

# 2016 Wounded Warrior Project<sup>®</sup> Survey

## Report of Findings

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**October 6, 2016**

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## EXECUTIVE SUMMARY

This executive summary includes a brief description of the survey purpose, content, and administration as well as top-line findings from the collected data.

### ABOUT THE SURVEY

*SURVEY OBJECTIVE.* The 2016 WWP survey was the seventh administration of the survey. The first survey, in 2010, collected baseline data on WWP alumni. The subsequent surveys provide updates and allow WWP to identify trends among its alumni, to compare their outcomes with those of other military populations, and to measure the impact and mix of WWP services and programs. The survey is NOT intended to measure the impact of individual WWP programs. WWP uses each set of annual data to determine how it can better serve its members.

*SURVEY CONTENT.* The survey measures a series of outcome domains within the following general topics about WWP alumni: Background Information (military experiences and demographic data), Physical and Mental Well-Being, and Economic Empowerment.

*2016 SURVEY ADMINISTRATION.* The web survey was fielded to 79,161 WWP alumni from March 8 to April 26, 2016 (7 weeks). Email communications included a prenotice message (sent on March 3, 2016), a survey invitation, and eight reminders. In addition to the email communications, a postal reminder was sent on April 8, 2016. Alumni who completed the survey could receive a WWP Maglite flashlight.

The final unweighted response rate for 2016 was 40.0 percent (31,683 completed surveys among 79,145 eligible warriors), which was up slightly from last year's 39.4 percent response rate. After data collection, the survey data were weighted to produce estimates representative of the 2016 alumni population.

# TOP-LINE FINDINGS

## ALUMNI BACKGROUND INFORMATION

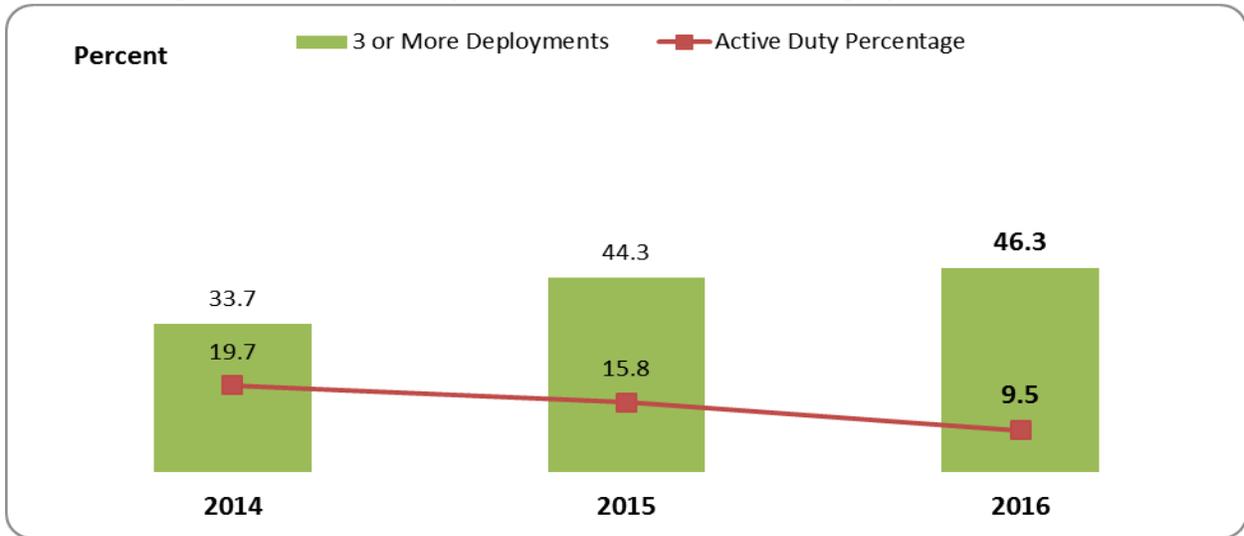
*DEMOGRAPHIC PROFILE.* The 2016 demographic profile of alumni looks like:

- Men – 85.3%
- Mean age – 38 years; younger than 31 – 19.4%
- Currently married – 66.5%
- Race/ethnicity:
  - White – 68.3%
  - Hispanic – 17.5%
  - Black or African American – 13.1%
  - American Indian or Alaska Native – 4.9%
  - Asian – 3.3%
  - Native Hawaiian or other Pacific Islander – 1.5%
- Geographic location:
  - South – 51.5%
  - West – 24.2%
  - Midwest – 13.3%
  - Northeast – 11.0%

*MILITARY PROFILE.* The 2016 military profile of alumni reflects similar trends to previous years. Most alumni were or are enlisted service members (91.9%). About 3 in 5 enlisted alumni (61.7%) achieved the rank of E5-E9.

Differences in military profiles over the past three years reflect a continuing decline in the proportion of active duty alumni and an increase in number of alumni deployments particularly in combat areas. Figure ES-1 depicts the three-year trends. Almost all alumni who have deployed since 2001 did so at least once to a combat area (94.3%).

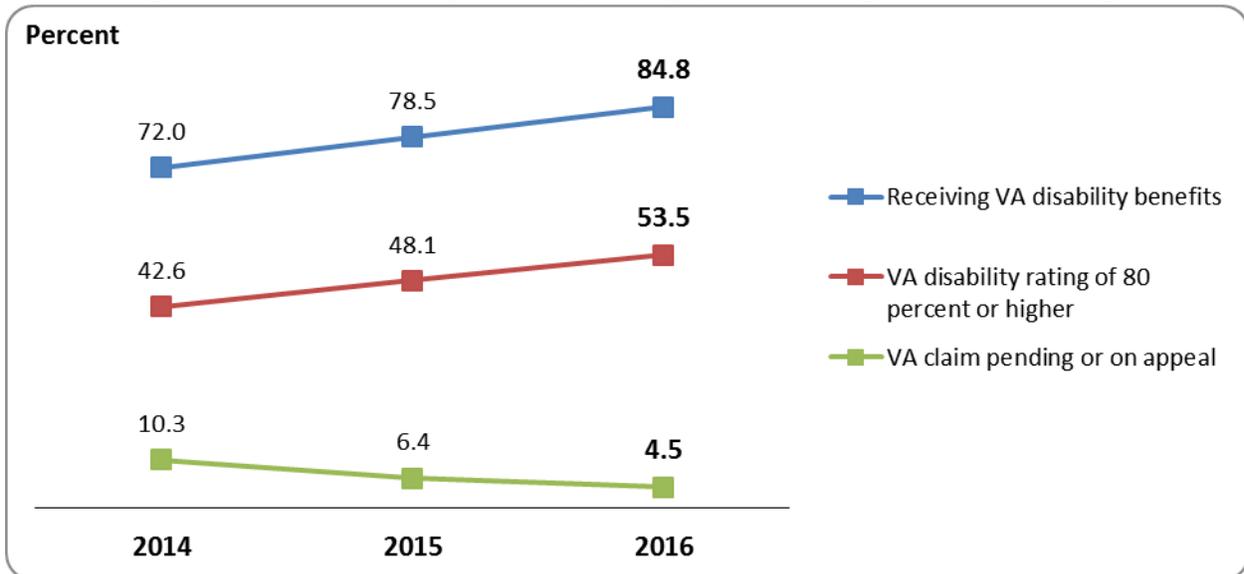
**Figure ES-1. Active Duty Alumni and Alumni with Deployments**



*SERVICE-CONNECTED INJURIES AND HEALTH PROBLEMS.* About 99 percent of alumni sustained serious injuries and health problems during their post-9/11 military service. Among those with injuries, nearly 9 in 10 (88.9%) experienced more than three injuries or health problems.

As Figure ES-2 shows, the percentage of alumni receiving VA benefits (84.8%) continued to rise; more than half of alumni (53.5%) had disability ratings of 80 percent or higher. The percentage of alumni reporting pending or claims on appeal at VA continues to decline (4.5%).

