22.9	18.1	27.9	16.1	32.7	21.6	20.5
Average hours per week (main job)	38.4	40.4	36.2	40.4	35.0	40.5	38.1
Average hours per week (all jobs)	39.9	41.9	37.7	41.6	36.0	42.6	40.4
% working long hours (48+/week)	22.8	29.4	15.9	28.1	10.3	31.7	24.5
% working frequent long days*	17.3	24.0	10.3	28.1	7.4	16.4	14.8

Sample: Ages 25–71, working for pay,  $N = 2,066$ . Results weighted using raked sample weights.

\* Frequent long days consist of 10 or more hours per day, 10 or more days per month.

in some of the working conditions we analyze in Chapter Four (e.g., autonomy, creative work, and task variation).

Generally, however, American workers often work very long hours. For example, 32 percent of men and 20 percent of women report working more than 48 hours per week. At the same time, 24 percent of men and 12 percent of women frequently work long days (defined as working more than ten hours per day for ten or more days per month).<sup>1</sup> The prevalence of long hours varies substantially in the population, with some expected patterns and important nuances. Hours are higher for younger workers, typically decline with age, and tend to be higher for college graduates. Yet, the prevalence of frequently working long days is highest for non-college-graduate men and stays persistently high with age.

These patterns in hours worked foreshadow one of our key findings in Chapter Four: that American workers are exposed to a high-pressure work environment (Table 4.8), with consequences for family and social commitments (Table 4.3, Figure 4.3).

## Pay and Benefits

Table 3.3 presents median annual earnings, overall and conditional on full-time work, by gender, age, and education. Our tabulations confirm the well-documented presence of important earnings differences in the population: Women earn less than men for a given education level and age group; educated workers earn a significant premium; and earnings first rise and then flatten out with age.

<sup>1</sup> This measure and many of our measures are harmonized with the European Working Conditions Survey, described in Chapter Two.

**Table 3.3**  
**Median Annual Earnings, by Age, Gender, and Education**

	All			Non-College Graduate		College Graduate	
	Overall	Men	Women	Men	Women	Men	Women
<b>A. All ages, 25–71</b>							
All	\$42,000	\$50,324	\$35,000	\$36,000	\$27,000	\$58,000	\$45,000
Full time	\$50,000	\$54,000	\$44,000	\$40,000	\$30,000	\$60,000	\$52,000
<b>B. Under age 35</b>							
All	\$40,000	\$45,000	\$34,000	\$30,000	\$24,000	\$52,000	\$44,720
Full time	\$45,000	\$47,000	\$43,467	\$30,000	\$27,000	\$53,000	\$50,000
<b>C. Ages 35–49</b>							
All	\$45,000	\$55,000	\$38,000	\$43,000	\$29,000	\$64,000	\$45,000
Full time	\$51,000	\$58,000	\$44,000	\$50,000	\$30,000	\$69,000	\$53,000
<b>D. Ages 50+</b>							
All	\$42,000	\$53,000	\$35,000	\$35,000	\$30,000	\$61,000	\$45,000
Full time	\$ 53,000	\$60,000	\$45,000	\$40,000	\$32,000	\$69,000	\$57,000

Sample: Ages 25–71, working for pay,  $N = 1,961$ . Results weighted using raked sample weights.

Annual earnings are top-coded to \$280,000, and respondents reported earnings to the nearest dollar.

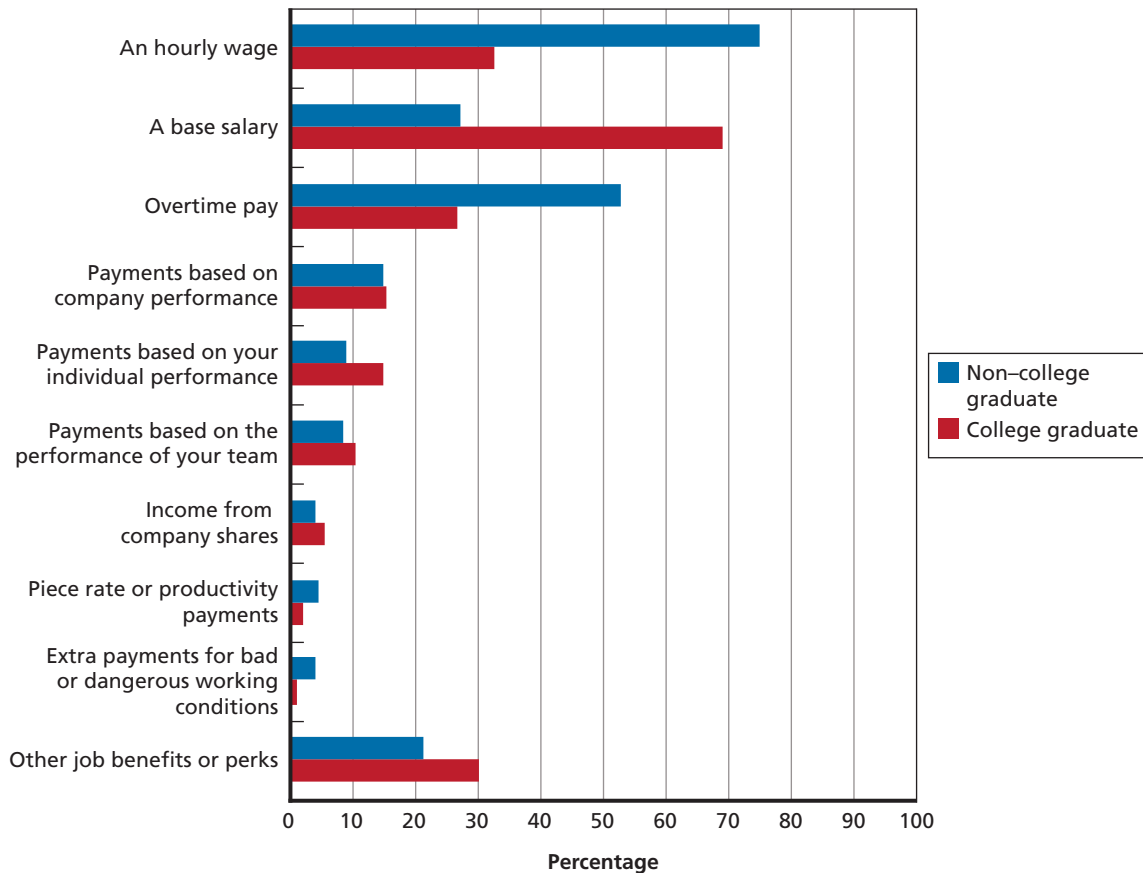
Figure 3.4 summarizes several key components of earnings from respondents' main paid job by education. As expected, workers without a college degree are much more likely to receive an hourly wage and overtime pay than college graduates, and college graduates are more likely to receive a base salary. Yet, our tabulations also reveal some patterns that have received less attention in the literature and that are relevant for our discussion in Chapter Four.

The pay of an important fraction of Americans is related to performance. Twenty-three percent of workers without a college degree and 29 percent of those with a college degree receive some form of performance pay, including payments based on company performance, individual performance, or performance of one's team. This speaks to another key finding of Chapter Four: that many workers have jobs that are both fast paced and require them to be quite independent. It is not surprising that performance-based pay is common, given the demands of the work environment.

At the same time, despite the large fraction of Americans reporting some kind of hazardous work condition (Tables 4.4, 4.5, and 4.6), very few receive explicit payments for such conditions. However, this does not necessarily mean that there is no implicit compensation in other parts of pay (e.g., a higher hourly wage).

Slightly more than 20 percent of workers without a college degree and 30 percent of college graduates report receiving perks or other benefits from their employer. Most of the reported benefits are perks (such as store discounts or access to a company car or housing), annual bonuses, or stipends; we exclude reports of such benefits as health insurance, which we asked about later in the survey. The high prevalence of these "other" benefits suggests that it would be worthwhile to collect more-detailed data on different types of compensation in the United States.

**Figure 3.4**  
**Earnings Components from Main Job, by Education**



RAND RR2014-3.4

In addition to pay, we find that more than two-thirds of Americans are covered by formal job benefits, such as company pension plans, health and dental insurance, life insurance, or disability insurance (Table 3.4). This is consistent with similar evidence on the prevalence of health insurance and pensions from other surveys, such as the Bureau of Labor Statistics' Employee Benefits Survey. However, our analysis of the AWCS suggests that these numbers do not tell the full story about American job characteristics. Foreshadowing the large inequality in working conditions we document in Chapter Four, Table 3.4 reveals that while the overall prevalence of benefits is high, benefits are nonetheless unequally distributed in the workforce. Non-college graduates are less likely to have benefits than college graduates, although the gap narrows with age, as older workers are less likely than younger workers to have benefits across the board.<sup>2</sup>

Finally, a job with benefits is not necessarily a "good" job—that is, one with favorable working conditions. As we document in the next chapter, large fractions of the American workforce face substantially adverse working conditions, including exposure to intense and repetitive physical effort, hazardous working conditions, a hostile social environment, time pressure, long hours, monotonous tasks, and irregular schedules.

<sup>2</sup> Note that the differences between older and younger workers disappear when we condition on full-time workers only.

**Table 3.4**  
**Employer Benefits Offered, by Age, Gender, and Education (Percentage)**

	All			Non-College Graduate		College Graduate	
	Overall	Men	Women	Men	Women	Men	Women
<b>A. All ages, 25–71</b>							
Paid vacation time	76.5	78.2	74.6	77.1	72.8	80.2	77.4
Paid holidays	74.1	73.7	74.5	70.6	71.2	79.6	79.6
Health insurance	74.1	75.5	72.5	73.6	67.7	79.1	79.6
Paid sick time	65.7	65.7	65.7	60.8	62.0	74.8	71.4
Pension/retirement benefits	65.6	66.7	64.4	64.2	60.4	71.4	70.3
Dental insurance	64.7	65.1	64.2	63.9	61.1	67.3	68.8
Disability insurance	62.1	62.8	61.4	59.2	58.1	69.3	66.4
Life insurance	59.9	58.3	61.7	54.3	58.9	65.5	65.9
Flexible spending account	51.9	48.9	55.4	41.1	50.3	63.1	62.9
<b>B. Under age 35</b>							
Paid vacation time	80.2	79.6	80.9	70.6	75.9	90.5	87.2
Paid holidays	78.4	78.0	78.8	70.2	69.3	87.4	90.7
Health insurance	80.0	82.0	77.1	78.5	67.1	86.2	89.0
Paid sick time	69.0	72.1	64.6	65.0	59.6	80.4	70.7
Pension/retirement benefits	68.5	69.0	67.9	63.8	58.2	75.6	79.7
Dental insurance	67.7	66.0	70.1	62.0	63.7	70.6	77.5
Disability insurance	68.2	66.4	70.5	56.0	62.5	77.0	79.4
Life insurance	59.3	54.7	65.9	43.3	55.7	67.9	78.1
Flexible spending account	52.0	45.9	60.8	27.4	49.7	66.7	72.9
<b>C. Ages 35–49</b>							
Paid vacation time	80.1	82.6	77.2	82.2	74.5	83.7	82.0
Paid holidays	76.1	76.2	76.0	73.8	72.6	82.6	81.7
Health insurance	75.4	76.5	74.2	72.4	70.0	87.7	81.3
Paid sick time	66.7	65.7	68.0	60.9	63.4	78.7	75.7
Pension/retirement benefits	66.2	68.9	63.1	66.3	60.3	75.9	67.9
Dental insurance	68.6	70.3	66.6	66.7	63.5	79.9	71.6
Disability insurance	62.7	62.4	63.2	58.4	59.3	74.1	69.7
Life insurance	63.1	62.4	63.9	57.5	61.6	75.7	67.7

Table 3.4—continued

	All			Non-College Graduate		College Graduate	
	Overall	Men	Women	Men	Women	Men	Women
Flexible spending account	54.5	51.3	58.1	43.6	52.0	72.4	67.9
<b>D. Ages 50+</b>							
Paid vacation time	70.6	72.5	68.6	75.5	69.5	67.1	67.0
Paid holidays	69.2	67.8	70.7	67.0	70.7	69.4	70.7
Health insurance	68.9	69.5	68.3	71.7	65.8	65.4	72.1
Paid sick time	62.5	61.0	64.2	58.1	61.8	66.3	67.9
Pension/retirement benefits	63.1	62.7	63.6	62.0	61.7	64.1	66.5
Dental insurance	59.1	59.3	58.8	62.1	57.6	54.2	60.7
Disability insurance	57.9	60.7	54.8	61.8	54.8	58.7	55.0
Life insurance	57.2	57.1	57.3	57.8	57.8	55.8	56.5
Flexible spending account	49.4	48.8	50.2	46.5	48.8	52.8	52.2

Sample: Ages 25–71, working for pay,  $N = 1,996$ . Results weighted using raked sample weights.

## Characteristics of Work

---

This chapter describes the conditions under which Americans work. These include control over the timing and location of work, physical and social risks in the workplace, work intensity, autonomy and creativity, training, opportunities for career advancement, and the meaning derived from work. The population described is all American workers ages 25–71 and includes the self-employed. As noted in Chapter Two, a nontrivial fraction of Americans hold more than one job; we instructed all employed survey respondents to report on the job they consider to be their “main” job. Unless otherwise noted, all group differences described in the text are statistically significant at the 5-percent level.

### The Timing and Location of Work

Eight in ten American workers describe their main job as “regular, steady work throughout the year” (Table 4.1). The remaining two in ten workers are evenly split between “predictable seasonal work during the year” and “unpredictable or irregular work (e.g., unpredictable periods without work, layoffs, and/or sporadic hours).” Regular, steady work is more common for prime-age workers (ages 35–49) than for younger or older workers, while predictable seasonal work is least common for prime-age workers. College graduates are significantly less likely to have unpredictable or irregular work than non-college graduates, but there were no differences in unpredictable or irregular work across age groups or between men and women.

While the clear majority of Americans have steady and predictable work throughout the year, many fewer work the same number of hours on a day-to-day basis (54 percent). Men are less likely (49 percent) than women (59 percent) to work the same number of hours every day (Table 4.1).<sup>1</sup> Among those without a college degree, older men (52 percent) are more likely than younger men (45 percent) to work the same number of hours each day, while non-college graduate women are most likely to work the same hours each day (approximately two-thirds), and this does not change much with age. While hours become more stable with age among men without a college degree, the opposite is true for college-graduate men and women. This age pattern could reflect the demands of career advancement for some, while for others it could arise from a preference for flexible hours.

Relatedly, 46 percent of men and 54 percent of women say they have “fixed starting and finishing times” (Table 4.1). Fixed starting and finishing times are most common among

---

<sup>1</sup> Similar percentages work the same number of hours every week, and 44 percent of men and 54 percent of women work *both* the same number of hours every day *and* the same number of hours every week.