**Figure ES-2. VA Disability Benefits, Ratings, and Pending VA Claims Among Alumni**



The four most common self-reported injuries and health problems among alumni include:

- Post-traumatic stress disorder (PTSD) – 76.7%
- Sleep problems – 75.7%
- Back, neck, or shoulder problems – 72.1%
- Depression – 70.0%

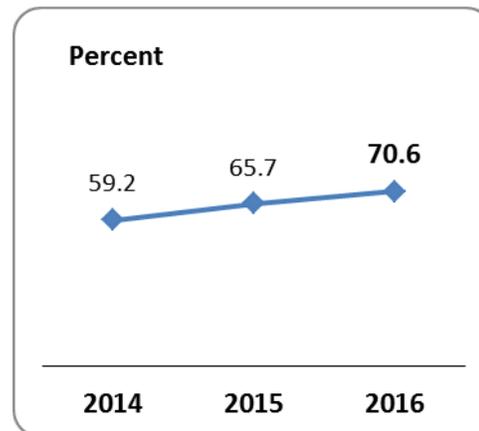
Rates for these injuries and health problems are similar to the 2015 estimates.

About 3 in 10 alumni (28.9%) need the aid and attendance of another person because of their injuries and health problems. Among them, more than one-fourth (26.8%) need more than 40 hours of aid every week.

*CURRENT HEALTH INSURANCE COVERAGE.* Up nearly five percentage points from the 2015 estimate, 70.6% of alumni receive health insurance through the VA. Figure ES-3 presents the three-year trend.

More than two-thirds (67.5%) of alumni with VA health insurance use the VA as their primary health care provider. These individuals may have other insurance in addition to VA coverage.

**Figure ES-3. Alumni with VA Health Insurance Coverage**



## PHYSICAL AND MENTAL WELL-BEING

*BACKGROUND.* Alumni were asked questions about their health and how it affects their daily activities. The questions comprise the Veterans RAND 36 Item Healthy Survey (VR-36) which was adapted from the RAND 36-Item Health Survey (SF-36), the instrument that was used in previous WWP surveys. Responses to the VR-36 are summarized by two composite scores, the Physical Component Scale (PCS) score and the Mental Component Scale (MCS) score. The mean PCS score for WWP alumni is 38.7, which is similar to the mean scores of veterans who have zero or one medical comorbidity. The mean MCS score for WWP alumni is 34.7, which is similar to the mean MCS score for veterans for have more than two mental comorbidities.

*HEALTH.* Similar to last year, just under half of alumni (48.5%) assessed their health as *excellent, very good, or good*. The majority reported their health as *fair or poor*.

### *EFFECTS OF PHYSICAL HEALTH AND MENTAL HEALTH/EMOTIONAL PROBLEMS ON ACTIVITIES.*

Though most alumni (70.4%) are not limited at all in bathing or dressing, about half (50.5%) say that their physical health limits them *a lot* in vigorous activities and nearly half (48.5%) indicate that they are limited *a little* in moderate activities.

Nearly 7 in 10 alumni (69.9%) cut down on the amount of time they spent on work or other activities *a little of the time* as a result of their physical health in the past four weeks. About 3 in 4 alumni (75.2%) cut down on the amount of time they spent on work or other regular activities at least *a little of the time* during the past four weeks because of their emotional problems.

Response options to questions about the impact of physical or emotional health problems in the VR-36 differed from those used in previous years, so comparisons with 2015 data are not made.

Physical health or emotional problems of 89.0 percent of alumni interfered with their normal social activities with family, friends, neighbors, or groups at least slightly. 68.6 percent indicated that physical or emotional problems interfered *extremely, quite a bit, or moderately*.

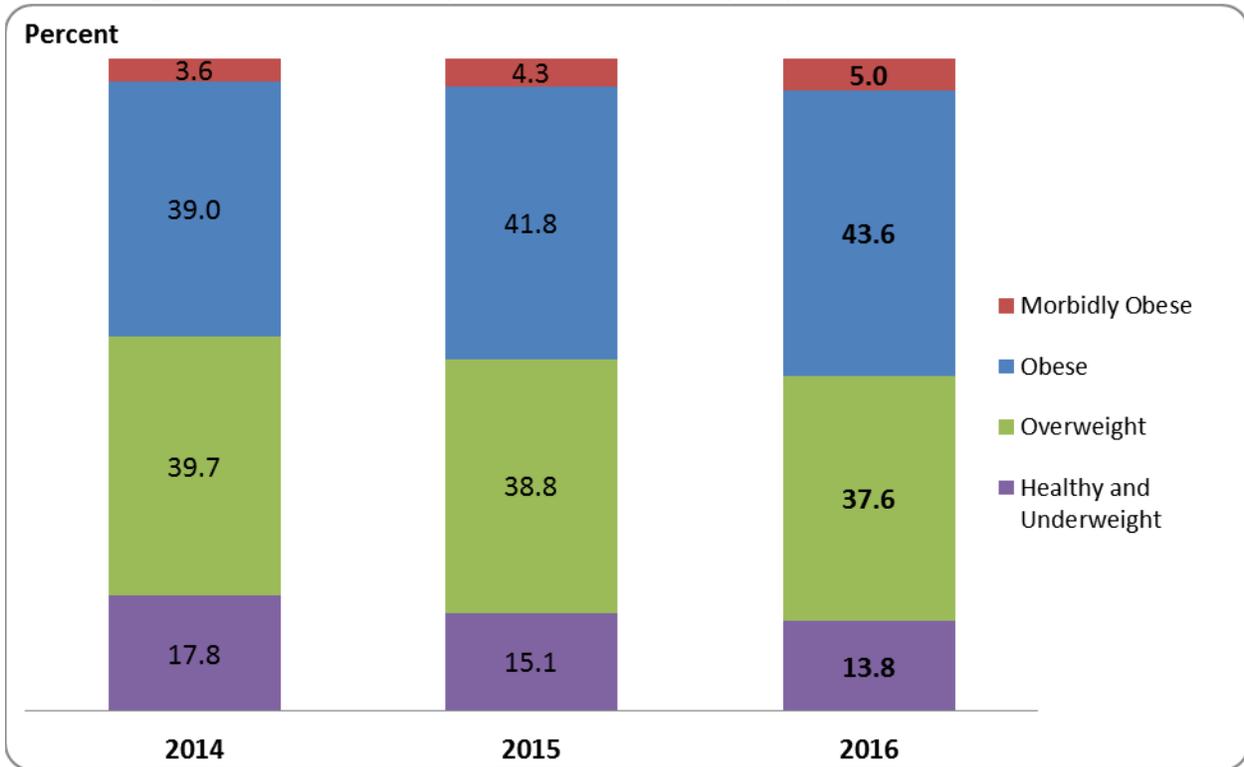
*HOW THEY HAVE BEEN FEELING.* Military experiences still adversely affect many alumni. 85.0 percent reported a military experience that was so frightening, horrible or, upsetting that they have been unable to escape memories or effects of it in the past months.

The most frequently reported problems bothering alumni nearly every day during the 2 weeks prior to the survey are the same as last year:

- Sleep issues (either had trouble falling or staying asleep or slept too much) – 43.2%.
- Tiredness (felt tired or had little energy) – 37.6%

*HEALTH-RELATED MATTERS.* For about three-fourths of alumni (73.7%), it is moderately important or very important to maintain a healthy diet and good nutrition, and 40.8 percent of alumni do moderate-intensity physical activity or exercise 3 or more days a week. However, the average body mass index (BMI) score for alumni is 30.4, slightly above the cut-off for obesity which is 30.0. Nearly half (48.6%) of alumni have BMI exceeding the obesity cut-off; 5 percent are morbidly obese. Figure ES-4 depicts the trend in BMI over the past three years.

**Figure ES-4. Alumni Body Mass Index Scores (BMI)**



**NOTE:** Underweight = BMI less than 18.5 (0.4% in 2014; 0.3% in 2015; 0.3% in 2016), Healthy = BMI between 18.5 – 24.99 (17.4% in 2014; 14.8% in 2015; 13.5% in 2016), Overweight = BMI between 25 – 29.99, Obese = BMI between 30 – 39.99, and Morbidly Obese = BMI more than 40.

Though excessive alcohol consumption is not an issue for the majority of alumni, about 1 in 5 alumni (21.7%) used more alcohol than they meant to in the past 4 weeks and 27.7 percent of those who reported drinking alcohol in the past 12 months had six or more drinks on one occasion at least once a month.