**Table 4.1**  
**Regularity of Work, by Age, Gender, and Education (Percentage)**

Do you work . . . ?*	All			Non-College Graduate		College Graduate	
	Overall	Men	Women	Men	Women	Men	Women
<b>A. All ages, 25–71</b>							
Regular, steady work throughout the year	80.9	80.2	81.6	80.8	80.2	79.2	83.9
Predictable seasonal work during the year	9.4	10.6	8.1	9.4	7.1	12.7	9.8
Unpredictable or irregular work	9.7	9.2	10.2	9.8	12.7	8.1	6.3
Same number of hours every day	53.7	49.0	59.2	48.9	65.0	49.2	50.2
Fixed starting and finishing times	49.5	45.9	53.7	50.1	60.5	38.1	43.0
Shifts	32.3	31.4	33.4	37.7	44.6	19.7	15.9
<b>B. Under age 35</b>							
Regular, steady work throughout the year	78.4	76.9	80.3	77.5	76.1	76.3	85.8
Predictable seasonal work during the year	12.6	14.6	9.8	13.7	8.9	15.6	11.1
Unpredictable or irregular work	9.0	8.5	9.8	8.8	15.0	8.1	3.1
Same number of hours every day	53.7	49.0	59.2	48.9	65.0	49.2	50.2
Fixed starting and finishing times	46.8	42.2	53.2	45.7	61.4	38.1	42.5
Shifts	33.3	28.5	40.0	31.6	57.3	24.8	17.5
<b>C. Ages 35–49</b>							
Regular, steady work throughout the year	85.0	86.6	83.0	86.1	80.9	88.0	86.8
Predictable seasonal work during the year	6.2	5.4	7.1	5.3	6.1	5.8	8.8
Unpredictable or irregular work	8.9	8.0	9.9	8.6	13.0	6.2	4.4
Same number of hours every day	53.7	49.0	59.2	48.9	65.0	49.2	50.2
Fixed starting and finishing times	51.4	48.4	54.8	49.6	58.8	45.0	47.7
Shifts	37.3	37.8	36.6	44.6	46.0	18.9	20.0
<b>D. Ages 50+</b>							
Regular, steady work throughout the year	78.5	76.1	81.1	76.5	81.7	75.3	80.0



**Table 4.1—continued**

Do you work . . . ?*	All			Non-College Graduate		College Graduate	
	Overall	Men	Women	Men	Women	Men	Women
Predictable seasonal work during the year	10.6	12.9	8.1	11.7	7.0	15.1	9.8
Unpredictable or irregular work	10.9	11.0	10.8	11.8	11.2	9.6	10.2
Same number of hours every day	53.7	49.0	59.2	48.9	65.0	49.2	50.2
Fixed starting and finishing times	49.5	46.2	53.0	53.5	61.7	33.0	39.3
Shifts	26.7	26.9	26.5	33.3	36.3	15.3	11.2

Sample: Ages 25–71, working for pay, N = 2,024. Results weighted using raked sample weights.

\* Response categories are not mutually exclusive.

women without a college degree (61 percent), regardless of age. Shift work is also most common among women without a college degree (45 percent), followed by non-college-graduate men (38 percent), college-graduate men (20 percent), and college-graduate women (16 percent). Overall, the data in Table 4.1 suggest substantial variability in working hours for Americans that is unequally distributed across the population, especially by education. The fact that variability rises with age among higher-educated workers suggests that some of this variability may be by choice.

To explore the element of choice in working arrangements, Table 4.2 summarizes responses to the question, “How are your working time arrangements set?” Thirty-eight percent of men and 35 percent of women have the most restrictive possible arrangement, with their hours “set by company with no possibility for changes.” Another 11 percent of men and 11 percent of women “can choose between several fixed schedules,” while 35 percent of men and 41 percent of women “can adapt working hours within certain limits.” At the extreme, just 16 percent of men and 14 percent of women can fully determine their schedule (“working hours entirely determined by me”). Non-college-graduate men have the least choice over their schedules, with 48 percent reporting the most-restrictive arrangement, and only 24 percent having the ability to adapt hours with certain limits. The reverse is true for college-graduate men: Only 18 percent have the most restrictive arrangement, and more than half (57 percent) can adapt their working hours within certain limits. Among women, the pattern by education is similar, although less pronounced. Older (age 50 and up) college-graduate men have by far the most freedom in setting their work schedules, with one-quarter saying that their work hours are entirely determined by them.

Overall, Table 4.2 suggests that most Americans have some choice in setting their schedule, though for the clear majority, the company plays an important role in schedule-setting. Choice over one’s schedule is unequally distributed by education, with college graduates having substantially more control over their schedules. Older, college-graduate men stand out as having the most freedom to determine their schedules.

**Table 4.2**  
**Freedom to Set Work Schedule, by Age, Gender, and Education (Percentage)**

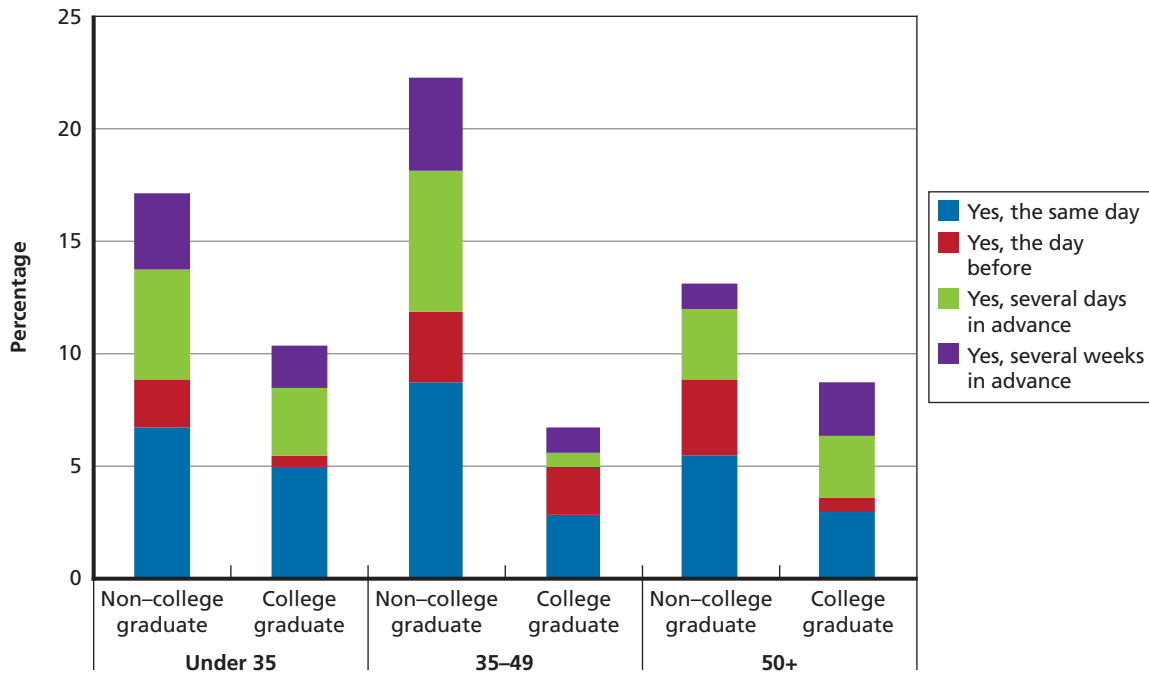
How are your working time arrangements set?*	All			Non-College Graduate		College Graduate	
	Overall	Men	Women	Men	Women	Men	Women
<b>A. All ages, 25–71</b>							
Set by company with no possibility for changes	36.3	37.5	34.8	47.9	40.1	18.0	26.6
Can choose between several fixed schedules	10.7	10.8	10.7	11.5	12.9	9.3	7.1
Can adapt working hours within certain limits	37.9	35.4	40.9	23.9	32.2	57.1	54.5
Working hours entirely determined by me	15.1	16.3	13.6	16.7	14.8	15.6	11.8
<b>B. Under age 35</b>							
Set by company with no possibility for changes	34.5	36.8	31.3	49.4	37.3	21.6	23.3
Can choose between several fixed schedules	12.0	11.3	13.0	11.7	16.1	10.9	8.8
Can adapt working hours within certain limits	40.6	36.7	46.1	18.8	32.9	58.2	63.4
Working hours entirely determined by me	12.9	15.2	9.7	20.1	13.7	9.3	4.5
<b>C. Ages 35–49</b>							
Set by company with no possibility for changes	37.5	37.2	37.9	44.5	42.9	16.6	29.0
Can choose between several fixed schedules	11.5	11.8	11.2	13.1	13.5	8.1	7.3
Can adapt working hours within certain limits	36.6	35.0	38.4	25.0	29.1	63.3	54.7
Working hours entirely determined by me	14.4	16.0	12.5	17.5	14.5	12.0	8.9
<b>D. Ages 50+</b>							
Set by company with no possibility for changes	36.3	38.5	34.0	51.1	38.7	15.4	26.7
Can choose between several fixed schedules	9.0	9.2	8.8	9.4	10.7	8.8	5.8
Can adapt working hours within certain limits	37.4	34.8	40.1	25.8	34.8	51.2	48.4
Working hours entirely determined by me	17.3	17.5	17.1	13.6	15.8	24.6	19.1

Sample: Ages 25–71, working for pay,  $N = 2,023$ . Results weighted using raked sample weights.

\* Response categories are mutually exclusive.

Workers with little or no choice of schedules are often subject to frequent and unpredictable changes to their work schedule (Figure 4.1). We asked workers, “Do changes to your work schedule occur often?” with the following response categories: “No,” “Yes, the same day,” “Yes, the day before,” “Yes, several days in advance,” and “Yes, several weeks in advance.” Non-college graduates are most prone to frequent changes in their work schedule, with prime-age workers more often subject to frequent changes than younger or older workers. For example, 9 percent of prime-age non-college-graduate workers frequently experience changes to their work schedule the same day, and another 3 percent frequently experience changes with notice the day before. Altogether, more than one in five non-college-graduate, prime-age workers are subject to frequent changes to their work schedules, and more than half the time, these

**Figure 4.1**  
**Frequent and Unpredictable Changes to Work Schedule, by Age and Education**



RAND RR2014-4.1

changes are made with little or no notice. There were no significant differences in frequent and unpredictable changes in work schedule by gender (not shown).

Relatedly, we asked respondents whether they could choose *where* they worked during regular business hours. More than 80 percent of American workers without a college degree cannot choose where they work, with no significant differences between men and women (not shown). College-graduate men are least constrained in this regard; 64 percent of men with a college degree cannot choose where they work, compared with 74 percent of college-graduate women. There were no significant differences across age groups. Overall, presence at the workplace during regular business hours is a requirement for most American workers (78 percent), with the option to telecommute still only available for a minority of workers.

While presence at the work place during business hours is required for most Americans, many take work home. About one-half of American workers do some work in their free time to meet work demands (Table 4.3). Approximately one in ten workers report working in their free time “nearly every day” over the last month, two in ten workers report working in their free time “once or twice a week,” and two in ten workers report working in their free time “once or twice a month.” Men are no more likely than women to work during their free time. College-graduate workers (particularly younger, college-graduate men) are more likely to work in their free time than non-college graduates.

Overall, while for one-half of Americans there is a clear separation between work and free time, a substantial fraction does work during free time. Together with Tables 4.1 and 4.2, these patterns suggest that work-time variability manifests differently by education, with college graduates taking work home and the non-college graduates experiencing more schedule variation that may be beyond their control.

**Table 4.3**  
**Working in Free Time, by Age, Gender, and Education (Percentage)**

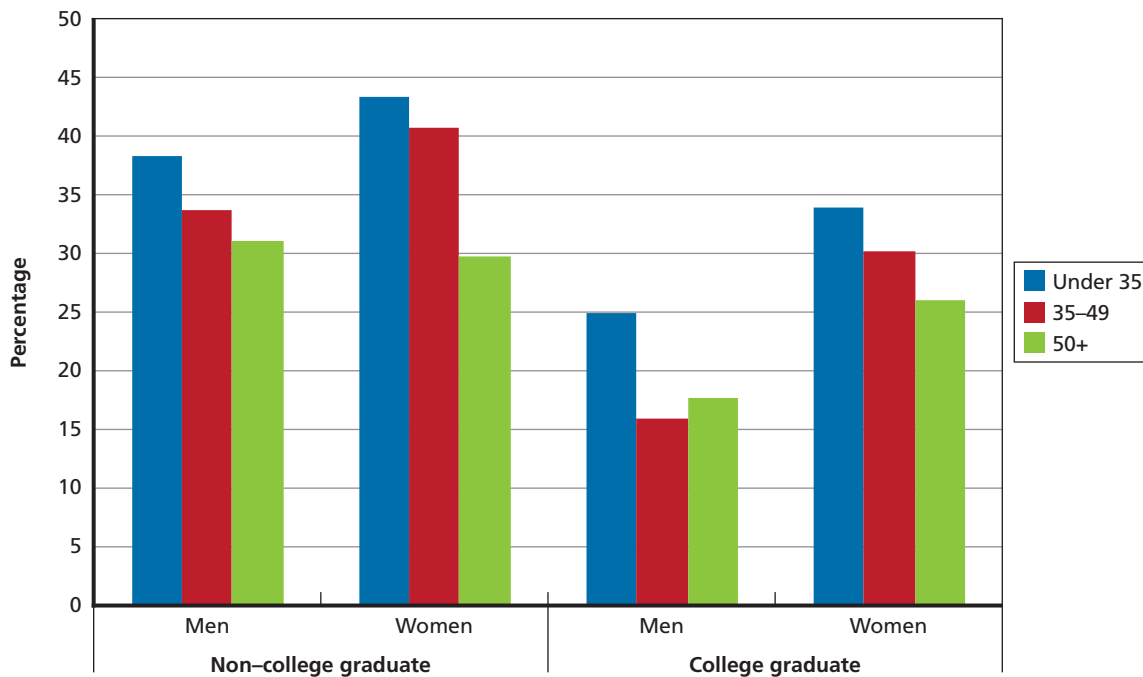
Over the last month, how often have you worked in your free time in order to meet work demands?*	All			Non-College Graduate		College Graduate	
	Overall	Men	Women	Men	Women	Men	Women
<b>A. All ages, 25–71</b>							
Nearly every day	10.3	9.6	11.1	9.8	9.8	9.3	13.3
Once or twice a week	18.4	18.3	18.5	12.5	13.4	29.1	26.3
Once or twice a month	21.4	21.3	21.4	18.0	19.5	27.4	24.5
I didn't work in my free time last month	49.9	50.8	49.0	59.7	57.3	34.2	35.9
<b>B. Under age 35</b>							
Nearly every day	10.2	11.0	9.0	14.5	6.6	6.8	12.1
Once or twice a week	23.2	24.2	21.8	16.0	14.4	34.0	31.5
Once or twice a month	24.8	24.2	25.6	23.7	24.9	24.9	26.4
I didn't work in my free time last month	41.8	40.6	43.6	45.8	54.0	34.3	29.9
<b>C. Ages 35–49</b>							
Nearly every day	10.3	7.4	13.7	6.6	13.4	9.6	14.2
Once or twice a week	16.0	13.1	19.4	10.6	16.0	19.9	25.3
Once or twice a month	20.7	21.6	19.7	16.3	18.6	36.5	21.7
I didn't work in my free time last month	53.0	57.9	47.3	66.5	52.1	34.0	38.9
<b>D. Ages 50+</b>							
Nearly every day	10.4	10.9	10.0	10.6	7.9	11.4	13.2
Once or twice a week	17.5	19.2	15.6	12.5	10.4	31.5	23.8
Once or twice a month	19.7	18.7	20.7	16.4	17.4	23.0	25.8
I didn't work in my free time last month	52.4	51.2	53.7	60.6	64.3	34.1	37.1

Sample: Ages 25–71, working for pay,  $N = 2,018$ . Results weighted using raked sample weights.

\* Response categories are mutually exclusive.