*MENTAL HEALTH CARE SERVICES: ACCESS/RESOURCES.* Among alumni, 53.3 percent had visited a professional to get help with issues such as stress, emotional, alcohol, drug, or family problems. More than one-third of alumni (34.8%), however, had difficulty getting mental health care, put off getting such care, or did not get the care they needed.

Over one-third of alumni (36.4%) indicated that conflicts between their personal schedules and hours of operation of the VA sites were the reason they had difficulty getting mental health care. This was the most frequently cited reason, but was closely followed by discomfort with existing resources within the DoD or VA (35.2%) and the feeling that treatment might bring up painful or traumatic memories that the alumni wanted to avoid (33.7%).

There was almost a 10 percentage point increase from the 2015 estimate in the percentage of alumni mentioning a lack of resources in their geographic area as a reason for difficulties in getting mental health care (26.0%, compared to 16.1% in 2015).

About 1 in 5 alumni selected reasons related to perceived adverse effects of seeking mental health care treatment:

- Concerned that your future career plans would be jeopardized – 21.7%
- Would be considered weak – 21.3%
- Would be stigmatized by your peers or family – 19.2%

Wounded warriors utilize various resources and tools to help address their mental health issues. The top three resources and tools used for addressing their mental health concerns were:

- VA Medical Center – 69.1%
- Talking with another OEF/OIF/New Dawn veteran – 51.7%
- Prescription medication – 49.6%

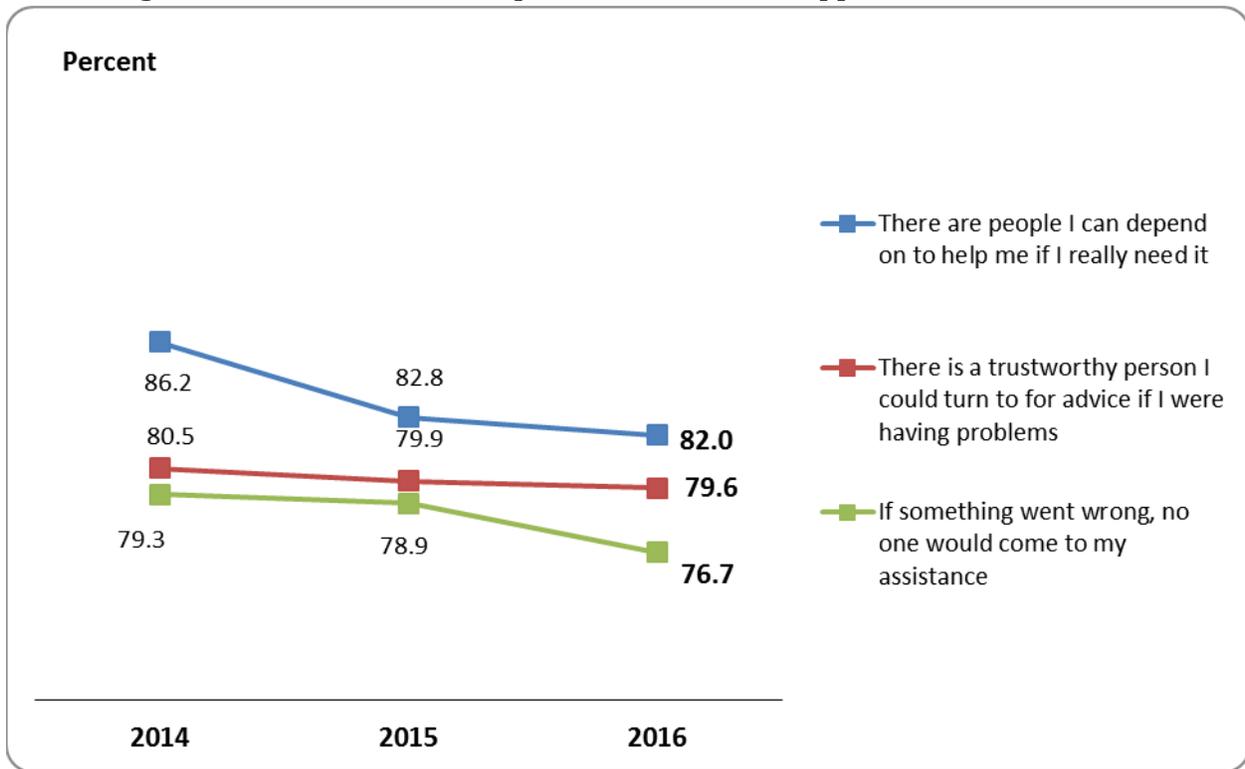
*PHYSICAL HEALTH CARE SERVICES: ACCESS.* More than 4 in 10 alumni (43.3%) had difficulty getting health care for physical injuries or problems in the past 12 months, or they put off getting care, or did not get the physical health care they thought they needed. The most frequently cited reason was difficulty in scheduling appointments: cited by 40.3 percent of alumni.

*SOCIAL SUPPORT.* On the 10-item Social Provisions Scale, more than half of alumni answered positively to each statement about their current relationships with friends, family members, co-workers, community members, and others. The three statements with the highest percentages answering positively are presented in Figure ES-5. The percentage of alumni with positive responses to these items has been relatively flat or down since 2014.

The statements from the Social Provisions Scale—Short Version that is used in the WWP survey assess five provisions and can also be used to develop a total social provision score (Cutrona & Russell, 1987). Mean scores for the five provisions could range from 2 to 8, and the range for the total score is 10 to 40. Higher scores indicate a greater degree of perceived support. The WWP mean survey scores for these five provisions and the total score are as follows:

- Guidance (advice or information) – **5.9** (5.9 in 2015, 6.0 in 2014)
- Reassurance of Worth (recognition of one’s competence, skills, and value by others) – **5.4** (5.4 in 2015 and 2014)
- Social Integration (a sense of belonging to a group that shares similar interests, concerns, and recreational activities) – **5.7** (5.8 in 2015 and 2014)
- Attachment (emotional closeness from which one derives a sense of security) – **5.4** (5.4 in 2014 and 5.5 in 2014)
- Reliable Alliance (assurance that others can be counted on in times of stress) – **6.0** (6.1 in 2015 and 6.2 in 2014)
- **Total Social Provisions Score** – **28.4** (28.5 in 2015 and 28.9 in 2014)

**Figure ES-5. Most Positive Responses About Social Support**



*CURRENT ATTITUDES.* Beginning this year, the survey used the 10-item version of the Connor-Davidson Resilience Scale (also known as the CD-RISC 10-Item Resilience Scale) to address current attitudes about resilience in the face of changes or hardships, as opposed to the 2-item version used in previous WWP surveys. About half of alumni have positive attitudes towards the two items that remain from the previously used 2-item version of the scale:

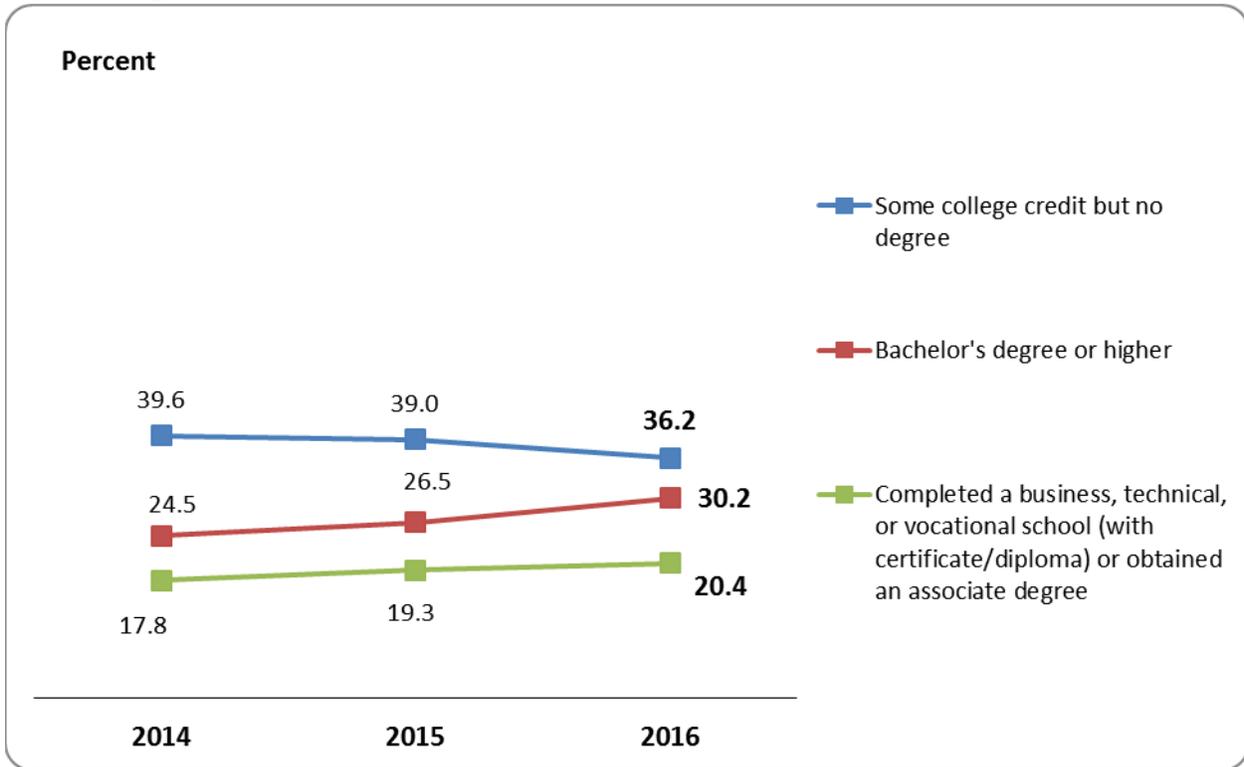
- It is *often true* or *true nearly all the time* that they are able to adapt when changes occur – 50.7% (52.7% in 2015)
- It is *often true* or *true nearly all the time* that they tend to bounce back after illness, injury, or other hardships – 47.7% (49.8% in 2015)

The mean CD-RISC 10-Item Resilience Scale score for WWP alumni is **23.9**. This is much lower than mean scores found for the general U.S. population: **31.8** (Campbell-Sills et al., 2009). However, individuals with PTSD tend to have a lower CD-RISC score when compared to the general U.S. population. WWP alumni screening positive for PTSD on the annual survey had a mean score of 22.0 which is slightly higher than findings from the international work which found a mean score in the range of 19.9 to 20.1 for groups with PTSD (Davidson et al., 2008).

## ECONOMIC EMPOWERMENT

*EDUCATIONAL ATTAINMENT.* The proportion of alumni with a bachelor’s degree or higher continues to increase. Figure ES-6 depicts the educational attainment among alumni over the past three years.

**Figure ES-6. Growth in Educational Attainment**



*PURSUIT OF MORE EDUCATION.* About 3 in 10 alumni (28.2%) are now enrolled in school to pursue the following:

- Bachelor's degree or higher – 68.2% of enrollees (65.6% in 2014)
- Associate degree – 21.4% (22.7% in 2015)
- Business, technical, or vocational school training leading to a certificate or diploma – 7.7% (7.4% in 2015)

The two primary benefits alumni use to finance their educational pursuits are the same as in 2015: Post-9/11 GI Bill and the VA's Vocational Rehabilitation and Employment Program (VR&E). The percentage of alumni who are using the VR&E program to pursue more education (26.1%) has increased by about 3 percentage points in the past 3 years.

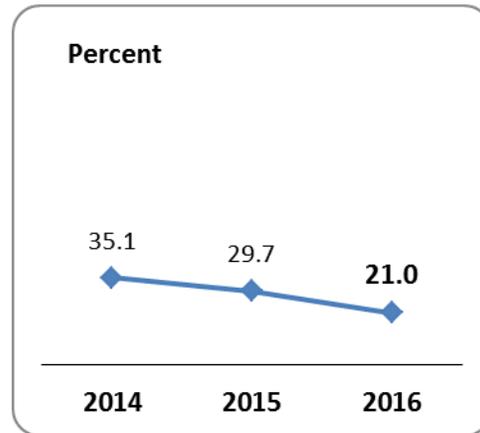
*LABOR FORCE/EMPLOYMENT STATUS.* Labor force findings include the following:

- Labor force participation rate – 62.5%
- Percentage of alumni employed full time – 47.1%
- Percentage of alumni employed part time – 7.1%
- Percentage of employed alumni who are self-employed – 5.6%
- Unemployment rate – 13.2%
- Unemployment rate for subset of *non-active-duty alumni* – 15.6%

The primary reasons alumni are not in the labor force include medical/health problems (56.8%), enrollment in school or in a training program (18.2%), or retirement (17.0%). In addition, 4.4 percent of alumni who are not in the labor force have become too discouraged to continue looking for work and 3.6 percent have family responsibilities.

Alumni work in many different industries, but 21.2 percent of alumni now work for the federal government (up from 18.9% in 2015). A similar percentage of alumni (21.0%) work in the military, including those on active duty and those working in other military jobs, which represents a continuing decline. Figure ES-7 displays the three-year trend.

**Figure ES-7. Alumni employed by the military**



**BARRIERS TO EMPLOYMENT.** Many factors make it difficult for alumni to obtain employment or change jobs. Although the order of most common factors changed slightly in 2016, the percentage estimates are similar to the 2015 estimates. The top 3 most frequently cited reasons are:

- Mental health issues – 33.7%
- Difficult for me to be around others – 33.4%
- Not physically capable – 21.8%

**INCOME.** Alumni reported on two sources of income they received in the past 12 months:

- Income from work:
  - Median income for those working full-time was \$800 per week (up from \$740 per week in 2015); 47.0% earned less than \$45,000 in the prior 12 months.
  - Median income for those who work part-time was \$200 (same as 2015 estimate); 54.6% earned less than \$15,000 in the prior 12 months.
- Income from various benefit, cash assistance, and disability programs:
  - Received \$20,000 or more in income from those sources – 38.3%.
  - Received no income from those sources – 17.8%.

*CURRENT LIVING ARRANGEMENT.* Among alumni, 49.1 percent currently own their own homes with an outstanding mortgage, continuing a three-year upward trend (Figure ES-8). 3.8 percent own their homes with no mortgage balance. Nearly one-third of alumni (31.8%) rent their homes.

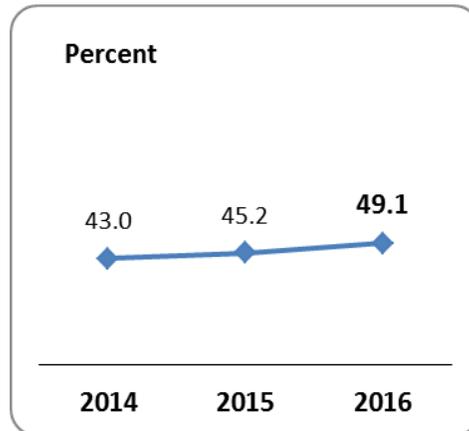
*HOMELESSNESS.* About 6 percent of alumni were homeless or living in a homeless shelter during the past 24 months. Of these, about 28 percent were homeless for less than 30 days, 48.1 percent were homeless for 1-6 months, 12.6 percent were homeless for 7-12 months, and 10.5 percent were homeless for 13-24 months. The mean number of days alumni were homeless was 152 (about 5 months). Among those who were homeless, 20.9 percent received government housing assistance (up from 17.9% in 2015).

*RATIO OF MONTHLY HOUSEHOLD DEBT PAYMENTS TO MONTHLY HOUSEHOLD INCOME.* Among all alumni, 39.9 percent own their homes with outstanding mortgages and answered the three income questions in the survey. Among this group, 64.2 percent have a debt-to-income ratio exceeding 41 percent, the general VA mortgage qualification ratio. Among alumni who currently do not own their homes (with or without a mortgage) and who answered the income questions (35.9% of alumni), 91.2 percent have a “non-housing” debt-to-income ratio higher than 8 percent, a common ratio used by commercial mortgage lenders for non-housing-related debt when “housing-related costs” will be about 28 percent of income.