While many Americans regularly adjust their personal schedules to accommodate work matters, we also asked about the reverse: how easily they could adjust their work schedules to accommodate personal matters. Thirty-one percent of American workers find it somewhat or very difficult to adjust their work schedule to accommodate a personal matter. In general, women are more likely than men to report difficulty arranging for time off during work hours to take care of personal or family matters, younger workers report more difficulties than older workers, and non-college graduates report more difficulties than college graduates. Indeed, 43 percent of younger, non-college-graduate women report difficulty arranging for time off during work hours to take care of personal or family matters, compared with 38 percent of younger, non-college-graduate men, or 34 percent of younger, college-graduate women (Figure 4.2). Prime-age and older college-graduate men are least likely to report difficulty

**Figure 4.2**  
**Difficulty Arranging for Time Off During Work Hours to Take Care of Personal or Family Matters, by Age and Education**



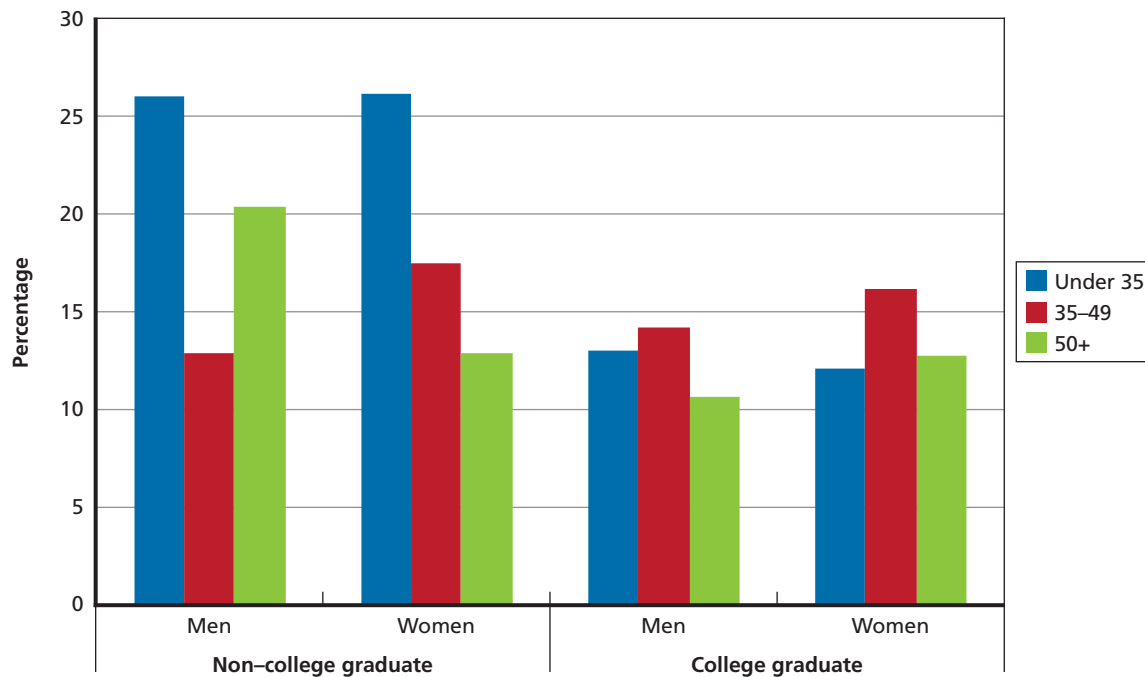
RAND RR2014-4.2

taking time off to attend to personal matters (16 and 18 percent, respectively); their low rates of difficulty contrast starkly with the higher rates of difficulty reported by prime-age and older women (30 and 26 percent, respectively).

Non-college graduates are also most likely to report a poor fit between their working hours and their family or social commitments outside of work, where poor fit was defined as responding “Not very well” or “Not at all well” to the question “In general, do your working hours fit in with your family or social commitments outside work?” (Figure 4.3). This was especially the case for younger non-college graduates (26 percent, both men and women). In contrast, older (ages 50 and up) college graduates are least likely to report a poor fit between working hours and outside commitments (11 percent of men and 13 percent of women).

Overall, a substantial fraction of young American workers feel constrained by their work schedules, presumably because this is a time of intense work effort for them (see Table 4.8) and a period when many have small children. For women, these constraints do not fully resolve with age, perhaps due to ongoing child-rearing demands or the need to assist elderly parents. Together with Table 4.8, Figures 4.2 and 4.3 reveal that most American workers face substantial time pressure at work that has important spillovers to their family and social lives.

**Figure 4.3**  
**Poor Fit of Working Hours with Family and Social Commitments, by Age and Education**



RAND RR2014-4.3

## Physical and Social Risks in the Workplace

American workers are subject to substantial physical demands in the workplace. One-half of men and one-third of women have a job that involves lifting or moving people or carrying or moving heavy loads one-quarter of the time or more frequently (Table 4.4). Forty-six percent of men and 35 percent of women have jobs involving tiring or painful positions one-quarter of the time or more. Thirty-eight percent of men and 30 percent of women work in jobs that involve standing all or almost all the time. Women are less likely to have physically demanding jobs on these three measures than men. College graduates and older workers are also less likely to have physically demanding jobs than those without college degrees and younger workers, respectively. Overall, these patterns indicate that an overwhelming fraction of Americans engage in intense physical exertion on the job—67 percent of men and 54 percent of women report at least one of the three intense physical demand measures from Table 4.4 (moving heavy loads or people, tiring or painful positions, and prolonged standing). Moreover, nearly three-quarters of American workers report repetitive hand or arm movements one-quarter of the time or more. The burdens of intense physical or repetitive work are unequally distributed, with less-educated workers having substantially higher physical demands. But even college graduates, older workers, and women experience substantial physical demands.

Recent evidence associates sitting for long periods of time with all-cause mortality, even after controlling for physical activity in other parts of the day. More than one-third of American men and 54 percent of American women work in jobs that involve sitting all or most of the time (Table 4.4). In contrast with other measures of physical demands, women are more likely

**Table 4.4**  
**Physical Demands, by Age, Gender, and Education (Percentage)**

Does your main paid job involve . . . ?*	All			Non-College Graduate		College Graduate	
	Overall	Men	Women	Men	Women	Men	Women
<b>A. All ages, 25–71</b>							
Moving heavy loads or people (1/4 time+)	45.1	53.7	34.7	67.9	42.9	27.2	22.3
Tiring or painful positions (1/4 time+)	40.9	46.1	34.8	56.6	42.9	26.3	22.2
Standing (all or almost all of the time)	34.3	37.9	30.1	49.9	38.2	15.5	17.6
Engaging in at least one of the above	60.8	66.8	53.6	80.0	62.9	42.0	39.3
Repetitive hand/arm movements (1/4 time+)	74.8	74.1	75.6	81.5	80.6	60.2	68.0
Sitting (all or almost all of the time)	44.3	36.9	53.0	29.8	49.5	50.2	58.4
<b>B. Under age 35</b>							
Moving heavy loads or people (1/4 time+)	51.4	58.8	40.9	81.5	55.1	31.8	22.7
Tiring or painful positions (1/4 time+)	45.5	50.5	38.5	65.8	53.8	32.3	18.9
Standing (all or almost all of the time)	40.7	39.7	42.1	59.3	58.2	16.5	21.6
Engaging in at least one of the above	62.3	66.2	56.8	83.8	74.3	45.2	34.3
Repetitive hand/arm movements (1/4 time+)	78.3	80.0	75.9	89.1	80.1	69.1	70.7
Sitting (all or almost all of the time)	45.4	37.5	56.6	20.8	49.6	57.3	65.4
<b>C. Ages 35–49</b>							
Moving heavy loads or people (1/4 time+)	48.3	55.9	39.4	66.3	46.7	26.8	26.8
Tiring or painful positions (1/4 time+)	41.9	50.5	31.7	61.6	38.6	19.6	20.0
Standing (all or almost all of the time)	35.1	39.1	30.3	47.9	36.8	14.6	19.3
Engaging in at least one of the above	62.5	70.2	53.3	81.8	60.2	37.9	41.5
Repetitive hand/arm movements (1/4 time+)	75.4	73.7	77.5	80.5	82.2	54.6	69.4
Sitting (all or almost all of the time)	48.7	41.9	56.6	39.5	52.8	48.5	63.3
<b>D. Ages 50+</b>							
Moving heavy loads or people (1/4 time+)	37.5	47.6	26.8	61.1	32.6	23.0	17.9
Tiring or painful positions (1/4 time+)	36.8	38.0	35.5	44.7	41.4	25.7	26.4
Standing (all or almost all of the time)	29.3	35.3	22.9	46.3	28.9	15.4	13.6
Engaging in at least one of the above	58.0	63.6	52.1	75.5	59.5	42.1	40.6
Repetitive hand/arm movements (1/4 time+)	71.8	70.0	73.7	77.7	79.4	55.8	64.9
Sitting (all or almost all of the time)	39.2	31.3	47.6	23.9	46.4	44.6	49.5

Sample: Ages 25–71, working for pay, *N* = 2,006. Results weighted using raked sample weights.

\* Response categories are not mutually exclusive.

to work in jobs that involve prolonged sitting compared with men, and college-graduate workers are more likely to work in sedentary jobs than workers without a college degree. Somewhat surprisingly, the prevalence of prolonged sitting is substantially *lower* among older workers (ages 50 and up) than among younger and prime-age workers. Non-college-graduate men are an exception; 21 percent of younger men without a college degree hold sedentary jobs, compared with 24 percent of their older (ages 50 and up) counterparts.

In addition to physical demands, more than one-half of American workers (55 percent) are exposed to unpleasant or potentially dangerous working conditions (Table 4.5). Sixty-two percent of men and 46 percent of women are exposed to vibrations (from hand tools or machinery); loud noise (defined as “Noise so loud that you would have to raise your voice to talk to people”); extreme temperatures (high or low); smoke, fumes, powder, dust, or vapors (including tobacco smoke); or chemical products or infectious materials one-quarter of the time or more at work. Table 4.5 presents these risks by gender, age, and education. Men are substantially more likely to be exposed than women, and workers without a college degree are substantially more likely to be exposed than workers with a college degree. In most instances, exposure rates persist with age. The most-frequent exposure is to extreme temperatures, with approximately one-half of American men and 30 percent of American women reporting exposure to extreme temperatures at work one-quarter of the time or more. The next-most-common exposures for men are noise (39 percent); breathing in smoke, fumes, powder, dust, or vapors (29 percent); vibrations (29 percent); and handling chemical products or infectious materials (29 percent). After extreme temperatures, the next-most-common exposures for women are handling chemical products or infectious materials (23 percent); noise (20 percent); breathing in smoke, fumes, powder, dust, or vapors (17 percent); and vibrations (9 percent). Overall, results in Table 4.5 show that an important fraction of Americans report exposure to unpleasant and potentially hazardous working conditions. Again, such exposure is highly unequally distributed, with the greater part falling on less-educated workers and men and persisting with age. Yet, a nonnegligible fraction (approximately one-third) of college-graduate workers experience some exposure risks.

Nearly one in five American workers were subjected to some form of verbal abuse, unwanted sexual attention, threats, or humiliating behavior at work in the past month or to physical violence, bullying or harassment, or sexual harassment at work in the past 12 months. Among men, the most common adverse events were verbal abuse and threats (13 percent in the past month), humiliating behavior (10 percent in the past month), bullying or harassment (9 percent in the past year), physical violence (2 percent in the past year), and unwanted sexual attention (1 percent in the past month) (Table 4.6). Among women, the most common adverse events were verbal abuse and threats (12.1 percent in the past month), bullying or harassment (11 percent in the past year), humiliating behavior (8 percent in the past month), unwanted sexual attention (5 percent in the past month), and physical violence (1 percent in the past year). These risks tend to be highly correlated with one another. The most-highly correlated adverse events are unwanted sexual attention and sexual harassment ( $\rho = 0.76$ ). Humiliating behavior is highly correlated with verbal abuse ( $\rho = 0.50$ ) and with bullying ( $\rho = 0.43$ ).

College graduates tend to experience fewer adverse social interactions at work than non-college graduates; however, the differences are more nuanced here than for physical job demands and exposures. Among younger men without a college degree, a staggering 35 percent report



**Table 4.5**  
**Physical Exposure Risks, by Age, Gender, and Education (Percentage)**

Are you exposed at work (at your MAIN JOB) to . . . at least 1/4 of the time or more?*	All			Non-College Graduate		College Graduate	
	Overall	Men	Women	Men	Women	Men	Women
<b>A. All ages, 25–71</b>							
Vibrations from hand tools, machinery, etc.	20.2	29.3	9.4	38.6	12.9	12.1	4.0
Noise so loud must raise voice to talk	29.9	38.7	19.5	48.6	24.1	20.1	12.3
Extreme temperatures (low or high)	41.7	52.0	29.6	66.0	35.0	25.8	21.3
Breathing smoke/fumes/powder/dust/vapors**	23.5	29.3	16.6	38.8	23.1	11.5	6.4
Handling chem. products/infectious materials	25.9	28.6	22.6	35.5	28.2	15.8	14.0
Exposed to any of the above	54.7	62.1	45.9	75.9	54.4	36.3	32.7
<b>B. Under age 35</b>							
Vibrations from hand tools, machinery, etc.	22.2	28.0	13.9	37.9	20.4	16.1	5.6
Noise so loud must raise voice to talk	29.3	32.3	24.9	39.9	31.0	23.3	17.2
Extreme temperatures (low or high)	41.7	52.0	27.2	74.4	31.8	25.3	21.1
Breathing smoke/fumes/powder/dust/vapors**	26.4	28.4	23.4	39.9	35.1	14.8	8.4
Handling chem. products/infectious materials	26.4	26.7	25.9	36.3	32.2	15.4	17.8
Exposed to any of the above	55.6	60.6	48.3	85.7	57.9	30.8	36.0
<b>C. Ages 35–49</b>							
Vibrations from hand tools, machinery, etc.	24.5	35.8	11.3	45.3	14.9	9.4	5.0
Noise so loud must raise voice to talk	32.6	43.0	20.4	52.0	25.0	17.7	12.5
Extreme temperatures (low or high)	44.1	54.1	32.3	64.5	38.8	24.9	21.2
Breathing smoke/fumes/powder/dust/vapors**	26.2	34.4	16.7	43.8	21.8	7.8	8.0
Handling chem. products/infectious materials	28.5	34.5	21.5	40.2	26.3	18.5	13.1
Exposed to any of the above	56.2	64.9	46.0	73.7	55.0	40.1	30.5
<b>D. Ages 50+</b>							
Vibrations from hand tools, machinery, etc.	14.6	23.6	5.1	31.0	7.0	10.2	2.1
Noise so loud must raise voice to talk	27.6	39.0	15.5	50.0	19.5	18.9	9.1
Extreme temperatures (low or high)	39.4	49.8	28.4	62.3	32.9	26.9	21.5
Breathing smoke/fumes/powder/dust/vapors**	18.8	24.7	12.5	32.1	18.1	11.2	3.8
Handling chem. products/infectious materials	23.0	24.0	21.9	29.4	27.9	14.1	12.5
Exposed to any of the above	52.5	60.2	44.3	72.0	51.9	38.7	32.5

Sample: Ages 25–71, working for pay, *N* = 2,005. Results weighted using raked sample weights.

\* Response categories are not mutually exclusive.

\*\* Includes smoke, fumes (such as welding or exhaust fumes, powder or dust (such as wood dust or mineral dust), vapors (such as solvents or thinners), and tobacco smoke from other people.