*FINANCIAL MANAGEMENT.* For this year’s survey, alumni were asked 15 questions comprising the Financial Management Behavior Scale (FMBS). The scale was developed to measure overall behavior in financial management and involves four subscales: savings and investment; cash management; credit management; and insurance. Scores range from one to five, where a higher score shows better financial management behavior. The following are the average scores for alumni:

- Overall score = 3.1
- Savings and investment subscale score = 2.4
- Cash management subscale score = 3.5
- Credit management subscale score = 3.1
- Insurance subscale score = 3.6

**Figure ES-8. Alumni who own a home with a mortgage**



Each of these scores is lower than results from a nationally representative study (Dew, 2011):

- Overall score: 3.48
- Savings and investment subscale score: 2.66
- Cash management subscale score: 3.73
- Credit management subscale score: 3.73
- Insurance subscale score: 3.81

Questions pertaining to bank accounts, savings plans, and emergency funds were removed from the 2016 survey.

*OVERALL ASSESSMENT OF FINANCIAL STATUS.* Alumni were asked whether they would say their financial status (and that of family living with them) is *better now*, the *same*, or *worse* than a year ago. Results are similar to 2015 estimates:

- Better now – 24.1% (23.7% in 2015)
- Same – 42.1% (40.6% in 2015)
- Worse – 30.0% (31.7% in 2015)
- Don't know – 3.8%

While the large majority of WWP alumni are Army veterans, and more than 90 percent were/are enlisted Service members, WWP alumni represent all Services and ranks. Almost half have deployed at least three times during their military career. Along with these military sacrifices come injuries and health problems. The most common problems faced by alumni include PTSD, sleep problems, obesity, and depression. Unfortunately, a majority of alumni report their health as being only *fair* or *poor*, and this decreased health impacts their employment opportunities, social interactions, and other daily activities that most of us take for granted. Because of their injuries and health problems, almost 3 in 10 need assistance from another person while adjusting to and living their new “normal”, and some will need a lifetime of care. The WWP and other VSOs will continue to play a vital role in the recovery and care provided to these wounded warriors by providing programs and services that augment governmental health care organizations that are already overstretched and underfunded.

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# WOUNDED WARRIOR PROJECT

Wounded Warrior Project (WWP) plays an important role in improving the lives of severely injured service members through efforts to increase public awareness about this population's needs, to bring about legislative and policy changes to address those needs, and to augment the programs and services available to them through the Department of Defense (DoD), the Department of Veterans Affairs (VA), Veterans Services Organizations, and other agencies and organizations. WWP offers many services, including benefits, peer and emotional support, as well as support for family members and caregivers. In addition, WWP offers career guidance through Warriors to Work, as well as IT training through the Transition Training Academy (TTA). WWP offers multiple programs to support Wounded Warriors in a comprehensive and holistic programming model. WWP's work in the legislative arena led to the creation of the Traumatic Injury Protection program (TSGLI), which provides much-needed financial support for severely injured service members, and the creation and passage of the Caregiver Legislation (Caregiver and Veterans Omnibus Health Services Act of 2010). The ultimate goal of WWP is to foster the most well-adjusted generation of American warriors by supporting their mental health, promoting their physical health, and encouraging their economic empowerment.

## WOUNDED WARRIOR PROJECT SURVEY

### SURVEY OBJECTIVE

WWP maintains a database of wounded warriors registered as WWP alumni. Eligible alumni include service members and veterans who incurred a physical or mental injury, illness, or wound that was not due to their own misconduct and was co-incident with their military service on or after September 11, 2001. WWP designed its survey to assess current alumni demographics, mental and physical well-being, and economic empowerment across a number of outcome domains. WWP has conducted this survey annually over the past 7 years to initially establish baseline data on its alumni membership and subsequently to identify trends among WWP alumni and compare their outcomes with those of other military populations (the survey was first administered in 2010). The survey is NOT intended to measure the impact of individual WWP programs.

### SURVEY CONTENT AND DEVELOPMENT

*SURVEY CONTENT.* The survey measures a series of outcome domains related to the following general topics:

- Background Information about WWP Alumni
- Physical and Mental Well-Being
- Economic Empowerment

*DEVELOPMENT PROCESS.* WWP worked with RAND to develop the outcome domains and survey items for the baseline survey administered in 2010. Westat appraised the draft survey to identify potential problems for alumni in understanding and answering the questions, and

conducted cognitive interviews with four alumni and one caregiver to pretest selected items from the draft 2010 survey. WWP and a RAND representative discussed the interview findings and recommendations during a conference call with Westat, and WWP decided on final changes to the survey that was administered in 2010.

Over the years, the survey has been revised to collect information on new topics, or more details about a topic already covered in the survey, or to update questions related to WWP programs. In 2016, notable changes include questions asking about financial patterns and activities such as paying off bills, creating savings accounts, or maintaining insurance; and new measures on emotional and physical wellbeing, as well as satisfaction with WWP programs. Also, new response options were added in 2016 for questions asking about participation in WWP activities and WWP communications. More details about changes in the current and previous years are described when relevant in various sections of this report.

*WEB INSTRUMENT.* The web instrument was pretested across Windows platforms, multiple browsers (Internet Explorer, Firefox, Safari, Opera, and Chrome), iOS and Android mobile devices, and popular screen resolution settings to minimize IT-related challenges during data collection.

## 2016 SURVEY ADMINISTRATION

Westat administered the survey to 79,161 alumni in WWP's member database (up from 58,933 alumni in 2015). WWP alumni membership has steadily increased from 3,464 alumni in 2010. Data collection continued for 7 weeks, from March 8 to April 26, 2016. All but one of the communications with the wounded warriors were via email and included a prenotification message, a survey invitation, and seven email thank you/reminder messages that were sent to survey nonrespondents. A postal mail reminder letter was also sent during the 5<sup>th</sup> week of data collection. As an incentive to promote higher survey response, those who answered and submitted a 2016 survey could choose to receive a WWP Maglite flashlight. (Nonmonetary incentives were also offered in previous years starting in 2011.)

Westat's WWP Survey Help Center provided technical assistance to sample members throughout data collection. The final response rate was **40.0** percent (31,683 completed surveys among 79,145 eligible warriors in the survey population), compared with 39.4 percent in 2015, and 49.0 percent in 2014. The Appendix includes more details on survey methods and administration.

*CAREGIVER ASSISTANCE WITH SURVEY.* One hundred seventy-six caregivers (0.6%, unweighted) reported that they completed the survey for their wounded warriors, and 2,844 caregivers (9.0%, unweighted) helped alumni complete the 2016 survey.

## 2016 REPORTED DATA

*WWP SURVEY.* The estimates provided in the findings section of this 2016 report are weighted data, unless specified otherwise. The survey results were adjusted to reduce bias in survey estimates that might occur due to survey nonresponse. Such bias is likely to occur if there is a relationship between response propensity and the values of the survey data. For example, if employment status of nonrespondents was systematically different from the employment status of those who completed the survey, this difference could have introduced bias.

When calculating weights, statisticians need to have information about both respondents and nonrespondents to determine if the characteristics of respondents are different from those of nonrespondents. This year, as in 2015 and 2014, there was sufficient information in the WWP alumni database on military status (active duty versus not active duty), age, and geographic region to use those variables to adjust the collected survey data for survey nonresponse. More details on the weighting process used for the 2016 survey are included in the Appendix.

The data set used for analysis includes completed cases for 31,683 alumni. For a survey to be considered “complete” and included in the analytic data set, the respondent had to answer at least 17 of the 20 core demographic questions as well as 22 of the 47 core nondemographic items. Core questions were those that all alumni had a chance to answer (i.e., they were not prevented from answering them because of programmed skips). Whenever percentages were calculated, missing responses were removed from the denominators. Denominators thus vary across questions because warriors could choose to skip any questions they did not want to answer. Missing responses also include items that were skipped according to questionnaire programming. Also, there are some slight differences (about 0.1 or 0.2 percentage points) between estimated percentages for *combined* response options presented in the text when only single response percentages appear in the figures because the text estimates are less subject to rounding errors.

The estimated data we report represent the findings for WWP alumni surveyed in 2016, 2015, and 2014. Most, but not all, figures and tables include data for all 3 years.