**Table 4.6**  
**Abuse, Violence and Harassment, by Age, Gender, and Education (Percentage)**

Over the last [month/12 months], during the course of your work have you been subjected to . . . ?*	All			Non-College Graduate		College Graduate	
	Overall	Men	Women	Men	Women	Men	Women
<b>A. All ages, 25–71</b>							
Verbal abuse or threats (past month)	12.8	13.1	12.4	15.6	13.9	8.4	10.0
Humiliating behavior (past month)	9.0	9.8	7.9	12.5	8.3	5.0	7.4
Unwanted sexual attention (past month)	2.7	0.8	4.9	0.9	6.3	0.7	2.7
Bullying/harassment including sexual (past year)	10.2	9.6	11.0	10.5	11.8	7.7	9.8
Physical violence (past year)	1.6	2.0	1.1	2.2	1.7	1.6	0.2
Any adverse social interaction listed above	19.6	20.5	18.6	23.6	19.3	14.6	17.6
<b>B. Under age 35</b>							
Verbal abuse or threats (past month)	17.0	18.5	14.8	28.0	16.6	7.1	12.5
Humiliating behavior (past month)	13.4	17.6	7.3	27.4	10.2	6.1	3.6
Unwanted sexual attention (past month)	4.8	2.4	8.2	3.9	7.6	0.6	8.9
Bullying/harassment including sexual (past year)	11.6	10.6	13.1	10.5	13.2	10.7	13.0
Physical violence (past year)	1.2	1.6	0.7	1.9	1.2	1.2	0.0
Any adverse social interaction listed above	23.7	26.0	20.4	34.6	20.2	15.9	20.8
<b>C. Ages 35–49</b>							
Verbal abuse or threats (past month)	12.7	11.4	14.3	12.6	16.5	8.1	10.3
Humiliating behavior (past month)	7.7	8.3	7.1	10.1	5.5	3.3	9.8
Unwanted sexual attention (past month)	2.5	0.2	5.0	0.0	7.4	0.9	0.8
Bullying/harassment including sexual (past year)	10.5	11.2	9.7	12.9	10.0	6.2	9.2
Physical violence (past year)	2.7	3.4	1.9	3.4	2.9	3.3	0.2
Any adverse social interaction listed above	20.2	21.3	19.0	23.6	20.8	15.0	15.8
<b>D. Ages 50+</b>							
Verbal abuse or threats (past month)	10.0	10.6	9.2	11.1	9.9	9.9	8.2
Humiliating behavior (past month)	7.2	5.5	9.1	5.6	10.0	5.2	7.8
Unwanted sexual attention (past month)	1.5	0.2	2.9	0.0	4.5	0.7	0.3
Bullying/harassment including sexual (past year)	9.0	7.1	11.1	7.7	12.9	5.9	8.3
Physical violence (past year)	0.7	0.8	0.7	0.9	0.9	0.6	0.3
Any adverse social interaction listed above	16.2	15.3	17.2	16.6	17.3	13.0	17.0

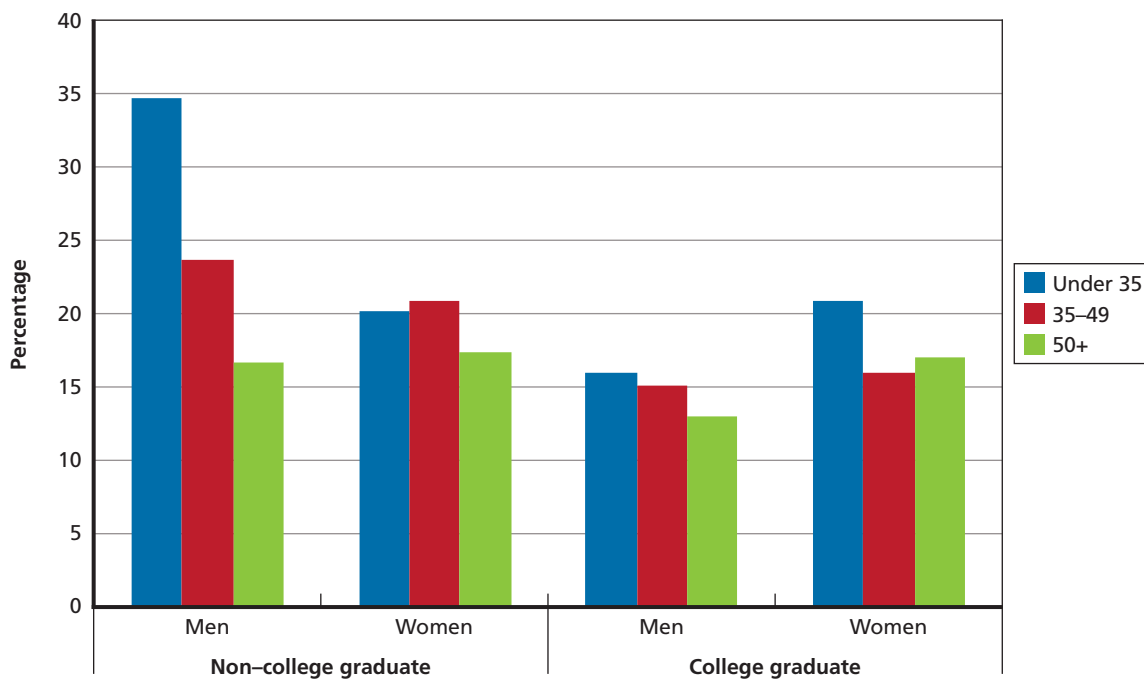
Sample: Ages 25–71, working for pay,  $N = 2,005$ . Results weighted using raked sample weights.

\* Response categories are not mutually exclusive.

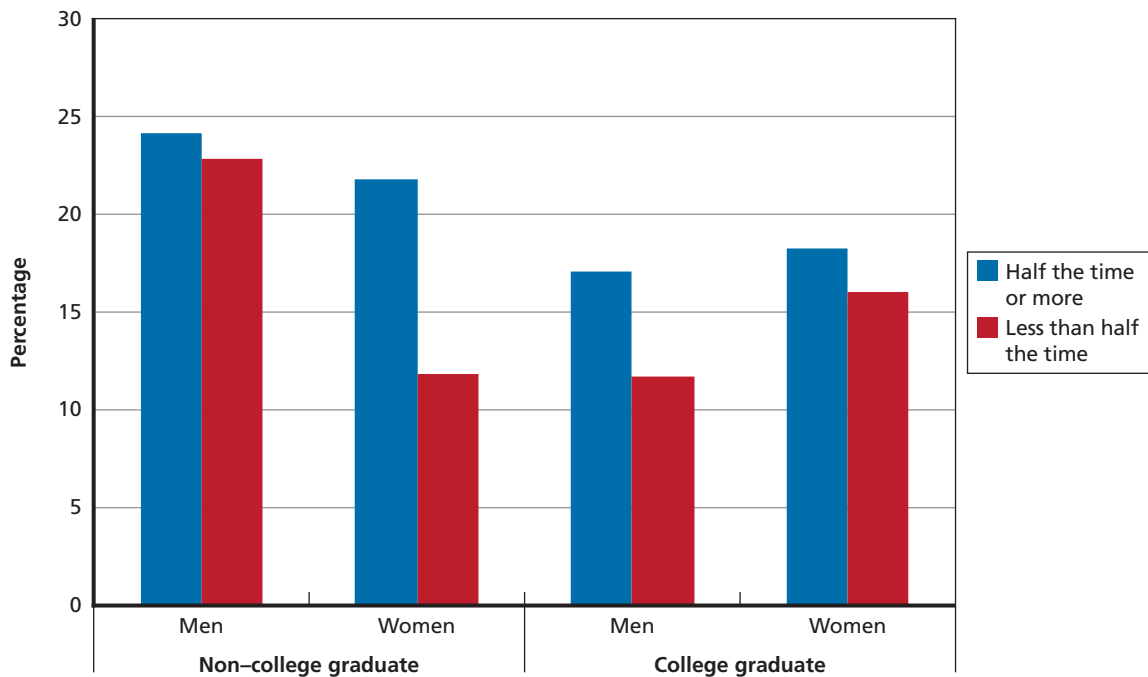
exposure to at least one type of adverse social interaction—nearly twice the national average (Figure 4.4). Broken down by type of event, 28 percent of young, non-college-graduate men report being subjected to verbal abuse or threats, 27 percent experienced humiliating behavior, and 4 percent reported receiving unwanted sexual attention in the past month; 11 percent reported being subjected to bullying or harassment (including sexual harassment) in the past year (Table 4.6); and 2 percent reported physical violence in the past year. The patterns among women are also alarming, especially with respect to unwanted sexual attention: 9 percent of young, college-graduate women (age 25–35), 8 percent of young, non-college-graduate women, and 7 percent of prime-age, non-college-graduate women (age 35–49) reported receiving unwanted sexual attention in the past month. Except for men without a college degree, workers who frequently deal directly with customers or service recipients are more at risk than those who do not often deal directly with customers (Figure 4.5).

Overall, Table 4.6 shows that a disturbingly high fraction of American workers (both men and women) are exposed to hostile or threatening behaviors at work. The incidence of hostile experiences varies in important ways by age and gender, with younger and prime-age women more likely to experience unwanted sexual attention, and a large fraction of young men experiencing verbal abuse. While verbal abuse and humiliating behavior occur more frequently for younger men without a college degree than for those younger men with a college degree, hostile experiences at work are generally more evenly distributed across education groups than physical demands (Table 4.4) and hazardous exposures (Table 4.5).

**Figure 4.4**  
**Any Reported Abuse, Harassment, or Violence at Work, by Age, Gender, and Education**



**Figure 4.5**  
**Any Reported Abuse, Harassment, or Violence at Work, by Gender, Education, and Frequency of Dealing Directly with Customers**



RAND RR2014-4.5

## Social Support at Work

While the workplace is a source of hostile social experiences for an important fraction of American workers (Table 4.6), it is a source of *supportive* social experiences for many others (Table 4.7). More than one-half of American workers agreed with the statement “I have very good friends at work,” with women more likely to report having very good friends at work than men (61 and 53 percent, respectively). We asked employees who work for someone else whether they agreed or disagreed with the following statements about their immediate boss: “trusts you,” “respects you,” “gives praise/recognition,” “gets people to work together,” “is helpful,” “provides useful feedback,” and “encourages and supports your development.” Ninety-five percent of employees agreed with at least one of these statements about their boss, and more than half (58 percent) agreed with all seven. Table 4.7 presents the percentage of employees agreeing with all seven statements about their boss, as well as the percentage agreeing with the statements “You like and respect your colleagues,” “There is good cooperation between you and your colleagues,” and “Conflicts are resolved in a fair way.”

While women are more likely than men to report having very good friends at work, they are less likely than men to report having a very supportive boss (55 percent versus 60 percent). Older workers are notably less likely than younger workers to have a very supportive boss (53 versus 66 percent) and are slightly less likely to have very good friends at work (53 versus 57 percent;  $p = 0.10$ ). Like and respect for colleagues is relatively high (78 percent) and remains so across the age distribution. One reason having a supportive boss may be important is that it could have a protective effect against adverse social interactions (Table 4.6), whether they arise

**Table 4.7**  
**Social Support at Work, by Age and Gender (Percentage)**

	All			Non-College Graduate		College Graduate	
	Overall	Men	Women	Men	Women	Men	Women
<b>A. All ages, 25–71</b>							
Has very good friends at work	56.4	52.7	60.7	55.8	61.0	46.9	60.4
Supportive boss*^	57.9	60.4	55.1	56.3	54.4	68.1	56.1
Like and respect colleagues*	78.4	77.3	79.6	75.1	77.0	81.5	83.7
Good cooperation with colleagues*	78.8	80.0	77.4	77.4	73.0	84.9	84.3
Conflicts resolved fairly*	56.6	56.8	56.3	55.5	54.0	59.3	59.8
<b>B. Under age 35</b>							
Has very good friends at work	56.9	52.0	63.9	65.1	62.4	36.5	65.8
Supportive boss*^	65.7	69.3	60.9	57.9	62.7	81.2	58.4
Like and respect colleagues*	78.8	78.9	78.6	80.2	75.3	77.5	83.0
Good cooperation with colleagues*	76.7	77.6	75.4	68.8	71.8	87.3	80.2
Conflicts resolved fairly*	56.8	54.7	59.8	53.6	60.7	55.9	58.6
<b>C. Ages 35–49</b>							
Has very good friends at work	59.2	55.8	63.0	56.2	64.3	54.8	60.8
Supportive boss*^	57.5	60.3	54.3	60.0	50.6	61.0	60.8
Like and respect colleagues*	79.8	79.4	80.3	78.9	75.8	80.8	87.9
Good cooperation with colleagues*	82.0	84.6	79.0	85.4	73.1	82.4	89.2
Conflicts resolved fairly*	59.5	59.5	59.5	60.4	55.4	56.8	66.6
<b>D. Ages 50+</b>							
Has very good friends at work	53.3	49.9	56.8	49.3	56.9	51.1	56.6
Supportive boss*^	52.8	53.4	52.1	50.7	53.4	58.9	50.1
Like and respect colleagues*	76.6	73.7	79.6	67.3	79.2	86.9	80.2
Good cooperation with colleagues*	77.0	76.9	77.1	73.2	73.7	84.3	82.4
Conflicts resolved fairly*	53.3	55.7	50.8	50.7	48.7	65.7	54.1

Sample: Ages 25–71, working for pay, N = 2,006. Results weighted using raked sample weights.

\* Conditional on working for someone else (an employee).

^ “Supportive boss” defined by exhibiting all seven positive behaviors (as rated by respondent): “trusts you,” “respects you,” “gives praise/recognition,” “gets people to work together,” “is helpful,” “provides useful feedback,” and “encourages and supports your development.”

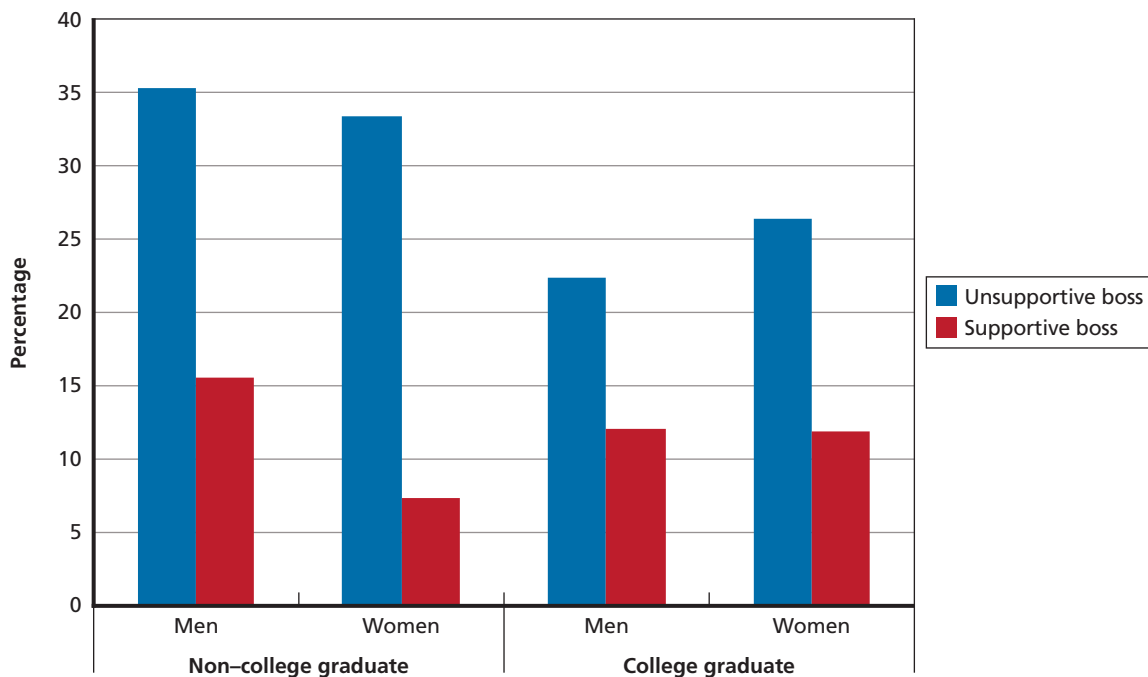
from interactions with customers or clients, with peers, or between supervisors and subordinates. Figure 4.6 shows that having a very supportive boss (i.e., a boss who performs all seven positive behaviors) is associated with a much lower incidence of abuse, harassment, or violence at work, especially for less-educated workers.

## Work Intensity

We next examine the intensity and pace of work. We asked respondents, “On the whole, is your pace of work dependent, or not, on” the following factors: “work done by colleagues,” “direct demands from people,” “targets,” “automatic speed of machine/product movement,” or “direct control of boss/client.” The most common determinants of work intensity are direct demands from people (reported by 76 percent of workers), work done by colleagues (54 percent), direct control of boss or client (53 percent), targets (43 percent), and automatic speed of machine or product movement (24 percent). Only 7 percent of American workers reported that none of these factors determined the pace of their work. Nearly half of American workers reported that the pace of their work was dependent on three or more of these factors (Table 4.8).