Please note that the sample sizes have increased each year since 2010. The 2016 survey population (79,161) was much larger than in 2015 (58,933) and 2014 (43,096). Also, the survey population included a lower percentage of active duty soldiers in 2016 (9.5%) than in 2015 (15.8%) and in 2014 (19.7%). Because the survey populations were not identical across those years, differences in results from one year to the next do not reflect how a specific group of alumni changed between 2014 and 2016. In the text, we highlight changes of about 5 percentage points or more between the 2016 and 2015 survey estimates as well as some patterns of change since 2014 and other notable changes in the estimates for WWP priorities. The data do reflect the physical and mental well-being, as well as the economic well-being and demographic characteristics, of WWP alumni in each year. As noted, WWP uses the yearly data when developing and improving its annual strategic plan for WWP programs and services for alumni and their family members.

*U.S. BUREAU OF LABOR STATISTICS COMPARISON DATA.* The U. S. Bureau of Labor Statistics (BLS) collects data on veterans as part of the Current Population Survey (CPS)—a monthly survey of about 60,000 households—as well as through a monthly supplement on special topics, such as veterans with disabilities. The supplement is administered annually in August. Veterans are identified by their service period in the BLS data and reports. In various sections of this report, we include 2015 BLS data on Gulf War-era II veterans—defined as those who have served in the military since September 2001—as well as some BLS comparison data for Gulf War-era I veterans (served August 1990–August 2001), all veterans, and nonveterans. Veterans who served in more than one service period are classified in the most recent one. As noted, the WWP survey population includes not just veterans, but also active duty service members (9.5% in 2016) who have been injured during military service since September 11, 2001. This difference in survey populations should be kept in mind when comparing results with the BLS data.

We also include BLS data on employment statistics for persons with and without a disability in the civilian noninstitutional population, ages 16–64. Sources for BLS data appearing in this report are cited in the text and in the References.

*COMPARISON DATA FOR PHYSICAL AND MENTAL HEALTH SCALE SCORES.* The primary sources of comparison data on physical and mental health status cited in this report are publications related to RAND’s Invisible Wounds of War study (2008; the study population included returned service members from Operation Enduring Freedom [OEF] and Operation Iraqi Freedom [OIF]), the Department of Defense Millennium Cohort (MC) study (the initial 2001 Cohort population cited in a few places in this report included U.S. service members, many of whom had never been deployed or incurred a service-connected injury), and the Post-Deployment Health Assessment/ Reassessment (PDHA/PHDRA) study (study population results are reported for Army soldiers who had served in the Iraq War or been deployed to other locations). More recent sources of comparison data are cited as well.

RAND and Boston University provided information on the scales used in the WWP survey, including instructions or programming code for calculating scores, and provided information on sources of comparison data. Caveats are sometimes included in the discussion of scale results to emphasize differences between the scales used in the WWP survey and corresponding scales in the other studies. Citations and references are included for sources of comparison data, which also provide information about study populations and sampling/research methods.

## ORGANIZATION OF REPORT FINDINGS

The remainder of this report contains the survey results. They are presented as follows:

### Overall Alumni Background Information

- Demographic Profile
- Military Service Experiences
- Offenses/Convictions Since First Deployment

### Physical and Mental Well-Being

- Health and Daily Activities
- How Have You Been Feeling?
- Health-Related Matters
- Health Care Services
- Social Support

### Economic Empowerment

- Education
- More on Unemployment and Employment
- Income
- Current Living Arrangement
- Homelessness
- Debt
- Financial Management
- Overall Assessment of Financial Status

### Major Themes in Survey Comments

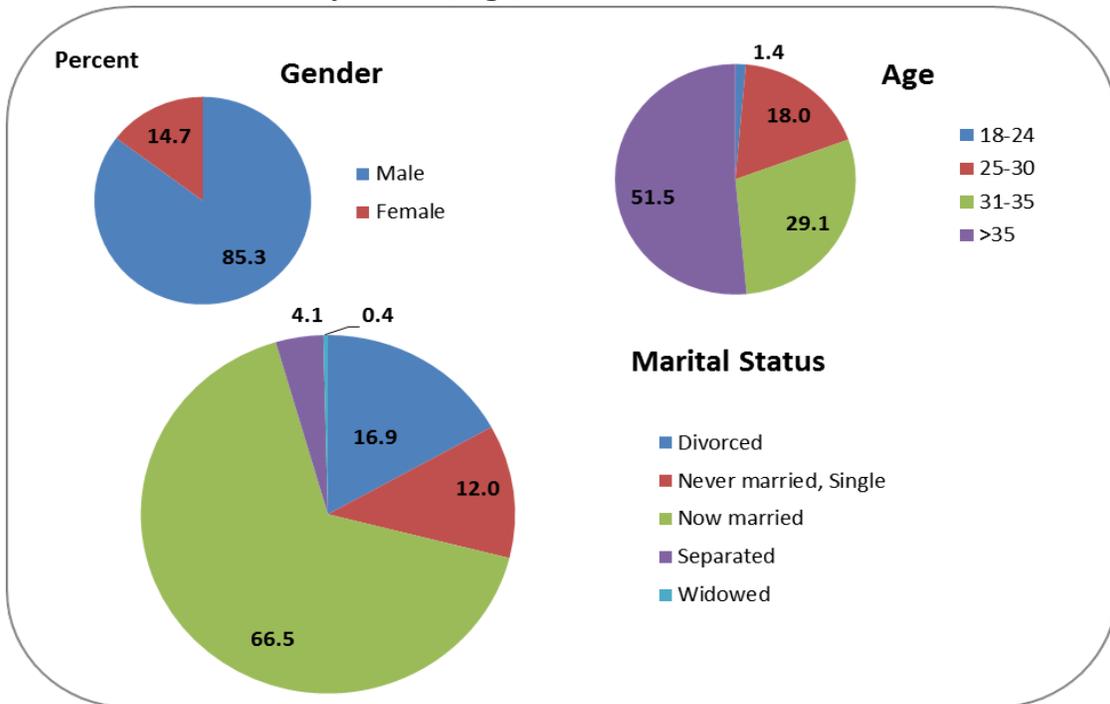
The report closes with an overall summary of findings and conclusions. The report Appendix includes Survey Methods and Administration Details

## ALUMNI BACKGROUND INFORMATION

### DEMOGRAPHIC PROFILE

*GENDER, AGE, MARITAL STATUS.* The 2016 demographic profile for alumni is similar to the 2015 and 2014 profiles. Most alumni are male (85.3%), 66.5 percent are currently married, and 12.0 percent are single and have never married (Figure 1). Among the 21.1 percent who are divorced or currently separated, most (87.2%) became legally separated or divorced from their spouses *after* deployment. Their mean age is 38 years old, with 19.4 percent younger than 31. The percentage of alumni 35 and younger is 48.5 percent (compared with 57.9% in 2015 and 59.6% in 2014).