Approximately two-thirds of Americans have jobs that involve working at very high speed at least half the time; the same fraction works to tight deadlines at least half the time. The overlap is high, with 56 percent working in jobs that involve both working at high speed and to tight deadlines half the time or more. There are no significant gender differences in working at high speed or working to tight deadlines (Table 4.8). Although college graduates are less likely than non-college graduates to work at very high speed, they are more likely to work to

**Figure 4.6**  
Any Reported Abuse, Harassment, or Violence at Work, by Gender, Education, and Whether One Has a Supportive Boss



**Table 4.8**  
**Intensity of Work, by Age, Gender, and Education (Percentage)**

	All			Non-College Graduate		College Graduate	
	Overall	Men	Women	Men	Women	Men	Women
<b>A. All ages, 25–71</b>							
Three or more pace determinants*	49.0	53.7	43.5	57.3	45.6	46.8	40.2
High speed (at least half the time)	66.1	65.8	66.4	66.6	68.9	64.4	62.4
Tight deadlines (at least half the time)	66.0	67.5	64.4	63.3	61.0	75.4	69.6
Not enough time to do job**	27.2	29.3	24.6	30.0	21.2	28.0	29.9
Frequent disruptions***	19.9	20.0	19.6	17.4	14.0	25.0	28.3
<b>B. Under age 35</b>							
Three or more pace determinants*	63.5	71.5	52.1	79.7	55.8	61.7	47.2
High speed (at least half the time)	77.3	78.7	75.5	79.3	77.2	77.9	73.2
Tight deadlines (at least half the time)	72.4	76.4	66.9	66.3	61.2	88.1	74.1
Not enough time to do job**	32.1	41.0	19.6	47.5	14.7	33.3	25.9
Frequent disruptions***	22.6	25.0	19.1	21.9	6.4	28.7	35.2
<b>C. Ages 35–49</b>							
Three or more pace determinants*	49.2	52.8	44.9	57.8	45.9	38.9	43.1
High speed (at least half the time)	66.8	63.3	70.7	63.4	73.2	63.3	66.2
Tight deadlines (at least half the time)	63.1	61.8	64.5	59.5	62.4	68.3	68.2
Not enough time to do job**	27.2	26.8	27.8	26.9	24.2	26.3	34.0
Frequent disruptions***	20.2	19.7	20.8	17.7	16.8	25.5	27.7
<b>D. Ages 50+</b>							
Three or more pace determinants*	39.1	40.8	37.2	42.3	39.9	38.2	33.1
High speed (at least half the time)	57.7	58.4	57.0	62.0	60.1	51.9	52.1
Tight deadlines (at least half the time)	64.8	66.7	62.8	65.9	59.6	68.3	67.8
Not enough time to do job**	23.7	23.0	24.5	22.4	21.7	24.0	28.8
Frequent disruptions***	17.7	16.5	18.9	14.2	15.3	20.9	24.4

Sample: Ages 25–71, working for pay,  $N = 2,012$ . Results weighted using raked sample weights.

\* Where potential pace determinants are “work done by colleagues,” “direct demands from people,” “targets,” “automatic speed of machine or product movement,” and “direct control of boss or client.”

\*\* “Not enough time to do job” defined by enough time to finish job “sometimes,” “rarely,” or “never.”

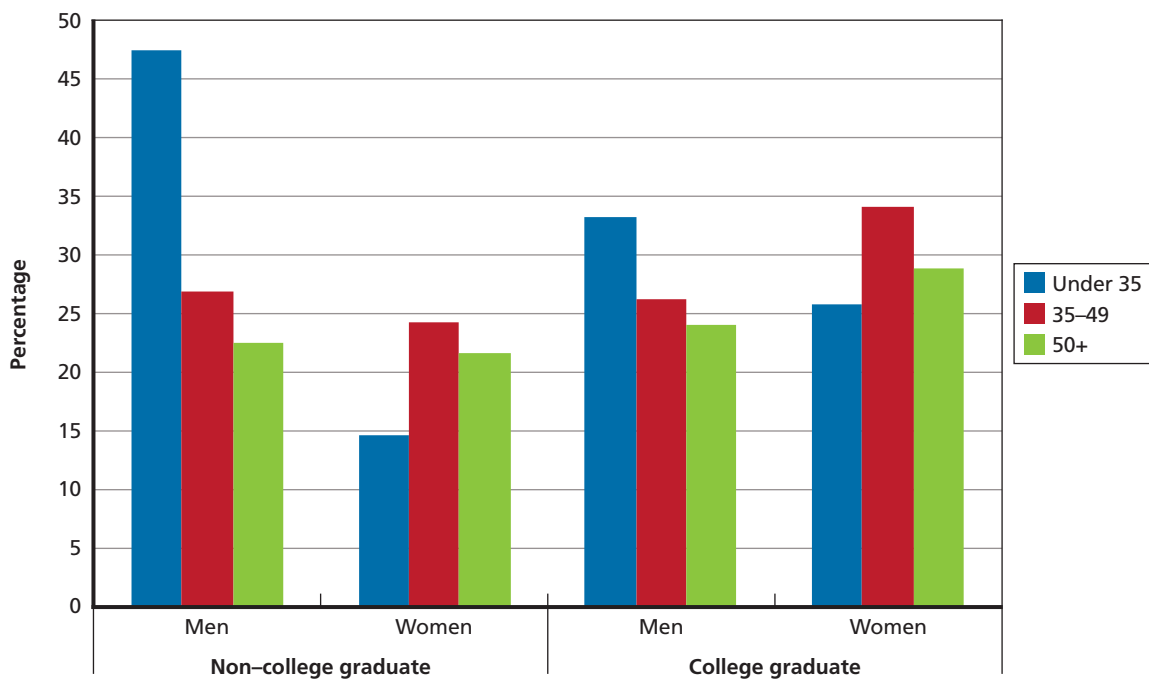
\*\*\* “Frequent disruptions” defined by interrupted “very” or “fairly” often and interruptions viewed as “somewhat negative.”

tight deadlines. Older workers are significantly less likely than younger workers to work at high speed or to tight deadlines.

Another measure of work intensity is how frequently workers perceive time constraints at work. We asked respondents how frequently they had enough time to finish their work and categorized those answering “sometimes,” “rarely,” or “never” as time constrained. Overall, men are slightly more likely to perceive time constraints than women (29 versus 25 percent). However, the age-by-gender patterns reveal interesting nuances (Figure 4.7). For instance, among younger (under age 35) workers, men without a college degree are more than *three times more likely* than women without a college degree to report not having enough time to finish their work (48 versus 15 percent). This gap closes with age, as perceived time constraints decline for men but generally rise with age for non-college-graduate women. While a similar age pattern is present for college-graduate men and women, the differences are small and statistically insignificant.

We also asked respondents how often they must interrupt a task they are doing to take on an unforeseen task. One-half of American workers are interrupted “very” or “fairly” often (as opposed to “occasionally” or “never”). Of these, 40 percent viewed these interruptions as “somewhat negative” (as opposed to “without consequences” or “somewhat positive”). That is, one in five American workers is subjected to frequent disruptions in the course of work. Men and women experience frequent disruptions at about the same rate, while college-graduate workers are more likely to experience frequent disruptions than workers without a college degree. Most strikingly, young (under age 35) men without a college degree are three times more likely than comparable women (22 versus 6 percent) to experience frequent, negative disruptions. Among non-college-educated workers, frequent disruptions decline with age for

**Figure 4.7**  
Percentage Reporting Not Enough Time to Finish Work, by Age, Gender, and Education



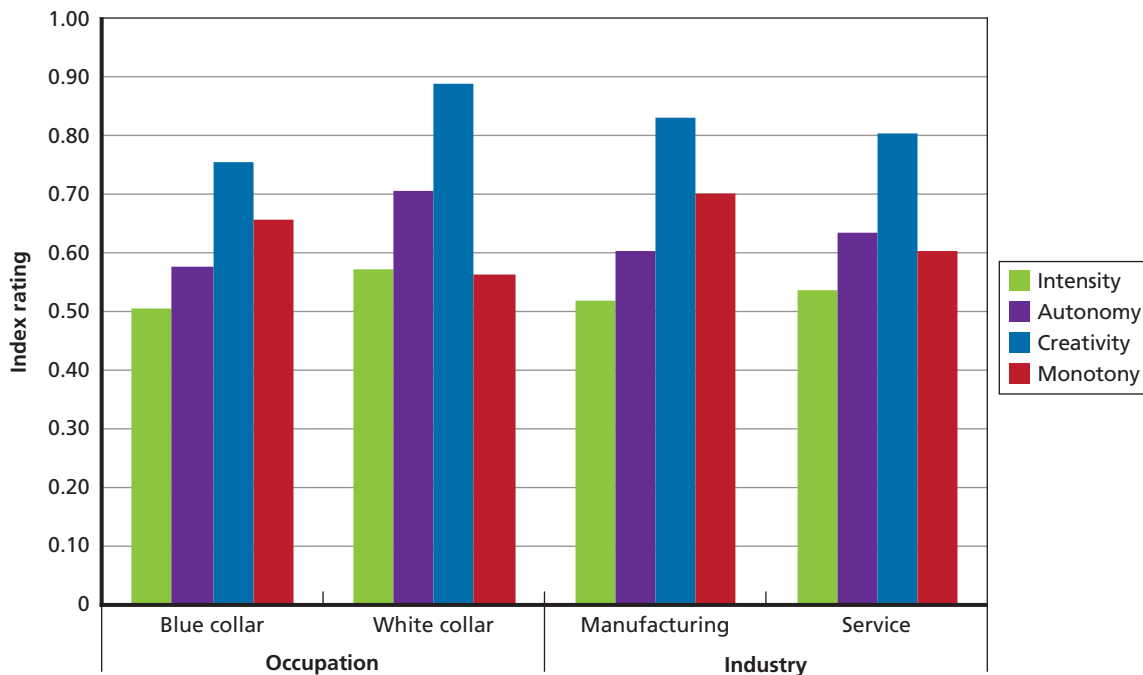


men but rise somewhat for women, as was the case for perceived time constraints. As with perceived time constraints, there are no significant differences between men and women at any point in the age distribution among college-graduate workers.

Finally, we examined how work intensity differs across broad occupation and industry groups. We created an index of work intensity that sums the indicators for working at high speed, working to tight deadlines, and not having enough time to finish one’s work and divides by the maximum value (three) so that it runs from zero to one. Workers in white-collar occupations experience significantly greater work intensity than those in blue-collar occupations (0.57 versus 0.50) (Figure 4.8).<sup>2</sup> In contrast, there are no significant differences in work intensity between the manufacturing and services sectors.

Overall, Table 4.8 and Figure 4.8 indicate that most Americans frequently work at high speeds and under tight deadlines and often perceive that they have too little time to do their work. This paints a picture of a work environment that is often pressured, stressful, and potentially physically taxing, corroborating (and perhaps contributing to) our earlier results on adverse physical and social working conditions. Among all potentially adverse working conditions, this is an area where differences by education are not as clear cut, since non-college-graduate workers more often must work at high speed, whereas college graduates more frequently face tight deadlines. Work intensity differs somewhat across occupation groups, with white-collar workers experiencing greater intensity at work than blue-collar workers. The one

**Figure 4.8**  
Occupation and Industry Differences in Intensity, Autonomy, Creativity, and Monotony



NOTE: All indexes range from 0 to 1. See text for details on index construction.

RAND RR2014-4.8

<sup>2</sup> We define blue-collar occupations as those that typically do not require a college degree, corresponding with two-digit Standard Occupation Classification codes of 31 or higher.

group that tends to fare better than average is older workers, who are less likely to work at high speeds, to tight deadlines, or to perceive time constraints than their younger counterparts.

## Autonomy

American workers have a great deal of autonomy in the workplace. Seventy-five percent can choose or change the order of tasks, 72 percent can choose or change their methods of work, and 78 percent can choose or change the speed or rate of their work (Table 4.9). There are no significant age or gender differences in any of these measures at the 5-percent level. (Women are slightly more likely than men to choose the order of their tasks (77 versus 73 percent;  $p < 0.10$ .) College-graduate workers are significantly more likely than workers without a college degree to be able to choose their order, methods, or pace of work.

Thirty-one percent of workers report that they have a say in choosing their working partners (always or most of the time), with men significantly more likely to have a say than women (33 versus 28 percent). Men and women are equally likely to be able to take breaks when they want to (always or most of the time), at 58 percent and 56 percent, respectively. College-graduate workers are more likely to take breaks when they want than workers without a college degree. Although there is no clear age pattern among men, there is a strong age gradient in the ability to take breaks among women, especially women without a college degree. While only 39 percent of young (under age 35) women without a college degree can take breaks when they choose, 62 percent of older (age 50 and up) women without a college degree have their choice of break times. There are also substantial differences in autonomy across occupation groups. Following the construction of our work intensity index, we created an index of job autonomy that runs from zero to one by summing the five indicators of autonomy: choice of order of tasks, methods of work, speed or rate of work, choice of working partners, and choice of break times. Workers in white-collar occupations have substantially greater autonomy over job tasks (0.70 versus 0.57) than those in blue-collar occupations (Figure 4.8). In contrast, there are no significant differences in autonomy between the manufacturing and services sectors.

Overall, Table 4.9 and Figure 4.8 show that more than three-quarters of Americans have autonomy over how they do their jobs. At the same time, only 57 percent of workers can take breaks when they want to, and fewer than one-third can choose with whom they work. Blue-collar workers have substantially less autonomy than white-collar workers, although they also experience somewhat lower work intensity. Together with prior results, this paints the picture of a fast-paced (Table 4.8) and physically taxing (Tables 4.4 and 4.5) work environment in which many workers have considerable autonomy to meet performance expectations, but often without sufficient time and with working partners not of their choosing.

## Creativity

American workers tend to have many opportunities to exercise creativity at work, although many jobs also involve monotonous tasks (Table 4.10). Eighty-two percent of all workers report that their main paid job involves solving unforeseen problems on their own, with men significantly more likely than women to solve unforeseen problems at work (87 versus 77 percent). Men are also more likely than women to report that their job involves complex

**Table 4.9**  
**Autonomy at Work, by Age, Gender, and Education (Percentage)**

	All			Non-College Graduate		College Graduate	
	Overall	Men	Women	Men	Women	Men	Women
<b>A. All ages, 25–71</b>							
Able to choose order of tasks	74.5	72.5	76.9	66.4	70.6	83.8	86.8
Able to choose methods of work	71.7	70.4	73.1	65.4	66.9	79.7	82.8
Able to choose speed/rate of work	78.0	78.3	77.6	76.4	75.0	81.8	81.6
Have say in choice of working partners*	30.6	33.2	27.5	35.2	24.8	29.4	31.7
Can take breaks when wanted*	57.3	58.3	56.2	48.5	50.9	76.3	64.5
<b>B. Under age 35</b>							
Able to choose order of tasks	73.5	72.2	75.4	65.0	67.1	80.8	86.1
Able to choose methods of work	70.0	68.5	72.2	62.9	64.5	75.0	82.1
Able to choose speed/rate of work	77.3	75.0	80.7	72.0	79.3	78.5	82.4
Have say in choice of working partners*	33.8	37.2	29.1	45.4	28.9	27.5	29.3
Can take breaks when wanted*	53.9	58.4	47.7	43.4	39.0	76.1	58.8
<b>C. Ages 35–49</b>							
Able to choose order of tasks	73.0	70.6	75.9	65.5	70.8	84.8	84.8
Able to choose methods of work	71.8	70.6	73.3	65.5	69.9	84.6	79.4
Able to choose speed/rate of work	77.8	79.9	75.3	78.9	73.6	82.9	78.2
Have say in choice of working partners*	30.1	31.8	28.3	34.4	25.5	24.3	33.1
Can take breaks when wanted*	53.8	54.8	52.6	47.6	46.1	74.5	64.1
<b>D. Ages 50+</b>							
Able to choose order of tasks	76.7	74.7	78.8	68.5	72.3	85.9	88.9
Able to choose methods of work	72.6	71.7	73.5	67.0	65.3	80.5	86.3
Able to choose speed/rate of work	78.6	79.2	78.0	76.4	74.1	84.3	84.2
Have say in choice of working partners*	28.8	31.5	26.0	29.5	22.0	35.1	32.1
Can take breaks when wanted*	63.1	61.7	64.6	52.9	62.0	77.8	68.6

Sample: Ages 25–71, working for pay,  $N = 2,014$ . Results weighted using raked sample weights.

\* Always or most of the time.