**Figure 1. Alumni Breakouts by Gender, Age, and Marital Status**



**BLS, Current Population Survey, Annual Averages 2015**

**Gulf War era II veterans: Served since September 2001**

- 82.3 percent are male
- 53.8 percent are younger than 35 years old

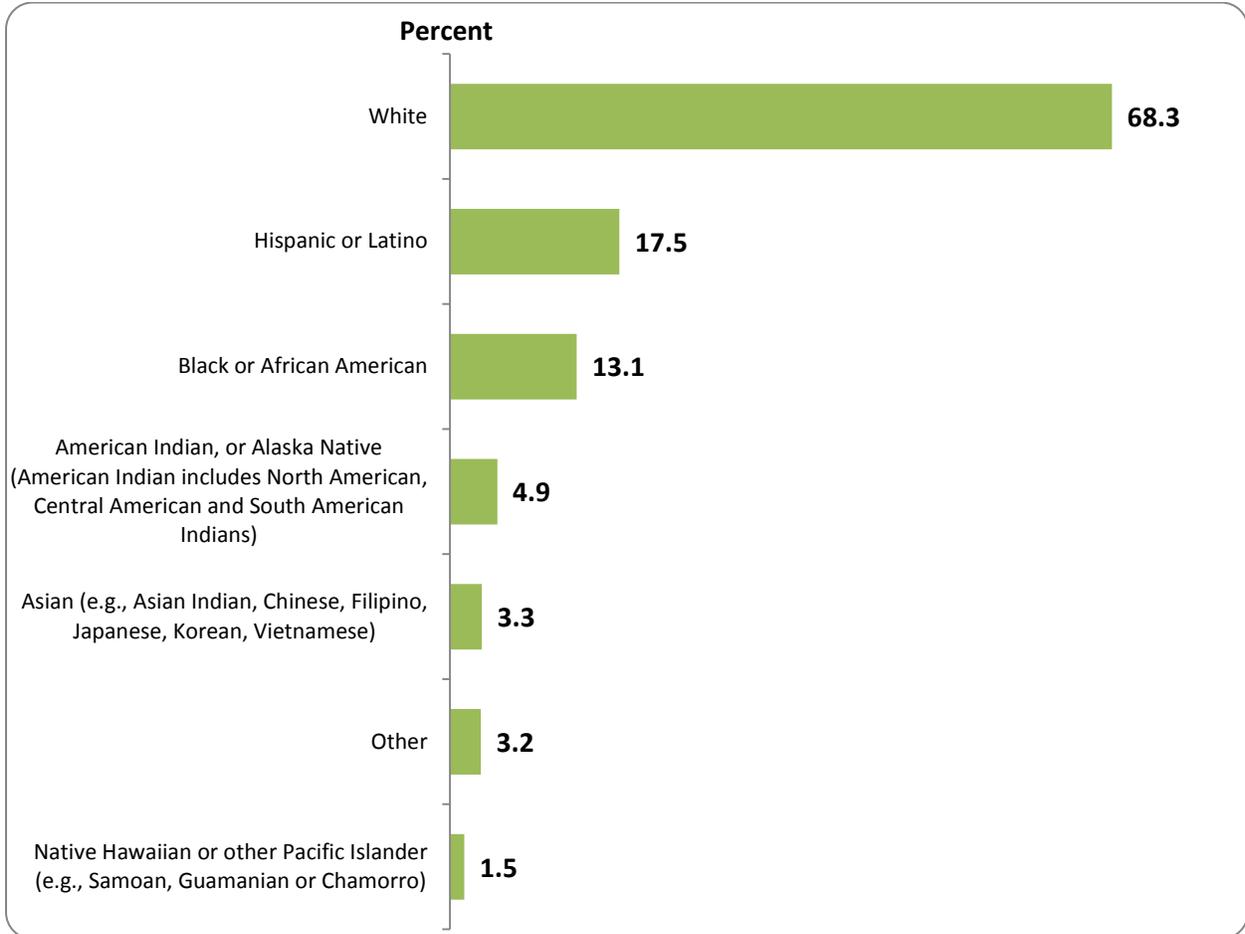
**Gulf War era I veterans: Last served August 1990 to August 2001**

- 84.6 percent are male
- 2.8 percent are younger than 35 years old

**Source:** August 2015 Veterans Supplement (BLS, March 2016, USDL-16-0611); Tables 1 and 2A: <http://www.bls.gov/news.release/pdf/vet.pdf>.

*RACE/ETHNICITY.* Most alumni are White (68.3%; Figure 2). Nearly 10 percent of alumni (9.6%) marked more than one race/ethnicity category.

**Figure 2. Alumni Breakout by Race/Hispanic Ethnicity**



**NOTE:** Percentages do not sum to 100% because alumni could mark more than one race/ ethnicity category.

**BLS, Current Population Survey, Annual Averages 2015**

**Gulf War-era II veterans:** Served since September 2001

- 79.2 percent—White
- 14.3 percent—Black
- 13.7 percent—Hispanic

**Gulf War-era I veterans:** Last served August 1990 to August 2001

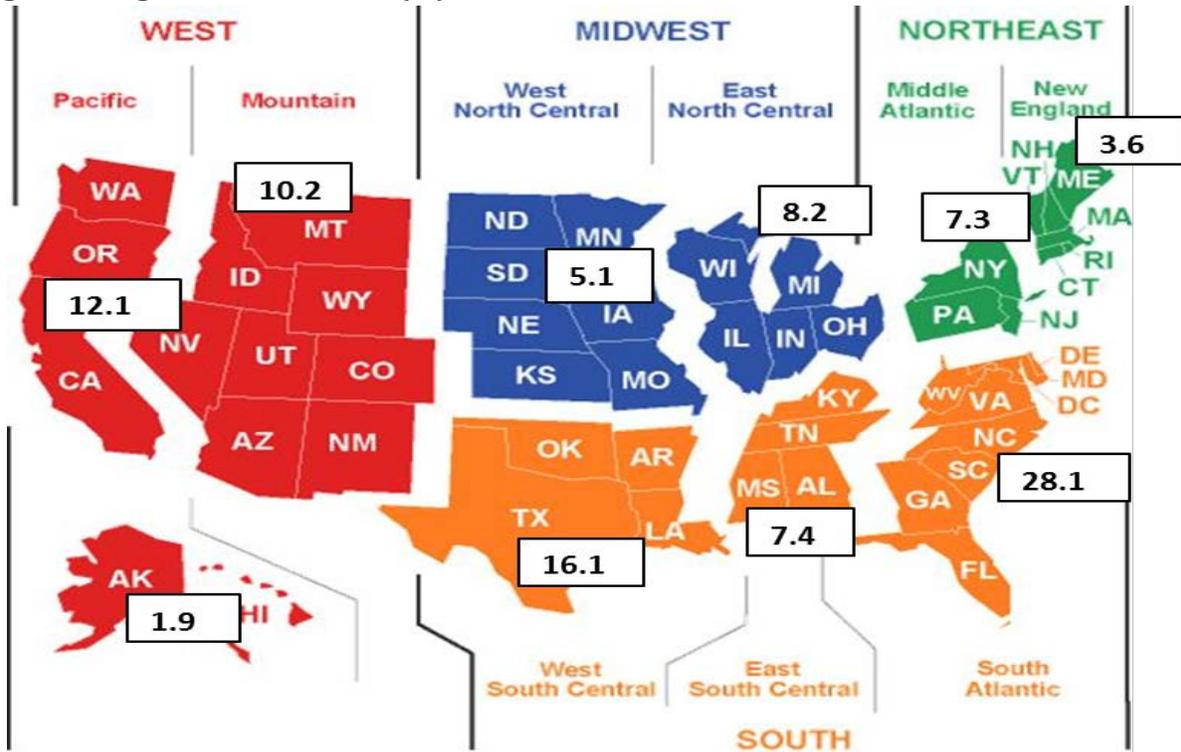
- 76.7 percent—White
- 17.3 percent—Black
- 8.1 percent—Hispanic

**NOTE:** Persons whose ethnicity is identified as Hispanic or Latino could be of any race.

**Source:** Table 1 (<http://www.bls.gov/news.release/pdf/vet.pdf>)

*GEOGRAPHIC RESIDENCE.* As in 2015, about half of alumni (51.6%) live in the South, 24.2 percent live in the West, 11.0 percent in the Northeast, and 13.3 percent in the Midwest. The 10 Census regions shown in Figure 3 map to the regions in the WWP strategic plan except for one state—Montana.

**Figure 3. Regional Distribution (%) of 2016 WWP Alumni**



The 10 states with the highest numbers of WWP alumni in 2016 were the same as in 2015 (Table 1). A total of 55.1 percent of alumni currently reside in these 10 states.