**Table 4.10**  
**Creative Work and Task Variation, by Age, Gender, and Education (Percentage)**

Generally, does your main paid job involve . . . ?*	All			Non-College Graduate		College Graduate	
	Overall	Men	Women	Men	Women	Men	Women
<b>A. All ages, 25–71</b>							
Solving unforeseen problems	82.3	86.9	76.9	84.9	71.2	90.5	85.7
Complex tasks	70.2	73.0	66.9	67.4	59.4	83.5	78.5
Learning new things	83.7	83.8	83.6	82.1	80.5	86.9	88.4
Applying own ideas**	85.1	84.1	86.2	80.1	82.0	91.5	92.7
Monotonous tasks	61.7	62.5	60.7	63.7	62.8	60.3	57.4
<b>B. Under age 35</b>							
Solving unforeseen problems	85.0	90.1	77.9	90.4	74.2	89.7	82.8
Complex tasks	79.3	85.4	70.7	81.0	67.7	90.5	74.6
Learning new things	90.2	92.0	87.8	90.8	85.3	93.3	90.9
Applying own ideas**	85.3	84.3	86.6	80.6	81.6	88.8	92.9
Monotonous tasks	69.8	72.4	66.1	75.8	65.9	68.3	66.3
<b>C. Ages 35–49</b>							
Solving unforeseen problems	78.1	82.8	72.7	79.8	65.8	91.3	84.7
Complex tasks	68.9	73.5	63.5	69.7	56.7	83.9	75.4
Learning new things	81.9	81.8	82.1	82.0	78.3	81.3	88.8
Applying own ideas**	82.8	79.8	86.3	75.4	82.8	92.0	92.5
Monotonous tasks	64.0	66.2	61.4	66.2	63.3	66.3	58.3
<b>D. Ages 50+</b>							
Solving unforeseen problems	84.5	88.6	80.2	87.4	74.9	90.7	88.5
Complex tasks	65.4	63.0	67.8	55.7	57.7	76.3	83.8
Learning new things	81.0	79.5	82.6	76.6	80.1	84.8	86.5
Applying own ideas**	87.2	88.4	85.9	85.5	81.4	93.7	92.8
Monotonous tasks	53.9	51.0	56.9	52.9	60.8	47.6	50.8

Sample: Ages 25–71, working for pay,  $N = 2,014$ . Results weighted using raked sample weights.

\* Question 49 unless otherwise specified.

\*\* Question q51f: “Able to apply your own ideas” at least sometimes.

tasks (73 percent versus 67 percent, respectively). Men and women are equally likely to report that their job involves learning new things (84 percent of both men and women). Interestingly, younger workers are more likely than older workers to hold jobs with complex tasks and that involve learning new things. Respondents were also asked how often they could apply their own ideas at work. Eighty-five percent report being able to apply their own ideas “sometimes,” “most of the time,” or “all of the time.” There are no significant gender or age differences in the ability to apply one’s own ideas at work. However, college graduates are significantly more likely than workers without a college degree to have jobs involving creativity on all four of the measures. Despite opportunities to exercise creativity at work, 62 percent American workers say that their jobs involve monotonous tasks. A college degree is somewhat protective against monotonous work. Older workers are less likely than younger workers to have jobs that involve complex tasks and learning new things, but they are also significantly less likely than younger workers to work in monotonous jobs.

There are also important differences by occupation and industry group. Using the same method of index construction for creativity and monotony as for work intensity and autonomy,<sup>3</sup> those in blue-collar occupations exercise less creativity at work than those in white-collar occupations (0.75 versus 0.89) and experience greater task monotony (0.65 versus 0.56) (Figure 4.8). Those in the service industries report exercising modestly less creativity than those in the manufacturing industries (0.80 versus 0.83), yet they also report substantially less task monotony (0.60 versus 0.70).

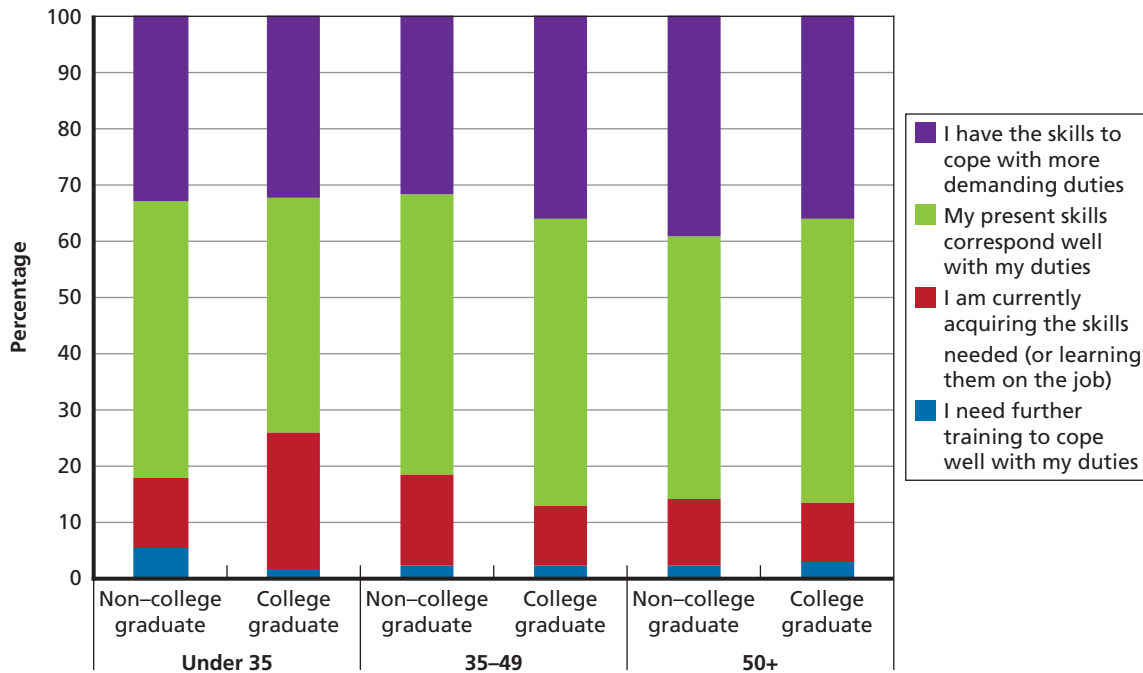
Overall, Table 4.10 paints a nuanced picture of creativity in U.S. jobs. While a large fraction of Americans hold jobs whose tasks are typically monotonous, a sizable majority, between 75 and 85 percent, views “solving unforeseen problems” and “applying own ideas” as integral parts of their jobs. Similarly, most American workers report that their jobs involve complex tasks and learning new things. Perhaps as expected, older workers and more-educated workers hold jobs that are less monotonous and have more opportunities to apply their own ideas. More-educated workers and younger workers more often solve complex tasks and learn new things on the job. In a telling piece of evidence regarding the gender wage gap, not only do women earn less, but younger and prime-age women are also less likely than men to report that their job involves solving unforeseen problems or complex tasks.

## Training, Opportunities for Advancement, and Meaning

The need for training and opportunities to obtain training may change as workers age. Only 6 percent of young (under age 35) workers without a college degree report needing further training to cope well with their duties in their current job, compared with 3 percent of prime-age (ages 35–49) workers without a college degree, and 2 percent of older (ages 50 and up) workers without a college degree (Figure 4.9). Among workers with a college degree, unmet need for training is low and does not vary significantly with age. Consistent with this, older workers are somewhat more likely to be overqualified in their current positions (“I have the

<sup>3</sup> The creativity index is the sum of indicators for having a job involving the items “solving unforeseen problems on your own,” “complex tasks,” “learning new things,” and “you are able to apply your own ideas in your work” sometimes or more frequently, rescaled to range from zero to one. The monotony measure is a single indicator for the question about having a job involving “monotonous tasks.”

**Figure 4.9**  
**Need for Training in Current Job, by Age and Education**



RAND RR2014-4.9

skills to cope with more demanding duties”) than are younger workers (40 percent versus 33 percent), though the difference is statistically significant only at the 10-percent level.

When it comes to receiving training, nearly three out of four workers received some form of training during the past 12 months. Included in this measure are employer-provided or employer-financed training, training on one’s own initiative (either in or outside the workplace), and on-the-job training. Training is much more common for college-graduate workers, who are nearly 20 percentage points more likely to receive training than non-college graduates. On-the-job training is also more common for college graduates than non-college graduates (Table 4.11). Consistent with human capital theory, the prevalence of training declines with age; however, these declines are most evident when comparing the youngest group to either of the older groups. Comparing those under 35 to those who are 35–49 years old, all forms of training are received with less frequency by both men and women. In general, training rates for those ages 35–49 are similar to those of workers age 50 and older; this is true regardless of education level. There are no statistically significant differences in training rates between men and women.

Thirty-eight percent of Americans agree or strongly agree that their job “offers good prospects for career advancement.” Men are more likely than women to perceive good prospects for career advancement (41 versus 35 percent), and this gender difference is most pronounced between young (under age 35) college-graduate men and women (62 versus 45 percent) and between prime-age (35–49) men and women without a college degree (47 versus 31 percent, respectively).

Overall, Table 4.11 shows that a large fraction of American workers receive some form of training while working, partly by their own initiative and partly paid by employers. How-

**Table 4.11**  
**Training and Prospects for Career Advancement, by Age, Gender, and Education (Percentage)**

Over the past 12 months, have you undergone any of the following types of training to improve your skills?*	All			Non-College Graduate		College Graduate	
	Overall	Men	Women	Men	Women	Men	Women
<b>A. All ages, 25–71</b>							
Paid for or provided by your employer	43.4	41.3	45.8	34.4	39.2	54.2	56.1
Done on your own initiative outside/inside workplace	55.8	56.5	54.9	48.8	47.2	70.9	66.8
On-the-job training	54.1	52.6	55.8	48.6	53.4	60.2	59.6
Any training	74.7	73.3	76.4	66.4	69.5	86.1	87.0
Job offers good prospects for career advancement**	37.8	40.5	34.6	39.5	33.3	42.3	36.7
<b>B. Under age 35</b>							
Paid for or provided by your employer	49.4	45.1	55.6	34.9	46.9	57.1	66.6
Done on your own initiative outside/inside workplace	61.4	62.0	60.7	46.6	52.6	80.2	70.9
On-the-job training	64.5	62.1	68.0	51.8	62.8	74.3	74.6
Any training	80.6	77.6	84.9	64.8	76.4	92.7	95.5
Job offers good prospects for career advancement**	50.1	53.7	44.9	46.8	44.9	62.0	44.8
<b>C. Ages 35–49</b>							
Paid for or provided by your employer	41.1	39.1	43.5	34.7	36.6	51.3	55.5
Done on your own initiative outside/inside workplace	55.4	56.9	53.6	53.5	46.2	66.6	66.5
On-the-job training	54.3	52.6	56.2	51.2	52.6	56.7	62.4
Any training	72.8	72.3	73.4	69.2	66.2	80.8	86.0
Job offers good prospects for career advancement**	40.1	43.8	35.8	47.0	30.9	35.2	44.3
<b>D. Ages 50+</b>							
Paid for or provided by your employer	41.5	40.6	42.4	33.6	37.7	53.5	49.9
Done on your own initiative outside/inside workplace	52.3	51.9	52.8	44.7	45.3	64.9	64.5
On-the-job training	46.9	45.4	48.5	43.4	49.2	49.0	47.4
Any training	72.7	71.1	74.3	64.1	69.1	83.8	82.4
Job offers good prospects for career advancement**	27.2	26.8	27.7	25.9	29.6	28.4	24.7

Sample: Ages 25–71, working for pay, *N* = 2,008. Results weighted using raked sample weights. “Any training” refers to if one received training from employer, on own initiative, or on the job. “Formal training” excludes on-the-job training.

\* Question q61 unless otherwise specified; response categories not mutually exclusive.

\*\* Question q77c: Agree or strongly agree.

ever, there are important differences among the population. College graduates are substantially more likely to pursue training on their own initiative and to receive employer-sponsored or on-the-job training. Prime-age and older workers are substantially less likely to receive employer-sponsored or on-the-job training than younger workers, but overall, a large fraction receives some training, and older workers are somewhat more likely to report being overqualified for the tasks they perform ( $p = 0.053$ ). Another finding of Table 4.11 is that only 38 percent of workers report that their job offers good prospects for advancement. This implies that the substantial amounts of training they receive do not necessarily correspond to aspirations, perhaps building firm-specific human capital rather than general skills that would make them attractive to other employers. Moreover, perceived prospects for advancement vary in complex ways in the population, with young, college-graduate men being most optimistic. All workers, regardless of education, become less optimistic with age, with only about one in four older workers saying that their job offers good prospects for career advancement.

Finally, we explored the degree to which American workers derive meaning and purpose from their work (Table 4.12). Specifically, we asked respondents how often their work provided them with the following: “satisfaction of work well done,” “feeling of doing useful work,” “sense of personal accomplishment,” “make positive impact on community/society,” “opportunities to fully use talents,” and “goals to aspire to.” The most common sources of meaning in work are satisfaction of work well done (65 percent), feeling of doing useful work (63 percent), and sense of personal accomplishment (61 percent). Four out of five Americans report that their job provides at least one of these sources of meaning always or most of the time, with one-third reporting all six sources of meaning in their work (not shown). Generally, there were no significant age or gender differences among non-college-graduate workers, but older college-graduate men are significantly more likely than younger college-graduate men or comparable college-graduate women to report at least one source of meaningful work from our list of six possible sources (Figure 4.10). The least likely to report any source of meaningful work are prime-age college-graduate men (although they are not statistically less likely to report any source of work than younger college-graduate men).

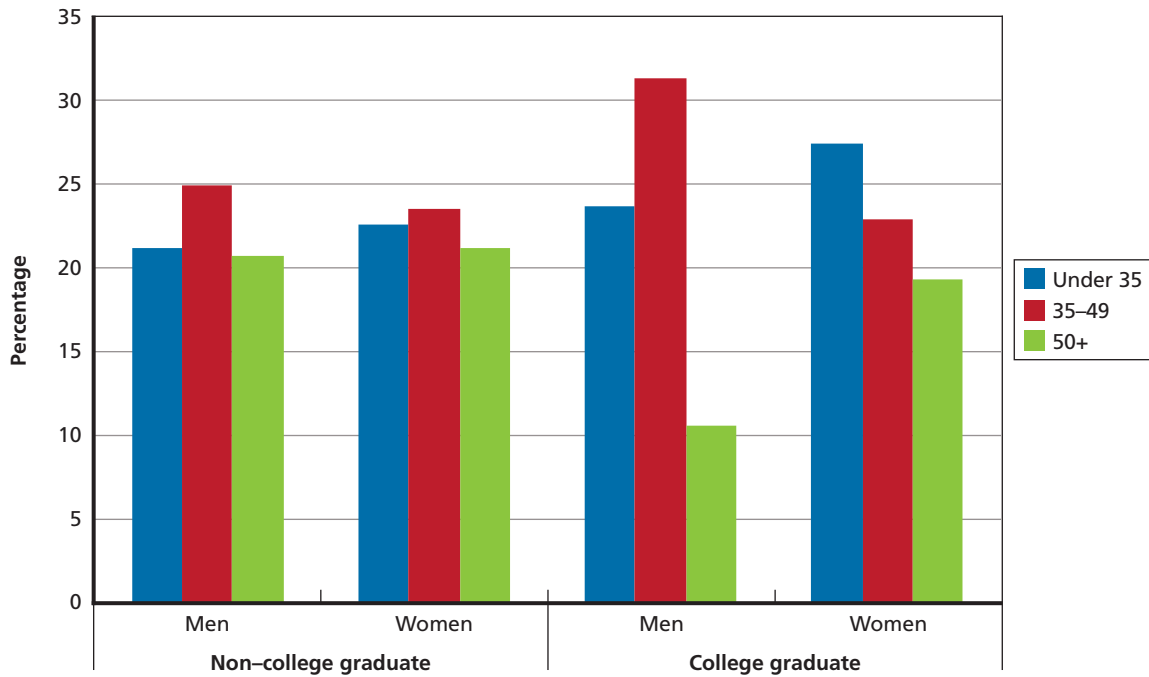


**Table 4.12**  
**Meaningful Work, by Age, Gender, and Education (Percentage)**

In general, how often does your work provide you with the following?	All			Non-College Graduate		College Graduate	
	Overall	Men	Women	Men	Women	Men	Women
<b>A. All ages, 25–71</b>							
Satisfaction of work well done	64.6	62.4	67.3	60.3	67.9	66.1	66.5
Feeling of doing useful work	62.9	60.5	65.7	58.8	64.4	63.5	67.8
Sense of personal accomplishment	61.1	59.4	63.0	57.8	61.1	62.4	66.0
Make positive impact on community/society	53.4	51.4	55.7	52.8	54.3	48.8	57.9
Opportunities to fully use talents	53.1	52.6	53.7	51.4	53.5	54.7	54.1
Goals to aspire to	49.2	49.7	48.7	47.5	46.9	53.8	51.4
<b>B. Under age 35</b>							
Satisfaction of work well done	61.2	59.4	63.7	58.6	68.6	60.4	57.4
Feeling of doing useful work	56.2	52.6	61.2	56.0	62.8	48.7	59.2
Sense of personal accomplishment	58.6	56.8	61.1	56.6	63.2	57.1	58.5
Make positive impact on community/society	53.2	52.7	53.8	64.1	54.7	39.2	52.7
Opportunities to fully use talents	50.8	51.7	49.5	54.9	53.8	47.9	44.0
Goals to aspire to	49.0	49.3	48.5	47.5	51.0	51.4	45.2
<b>C. Ages 35–49</b>							
Satisfaction of work well done	61.8	56.9	67.6	56.2	66.9	58.7	68.8
Feeling of doing useful work	59.1	53.7	65.4	51.3	63.6	60.3	68.4
Sense of personal accomplishment	55.9	51.6	61.0	50.9	56.4	53.2	69.1
Make positive impact on community/society	50.5	46.8	54.7	47.6	52.9	44.5	58.0
Opportunities to fully use talents	51.0	49.7	52.6	48.3	50.7	53.5	56.0
Goals to aspire to	46.9	47.0	46.7	46.2	42.1	49.3	54.8
<b>D. Ages 50+</b>							
Satisfaction of work well done	69.8	70.3	69.1	66.3	68.5	77.6	70.2
Feeling of doing useful work	71.1	73.5	68.6	69.5	65.9	80.8	72.8
Sense of personal accomplishment	67.9	69.5	66.1	66.7	64.7	74.7	68.1
Make positive impact on community/society	56.4	55.1	57.7	51.6	55.5	61.7	61.2
Opportunities to fully use talents	56.7	56.2	57.2	52.7	56.2	62.5	58.9
Goals to aspire to	51.8	52.8	50.6	49.1	49.5	59.6	52.4

Sample: Ages 25–71, working for pay, N = 2,004. Results weighted using raked sample weights.

**Figure 4.10**  
**Percentage Reporting No Sources of Meaningful Work, by Age, Gender, and Education**



NOTE: Respondents were asked, "In general, how often does your work provide you with the following?" Answer choices were "satisfaction of work well done," "feeling of doing useful work," "sense of personal accomplishment," "opportunities to fully use talents," "make positive impact on community/society," and "goals to aspire to."

RAND RR2014-4.10

## Preferences over Working Conditions

---

The AWCS contains several pieces of data that allow one to study how satisfied American workers are with their job conditions and whether job conditions play a role in employment choices. These data provide new evidence on the potential relevance of working conditions in the employment decisions of working Americans in general and in the employment and retirement decisions of older workers in particular. Because the ALP has a longitudinal structure, future research can analyze how the preferences that workers report may shape their subsequently realized employment decisions.

This chapter first presents information about the desired job characteristics of currently employed workers and contrasts these desired characteristics with the actual characteristics of their main job. One novel feature of the AWCS is that it also asks about desired working conditions of those who are not working. These data are used to contrast the desired working conditions of nonworkers with the desired conditions of the currently employed. With this analysis, we use the AWCS data to assess whether working conditions could be the key to unlocking the work potential of mature and older workers.

Based on this analysis, Chapter Five contains three main findings. First, our analysis of worker preferences suggests that a nonnegligible fraction of currently employed individuals lacks at least one job attribute that they rate as essential or very important. Second, we find that nonworkers have different preferences over job attributes than employed individuals, putting less weight on financially related job aspects and more weight on nonpecuniary aspects. Finally, the percentage of older workers who lack an essential or very important attribute is higher than for younger workers for such attributes as job pace and control over work and is lower than for younger workers for such attributes as opportunities to learn and career advancement.

### Desired and Actual Working Conditions Among the Employed

Preferences for various job attributes among employed workers and the percentage lacking those attributes in their current job are shown in Table 5.1. The table reveals several notable findings. Our first set of findings pertains to which attributes workers say they value most.<sup>1</sup>

The most important job attributes are the ability to earn a living (87 percent of respondents rate it as “essential” or “very important”) and job security (74 percent). Fringe benefits are generally also deemed essential or very important, especially health insurance (76 percent)

---

<sup>1</sup> Attribute ratings presented in Table 5.1 were measured in a related survey of preferences administered to ALP respondents in December 2015.

**Table 5.1**  
**Preferences for and Percentage Lacking Various Job Attributes**

<b>Job Attribute</b> (In thinking about possible work in the future, how important is it to you that your job . . . ?)	<b>Percentage Rating Attribute Essential or Very Important</b>	<b>Percentage Lacking Attribute</b>	<b>Percentage Lacking Attribute and Rating It Essential or Very Important</b>
Allows you to provide for yourself and your family financially	86.5	9.3	8.1
Provides job security	74.2	9.5	6.4
Has the right number of hours	55.1	70.0	38.9
Fewer hours than preferred <sup>^</sup>		23.0	14.0
More hours than preferred <sup>^</sup>		47.0	24.9
Will lead to opportunities for career advancement	45.3	37.8	21.4
Gives you opportunities to learn new things	41.6	26.4	10.3
Gives you control over how you do your work	37.9	28.5	9.2
Is not stressful	31.8	41.1	11.6
Provides you with control over your schedule	29.4	51.3	11.7
Allows me to work at my own pace	27.7	21.7	4.8
Is morally, socially, personally, or spiritually significant	23.1	6.1	1.3
Gives you opportunities to work with others	21.2	31.5	4.5
Is not physically demanding	16.6	39.0	6.7
Has the following benefits:			
Health insurance	76.2	17.4	8.0
Paid vacation time	70.4	13.9	5.6
Pension/retirement benefits	65.2	26.0	10.5
Paid sick time	61.4	27.2	12.1
Paid holidays	62.2	17.2	6.6
Dental insurance	51.5	26.9	7.4
Paid family leave <sup>^^</sup>	46.2	14.4	7.8
Disability insurance	45.1	27.5	9.1
Life insurance	39.1	29.7	6.7
Any dimension			73.8
Any benefit dimension			32.3
Any non-benefit dimension			67.8
More than one non-benefit dimension			37.1
More than two non-benefit dimensions			18.3

*N* = 1,504 respondents who were working in July 2015 (excluding self-employed) and who responded to a second survey of work preferences (ALP Module 445) in December 2015. Attribute ratings from December survey.

<sup>^</sup> Within 5% of preferred hours/week. <sup>^^</sup> Mismatch defined by difficulty taking time off work to take care of personal or family matters.

and paid vacation (70 percent). Pension or retirement benefits, paid sick leave, and paid holidays matter as well (about 60–65 percent report these as essential or very important). Other benefits, such as dental insurance, paid family leave, disability insurance, and life insurance are essential or very important for 40–50 percent.

A second set of important attributes pertains to hours worked and control over how the job is performed. Working the “right number of hours” is reported to be essential or very important for more than half of all workers (55 percent); about one-third rate control over how they do their work, absence of stress, or control over schedule as essential or very important.

A third set of important attributes pertains to the career outlook of the job; 45 percent report that it is essential or very important that a job will lead to opportunities for career advancement, and 42 percent said it was essential or very important that a job gives opportunities to learn new things.

A second set of results from Table 5.1 pertains to the percentage lacking an attribute, overall and for the subset of those who also declared the attribute essential or very important. The results are striking and indicate important areas of dissatisfaction with the American workplace. About 70 percent report that their job does not have the right number of hours<sup>2</sup> (with two-thirds of this group working *more* hours than preferred), and more than half of this group (39 percent of the working population) declared this job aspect essential or very important. Close to 40 percent declared that they lack career opportunities, and approximately one-half of this group (21 percent of the working population) said that this attribute was essential or very important. There are several other job attributes for which about one in ten workers do not have the attribute but deem it essential or very important. These include control over schedule (12 percent), absence of stress (12 percent), opportunities to learn new things (10 percent), control over how work is done (9 percent), paid sick time (12 percent), pension or retirement benefits (11 percent), and disability insurance (9 percent). Overall, 74 percent of the workforce lacks *at least one* attribute they deem essential or very important.

The results in Table 5.1 show that a significant proportion of workers is not satisfied with at least some aspects of their working conditions. Two important follow-up questions are whether workers are in some way compensated for these undesirable job attributes—for example, by higher earnings—and whether and when these workers will grow to dislike their jobs enough to switch employers or quit working altogether.

## Different Preferences for Older and Younger Workers

Preferences over job attributes are likely to vary over the life course with changing work horizons and needs. We next present information on preferences over job attributes separately for younger and prime-age workers (ages 25–49) and mature and older workers (ages 50 and up). As in Table 5.1, Table 5.2 shows the percentages of workers rating a given job attribute as essential or very important, the percentage lacking that job attribute, and the percentage of workers lacking an attribute deemed essential or very important. The table also indicates which percentages are statistically different between older and younger workers.

In terms of overall importance, older workers are more likely to rate as essential or very important the ability to control how they do their work and their pace, as well as low physical

<sup>2</sup> “Right number of hours” is defined as actual hours within a range of plus or minus 5 percent of preferred hours.

**Table 5.2**  
**Preferences for and Percentage Lacking Various Job Attributes, by Age**

Job Attribute (In thinking about possible work in the future, how important is it to you that your job . . . ?)	Percentage Rating Attribute Essential or Very Important		Percentage Lacking Attribute		Percentage Lacking Attribute and Rating It Essential or Very Important	
	Ages 25–49	Ages 50+	Ages 25–49	Ages 50+	Ages 25–49	Ages 50+
Allows you to provide for yourself and your family financially	87.2	85.2	10.6	7.1**	9.1	6.5*
Provides job security	75.6	71.9	9.0	10.4	5.2	8.3**
Has the right number of hours	55.4	54.7	71.5	67.4*	39.6	37.7
Fewer hours than preferred <sup>^</sup>			25.5	18.9***	15.0	12.3
More hours than preferred <sup>^</sup>			46.0	48.5	24.6	25.4
Will lead to opportunities for career advancement	53.3	32.2***	44.0	27.5***	27.0	12.3***
Gives you opportunities to learn new things	44.1	37.6**	25.1	28.5	12.3	7.1***
Gives you control over how you do your work	35.1	42.4***	27.5	30.1	8.3	10.7
Is not stressful	30.5	34.0	45.1	34.3***	11.7	11.4
Provides you with control over your schedule	28.0	31.8	50.4	52.9	11.1	12.7
Is morally, socially, personally, or spiritually significant	22.3	24.5	7.9	3.1***	1.6	0.8
Allows me to work at my own pace	24.2	33.4***	20.6	23.5	3.4	7.0***
Gives you opportunities to work with others	20.5	22.4	30.1	33.7	4.5	4.7
Is not physically demanding	14.7	19.8**	40.7	36.2*	6.8	6.4
Has the following benefits:						
Health insurance	76.2	76.2	15.3	21.0***	7.0	9.5*
Paid vacation time	70.8	69.6	10.9	18.9***	4.4	7.6***
Paid sick time	60.4	63.2	26.2	28.8	11.8	12.6
Pension/retirement benefits	62.5	69.6***	25.7	26.5	9.9	11.4
Paid holidays	62.0	62.7	15.5	20.1**	5.3	8.6**
Dental insurance	50.9	52.5	25.0	30.0**	6.3	9.3**
Paid family leave <sup>^^</sup>	46.4	45.7	13.8	15.4	7.4	8.4
Disability insurance	42.5	49.3**	25.2	31.4***	7.0	12.5***
Life insurance	38.8	39.6	28.6	31.6	5.7	8.3*
Any dimension					75.2	71.4*
Any benefit dimension					30.1	35.9**
Any non-benefit dimension					69.6	65.0*
More than one non-benefit dimension					38.8	34.4*
More than two non-benefit dimensions					19.8	15.8*

*N* = 1,504 respondents who were working in July 2015 (excluding self-employed) and who responded to ALP module survey 445 (December 2015). Attribute ratings from December survey. Statistical significance level across age groups denoted by \*\*\*  $p < 0.01$ , \*\*  $p < 0.05$ , \*  $p < 0.1$ .

<sup>^</sup> Within 5% of preferred hours/week.

<sup>^^</sup> Mismatch defined by difficulty taking time off work to take care of personal or family matters.

demands on the job. In contrast, older workers deem opportunities for career advancement and to learn new things less important than younger workers. Although older workers are more likely than younger workers to report that pension or retirement benefits and disability insurance are essential or very important, older workers are generally *not* more likely to express a preference for formal job benefits. Across most of the dimensions shown in the table, older workers are less likely to report that they lack a given non-benefit attribute but (consistent with Table 3.4) *more* likely to report that they lack a given benefit, such as health insurance or paid vacation time. This suggests that stated preferences for job attributes may at least partially translate into an observed higher prevalence of these attributes among those expressing preference. Finally, the percentage of older workers who lack an essential or very important attribute is higher than for younger workers for non-benefit attributes, such as job pace and job security, and lower than for younger workers for such attributes as opportunities to learn and career advancement. Across the board, the percentage of older workers who lack an essential or very important fringe benefit, such as disability insurance or paid vacation time, is higher than for younger workers. Overall, older workers are slightly less likely to lack an essential or very important attribute on any dimension ( $p < 0.10$ ), but this masks substantial heterogeneity by type of attribute; whereas older workers are slightly less likely to experience some degree of mismatch on any non-benefit dimension, they are, in fact, more likely to experience mismatch on any benefit dimension.

### Desired Working Conditions Differ for Older, Nonworking Individuals

Working conditions may also be relevant for workers who have already left the labor force. In Chapter Three, we used data from the AWCS to confirm that retirement is a fluid concept; many older individuals who are currently working report having previously retired, and many of those who are not in the labor force say they would consider working if conditions were right. Therefore, it is important to understand preferences over working conditions among these individuals and to assess the extent to which they differ from the preferences of those who are in the labor force.

We consider two groups of nonworkers—those not in the labor force (but who would consider working if the right opportunity came along) and the unemployed. We compare these groups with employed workers who are also searching for a job. These comparisons allow us to examine whether the unemployed are more like other job seekers or other nonworkers.

Table 5.3 shows the percentages of workers rating a given job attribute as essential or very important, by age (25–49 versus 50 and up) and employment status (defined by the three groups discussed in the previous paragraph). For each employment group, we test whether preferences for each attribute are statistically significant for older versus younger workers. Two interesting findings emerge.

First, older job seekers are substantially different from younger workers in the attributes they rate as essential or very important, regardless of whether they are employed and searching on the job, unemployed and actively searching for work, or not in the labor force but open to the possibility of working if the right opportunity arose. Older workers are substantially less likely than younger workers to require that their job provide opportunities for career advancement, and they are less likely to rate formal employee benefits, such as dental insurance, life

**Table 5.3**  
**Percentage Rating Job Attribute Essential or Very Important, by Age and Employment Status**

Job Attribute	Ages 25–49			Age 50+		
	Employed and Searching on the Job	Unemployed and Searching for Work	Not in Labor Force But Open to Working	Employed and Searching on the Job	Unemployed and Searching for Work	Not in Labor Force But Open to Working
Allows you to provide for yourself and your family financially	86.2	73.2	78.1	90.7	69.4	66.1**
Provides job security	75.3	56.7	60.8	71.3	52.1	57.6
Has the right number of hours	60.6	44.1	57.5	59.0	45.2	52.2
Will lead to opportunities for career advancement	60.0	58.4	60.7	44.3***	36.8***	39.1***
Gives you opportunities to learn new things	48.3	49.6	54.1	46.5	40.7	45.7
Gives you control over how you do your work	38.0	29.7	31.9	48.7**	41.5*	46.6***
Is not stressful	39.6	30.6	36.7	34.0	42.5*	39.3
Provides you with control over your schedule	30.0	33.0	45.0	34.8	43.2	36.6
Is morally, socially, personally, or spiritually significant	30.4	37.2	35.1	28.5	31.2	29.8
Allows me to work at my own pace	24.9	27.4	32.5	33.1*	42.1**	33.7
Gives you opportunities to work with others	28.0	22.7	27.5	18.4**	29.8	22.5
Is not physically demanding	19.8	20.0	20.7	16.1	35.0**	27.6
Has the following benefits:						
Health insurance	77.9	57.3	76.0	77.0	72.4**	69.2
Paid vacation time	74.6	53.9	50.6	69.8	59.7	55.1
Paid sick time	65.0	57.9	55.4	63.1	55.9	52.7
Pension/retirement benefits	64.0	55.7	64.2	67.4	62.4	58.5
Paid holidays	65.6	54.7	49.4	63.5	45.7	51.9
Dental insurance	59.8	44.9	55.6	50.0*	48.0	40.3***
Paid family leave	52.9	50.5	58.6	41.9**	37.6*	35.2***
Disability insurance	49.5	44.0	58.1	49.4	53.9	41.3***
Life insurance	48.3	38.1	42.9	37.4**	45.1	29.6**
Number of observations	242	120	81	187	115	263

Responses for all workers who are not self-employed taken from December 2015 survey. Statistical significance level across age groups denoted by \*\*\*  $p < 0.01$ , \*\*  $p < 0.05$ , \*  $p < 0.1$ .



insurance, and paid family leave, as essential or very important.<sup>3</sup> This likely reflects the fact that older workers are closer to the end of their careers, and many have access to income from retirement assets or may receive financial support and group insurance benefits through their spouse. Instead, older workers are much more likely than younger workers to deem nonpecuniary attributes as essential or very important. These include that the job allows control over how they do their work and the ability to set their own pace. They also care substantially more about the job not being physically demanding.

A second interesting finding is that, regardless of age, unemployed job seekers and labor market nonparticipants tend to have similar preferences for job attributes—both nonmonetary attributes and formal employee benefits. Among older nonemployed workers, for instance, the only statistically significant difference in ratings between active and passive job seekers was for life insurance, which unemployed older workers were marginally more likely to rate essential or very important ( $p < 0.10$ ; not shown). However, among both older and younger workers, those searching while employed are substantially different from nonemployed job seekers on a number of dimensions. Notably, employed job seekers are much more likely to prioritize jobs that allow one to provide for one's family financially and jobs that provide job security. Among older workers in particular, employed job seekers are much more likely than nonemployee job seekers to rate formal employee benefits, such as health insurance, paid time off, and pension or retirement benefits, as essential or very important.

Overall, the findings in Table 5.3 strongly suggest that older workers are more likely to deem nonmonetary job attributes as essential or very important than younger workers, especially among those unemployed and not in the labor force but open to possible work in the future. These results raise the question of whether working conditions could play an important role in unleashing the work potential of retired workers or those close to retirement.

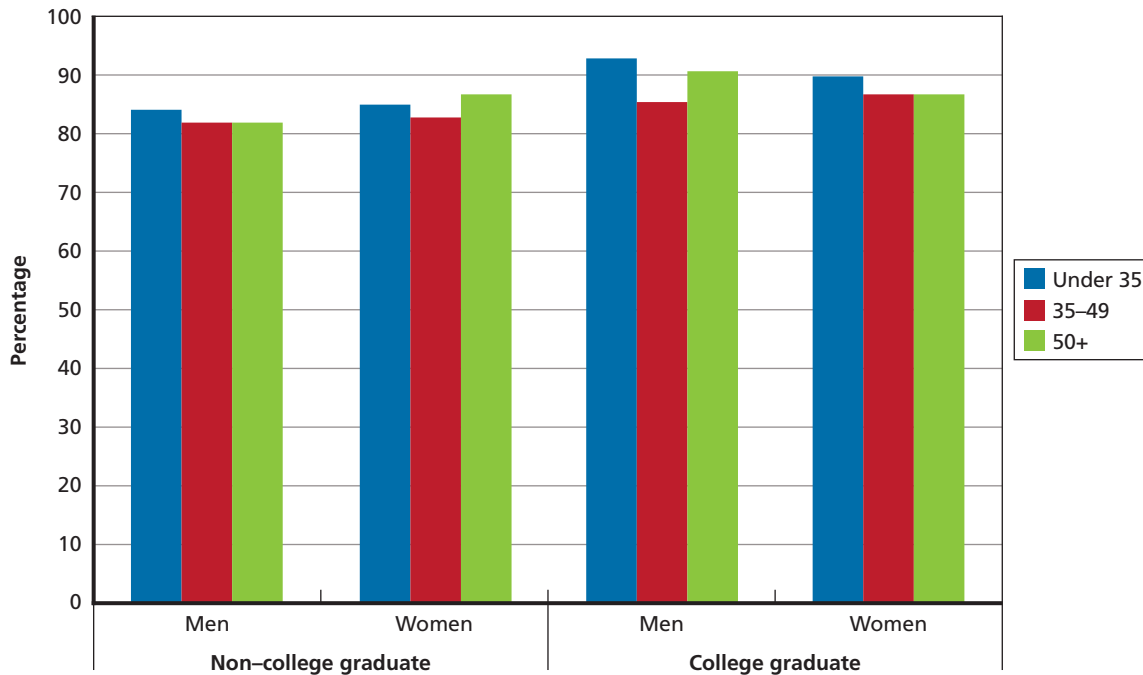
## Working Conditions Affect Job Satisfaction

Absent data on employment transitions that reflect revealed preferences, another common way to gauge the importance of working conditions is to analyze their effects on job satisfaction. Figure 5.1 presents the percentage of workers who report that they are satisfied or very satisfied with their working conditions by age, gender, and education. Perhaps not surprisingly, given our findings in Chapter Four, those without a college degree are less satisfied with their working conditions than college graduates, and the education gap is most pronounced among young and older men. We then regressed job satisfaction on the measures of working conditions analyzed in Chapter Four. The coefficient estimates and standard errors resulting from this correlational analysis are shown in Table 5.4. The findings confirm the importance of working conditions overall and of certain working conditions in particular.

Among those variables that have a precisely measured effect, several work characteristics that have emerged as key aspects of American jobs from the discussion in Chapter Four stand out (not all attributes enter statistically different from zero; this is not unexpected, given that

<sup>3</sup> An exception is health insurance, which older unemployed job seekers are significantly more likely to rate essential or very important than younger unemployed job seekers, in contrast with older versus younger non-labor market participants and on-the-job seekers. In this case, the act of seeking employment (as opposed to seeking a *job*, conditional on being employed) likely reflects a strong need for health insurance in and of itself.

**Figure 5.1**  
**Percentage Satisfied or Very Satisfied with Working Conditions, by Age, Gender, and Education**



RAND RR2014-5.1

several of these measures are highly correlated). These include key unpleasant conditions (such as long hours and job intensity, harassment, and physical exposure) and key positive conditions (such as independence, creative work, and socially supportive conditions).

In sum, Table 5.4 shows that many of the job attributes analyzed in Chapter Four are correlated with job satisfaction in an expected fashion. Overall, these findings help to underscore the salience of some of the most important working conditions captured by the data in the AWCS and documented extensively in Chapter Four.

In closing, this chapter demonstrates that American workers have clear preferences over their working conditions, and whether these preferences are realized affects their job satisfaction. Although the data suggest that most workers are well matched to their working conditions across a range of important attributes, our findings also imply that there are key attributes for which there is an important degree of mismatch. Our finding that the desired working conditions of workers not in the labor force differ substantially from those employed underscores the potential importance of working conditions for retirement behavior.

**Table 5.4**  
**Effect of Working Conditions on Job Satisfaction (Regression Coefficients)**

	(1) All	(2) Under Age 35	(3) Age 35–49	(4) Age 50+
Part time (< 35 hours/week)	–0.061*** (0.020)	–0.076 (0.058)	–0.037 (0.036)	–0.057** (0.025)
Long hours (48+/week)	–0.006 (0.018)	0.026 (0.043)	–0.022 (0.034)	–0.048* (0.028)
Frequent long hours	–0.045** (0.020)	–0.040 (0.048)	–0.108*** (0.038)	0.021 (0.030)
Set or fixed work schedule	–0.021 (0.016)	0.003 (0.042)	–0.057* (0.030)	–0.030 (0.022)
Difficulty taking time off	–0.018 (0.017)	–0.047 (0.043)	0.040 (0.033)	–0.061*** (0.023)
No working in free time	0.034** (0.016)	0.041 (0.042)	0.043 (0.029)	0.023 (0.021)
Option to telecommute	0.032* (0.019)	0.027 (0.048)	0.072** (0.034)	–0.018 (0.026)
Any lifting/carrying/repetitive	0.039** (0.020)	–0.007 (0.050)	0.085** (0.037)	0.031 (0.026)
Standing almost/all the time	–0.032* (0.018)	0.031 (0.047)	–0.050 (0.033)	–0.102*** (0.024)
Sitting almost/all the time	–0.024 (0.016)	0.063 (0.042)	–0.082*** (0.030)	–0.044** (0.022)
Any physical exposure	–0.045*** (0.017)	–0.037 (0.043)	–0.062* (0.031)	–0.036* (0.022)
Any abuse/harassment	–0.150*** (0.019)	–0.003 (0.047)	–0.255*** (0.035)	–0.186*** (0.027)
Intensity index (0–1)	–0.118*** (0.022)	–0.113* (0.062)	–0.137*** (0.042)	–0.086*** (0.030)
Autonomy index (0–1)	0.120*** (0.028)	0.220*** (0.072)	0.049 (0.052)	0.102*** (0.035)
Any creative work	0.113** (0.048)	–0.214 (0.210)	0.228*** (0.071)	0.017 (0.067)
Not monotonous	0.000 (0.015)	–0.038 (0.040)	0.003 (0.028)	0.013 (0.020)

Table 5.4—continued

	(1) All	(2) Under Age 35	(3) Age 35–49	(4) Age 50+
Acquiring skills/in training	0.077* (0.047)	–0.043 (0.100)	0.058 (0.095)	0.214*** (0.066)
Skills are good fit for job	0.070 (0.044)	–0.032 (0.094)	0.065 (0.090)	0.193*** (0.060)
Overqualified for job	–0.023 (0.045)	–0.178* (0.096)	–0.025 (0.091)	0.154** (0.061)
Good career prospects	0.057*** (0.016)	0.073 (0.045)	0.064** (0.030)	0.034 (0.022)
Very supportive boss	0.038** (0.015)	–0.007 (0.040)	0.046 (0.029)	0.047** (0.021)
Very good friends at work	0.056*** (0.015)	0.067* (0.038)	0.062** (0.027)	0.051*** (0.020)
Meaningful work (count of sources)	0.026*** (0.003)	0.025*** (0.009)	0.025*** (0.006)	0.030*** (0.005)
Observations	1,981	316	611	1,054
R-squared	0.236	0.249	0.308	0.279

NOTES: These numbers are estimates of the association between the measure in the first column and job satisfaction. Negative numbers indicate that workers with the attribute have lower job satisfaction. Statistical significance (indicated by \*, \*\*, or \*\*\*, with \*\*\* being the most highly significant indicator) means that the association between the measure and job satisfaction is different from zero.

Nearly all the measures have a value of either zero or one. These indicate whether the person has the attribute on the job—so the worker either has the attribute (indicated by a one) or does not (zero). For example, having a part-time job is associated with a reduction in job satisfaction (column 1, row 1). Looking across the regressions (columns) at the part-time effect, we see that there is a negative effect of part-time work on job satisfaction when the estimates are calculated for the entire population (column 1), but this is largely driven by a part-time effect for older workers (column 4); the effect of part-time work for younger and prime-age workers (columns 2 and 3) is statistically insignificant.

\*\*\*  $p < 0.01$ , \*\*  $p < 0.05$ , \*  $p < 0.1$ . Standard errors are in parentheses.

## Summary and Extensions

---

In this report, we introduced the new AWCS, which was fielded on the RAND ALP in 2015. The data available from the AWCS provide a comprehensive overview of the working conditions of American workers. This includes information on wages, hours worked, and benefits but also schedule variability, physical demands and exposure risks, the social work environment, the pace and intensity of work, task monotony and autonomy, and social and professional support on the job.

Because of its sample size and representativeness, the AWCS allows one to study the level and distribution of these and other working conditions in the population of employed workers and salient subgroups. Moreover, the AWCS collects desired job characteristics of those unemployed and not in the labor force, allowing one to assess the potential relationship of working conditions and labor supply. Another core advantage of the AWCS is that it is harmonized with the EWCS, allowing a range of in-depth cross-country comparisons.

### Summary of Main Findings

Our main findings in Chapter Four paint a complex picture of the American workplace, in which a substantial proportion of workers is exposed to an adverse physical and social work environment and is subject to high pressure and hours variations that spill over into personal lives; at the same time, many workers say that they have latitude over how they do their jobs, and a majority feel supported by their coworkers and bosses. Our analysis also finds that these job attributes vary substantially across the population. In particular, men without a college degree, but also women and younger workers more generally, experience substantially worse job conditions.

Overall, our analysis suggests that for many Americans, work can be taxing across a range of core dimensions, including at the physical, social, mental, and time levels. This perhaps surprisingly critical assessment of the American workplace is partly offset by the ability to work independently, a confidence in skills, access to training, and social support on the job. Data on preferences imply that many Americans would like more of the good job attributes and less of the taxing aspects. The potential access to better jobs could be an important factor in the employment decisions of many older Americans. Older workers who are not in the labor force but who would consider reentering are more likely to declare nonmonetary job attributes as most critical than younger nonworkers. These results raise the question of whether working conditions could play an important role in unlocking the substantial work potential of retired workers or those close to retirement.

The many striking and complex findings regarding American working conditions will give social scientists, policymakers, employers, and workers themselves much to consider, and we hope that these data will contribute to a constructive debate on how to improve working conditions, especially for those that are most affected by some of the more taxing job conditions we document. The findings presented here suggest that there is ample scope for modifying work environments to keep workers healthier, happier, and more productive.

## **Upcoming Extensions of the AWCS Data**

### **Extension No. 1: Longitudinal Component**

The AWCS has a longitudinal component: The same individuals interviewed in the baseline survey were reinterviewed after six and 12 months. This will allow studies of short-term changes in workers' employment choices and job conditions. It is also possible to link changes in employment status directly with previous and new working conditions.

### **Extension No. 2: Stated Preference Survey**

The data on working conditions from the AWCS will be linked with detailed information on preferences of workers over job characteristics, allowing an assessment of both the value of job characteristics and possible imbalances between worker needs with the job offerings in the labor market.

### **Extension No. 3: Links with Other ALP Data Sets**

Last, but not least, any survey that was fielded on the ALP can be linked with other surveys collected as part of the ALP family. Thus, the AWCS can be linked with surveys on financial decisionmaking, public opinion, expectations, health and disability, and retirement, among others.

## References

---

Eurofound, “European Working Conditions Surveys (EWCS),” January 29, 2015. As of July 6, 2017:  
<http://www.eurofound.europa.eu/european-working-conditions-surveys-ewcs>

RAND American Life Panel, homepage, 2015a. As of July 6, 2017:  
<https://alpdata.rand.org/>

RAND American Life Panel, “Panel Weighting,” 2015b. As of July 6, 2017:  
<https://alpdata.rand.org/index.php?page=weights>