**Table 1. Top 10 States with WWP Alumni**

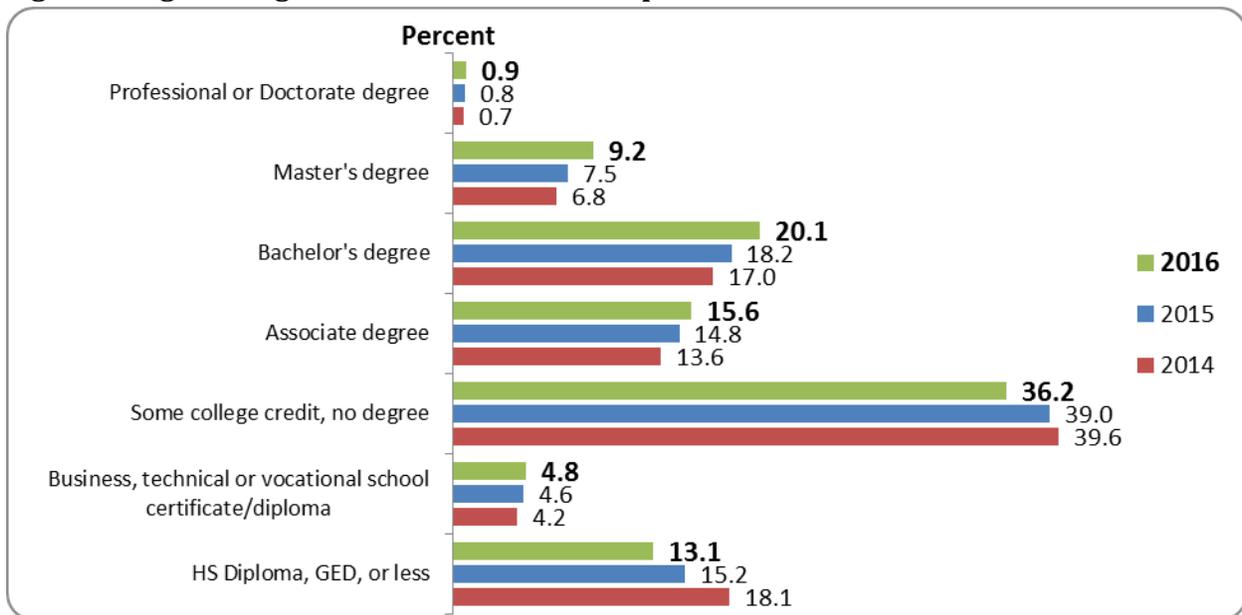
State	2016 Count	2015 Count
1. Texas	9,772	7,084
2. Florida	6,483	4,519
3. California	5,891	4,423
4. North Carolina	4,462	3,332
5. Virginia	3,444	2,525
6. Georgia	3,415	2,456
7. Washington	2,579	2,186
8. Colorado	2,544	2,029
9. New York	2,532	1,992
10. Arizona	2,465	1,740

*EDUCATION.* Current level of educational attainment varies among alumni (Figure 4):

- Bachelor’s degree or higher – 30.2%
- Associate degree or some college – 51.8%
- No college credit – 17.9% (but 4.8% of these have a business, technical, or vocational school certificate/diploma)

The 2016 results are mostly similar to those in 2015 and 2014; however, the percentage with a bachelor’s degree or higher has continued to increase since 2014.

**Figure 4. Highest Degree or Level of School Completed**



**BLS, Current Population Survey, Annual Averages 2015**

**Gulf War-era II veterans (25 years and over):** Served since September 2001

- 33.8 percent—college degree or higher (nonveterans: 33.3%)
- 44.1 percent—an associate degree or some college (nonveterans: 25.8%)
- 22.1 percent—no college credit—had a high school diploma, GED, or less (nonveterans: 40.9%)

**Gulf War-era I veterans (25 years and over):**

- 33.0 percent—college degree or higher
- 40.3 percent—an associate degree or some college
- 26.6 percent—no college credit—had a high school diploma, GED, or less

Source: Table 3 (<http://www.bls.gov/news.release/pdf/vet.pdf>)

*EMPLOYMENT STATUS.* Among all alumni, 54.0 percent are employed either full time or part time in paid work. Alumni who reported they were not currently employed but actively looked for work in the past 4 weeks and could have accepted a job in the previous week or could have done so except for a temporary illness are classified as unemployed. The groups of employed and unemployed alumni make up the alumni labor force. The 2016 alumni labor force participation rate is 62.5 percent (number in alumni labor force/number in alumni population). The unemployment rate = the number of unemployed/the number in the alumni labor force. The unemployment rate for 2016 alumni is 13.2 percent (see the *Note* below discussing this estimated rate).

Wounded warriors who are neither employed nor unemployed are asked to select the “best” among five reasons for not being in the labor force. The results in 2016 are similar to the 2015 results; however, the number of retired alumni has increased slightly (12.1 percent in 2015):

- 56.8% – Medical/health conditions (or treatment) prevent them from working
- 18.2% – In school or in a training program
- 17.0% – Retired
- 4.4% – Would have liked to work but have become **discouraged** about finding work and did not look for work in the past 4 weeks
- 3.6% – Family responsibilities

Warriors in the relatively small group of discouraged workers were asked to select from among four possible reasons the main reason they did not seek work in the past 4 weeks:

- 32.4% – Have been unable to find work and quit looking
- 31.7% – Do not have the necessary schooling, training, skills, or experience
- 26.6% – Employers discriminate against them because of age or disability or some other reason
- 9.4% – No job available in their line of work or area

**NOTE:** Since 2014, all active duty alumni have been counted as employed in paid work (not all of them had reported themselves as employed in prior years of the survey). To have comparable data for prior years, we recalculated the estimated employment percentages, labor force participation rates, and unemployment rates reported from 2011 through 2013. We also calculated a second set of rates that correspond better to BLS estimates for veterans—they include only non-active-duty alumni.

The top rows in Table 2 on the next page show employment percentages, labor force participation rates, and unemployment rates for 2013–2016 when all alumni are included and all active duty alumni are counted as employed. The bottom rows of the table show the results for only non-active-duty alumni. As expected, for the subgroup of non-active-duty alumni, in each of the 4 years, the percentage employed and the labor force participation rate are lower and the unemployment rate is higher than the corresponding rates that include all alumni. The unemployment rate for non-active-duty alumni continues to decline—15.6 percent in 2016, compared with 16.6 percent in 2015 and 19.7 percent in 2014. The percentage employed in this

group has increased over time (from 47.0% in 2013 to 49.2% in 2016), and the labor force participation rate has decreased over the 4 years.

**Table 2. Estimated Employment, Labor Force Participation, and Unemployment Rates for All Alumni and for Non-Active-Duty Alumni (2014–2016)**

	2016	2015	2014
	<b>All Alumni</b>		
Percentage employed	54.0%	57.2%	57.9%
Labor force participation rate	62.5%	65.4%	67.4%
Unemployment rate	13.2%	12.5%	13.9%
	<b>Non-active duty alumni</b>		
Percentage employed	49.2%	49.2%	47.6%
Labor force participation rate	58.5%	58.9%	59.4%
Unemployment rate	15.6%	16.6%	19.7%

**NOTE:** In the all-alumni group, all active duty alumni are counted as employed.

The large subgroup of non-active-duty alumni in the table above is a better comparison group for the BLS data below and on the following pages.

### BLS, Current Population Survey

#### Annual Averages 2015 (Civilian noninstitutional population, 18 years and over)

##### **Gulf War era II veterans:** Served since September 2001

- 81.0 percent—labor force participation rate
- 5.8 percent—unemployed
  - 13.0 percent—unemployment rate for those 18-24 years old
  - 6.8 percent—unemployment rate for those 25-34 years old

##### **Gulf War era I veterans:** Served August 1990 – August 2001

- 80.4 percent—labor force participation rate
- 3.8 percent—unemployed

**Source:** BLS, March 2016, USDL-16-0611, Tables A, 2A: <http://www.bls.gov/news.release/pdf/vet.pdf>.

#### August 2015 BLS Supplement

##### **Gulf War era II veterans with disabilities** (about 33 percent reported having a Service-connected disability; not all veterans reported disability status)

- 73.2 percent—labor force participation rate (vets without disabilities: 87.3%)
- 5.5 percent—unemployed (not statistically different from the rate for veterans no disability—4.8%)

##### **Gulf War era I veterans with disabilities** (about 25 percent reported having a Service-connected disability)

- 68.8 percent labor force participation rate (vets without disabilities: 87.2%)
- 5.9 percent—unemployed (not statistically different from the rate for veterans without disabilities: 3.9%)

**Source:** BLS, March 2016, USDL-16-0611, T7: <http://www.bls.gov/news.release/pdf/vet.pdf>.

**BLS, Current Population Survey – Veterans/Civilians – Disability Data  
August Supplement, 2015**

Employment rate = percent of population who are employed

**Employment rate of Gulf War era II veterans, by service-connected disability status** (about 33 percent of Gulf War era II veterans reported having a service-connected disability; not all veterans reported disability status)

- Overall employment rate for veterans with a disability: 69.1 percent
  - Less than 30 percent disabled: 74.7 percent employed
  - 30 to 50 percent disabled: 89.3 percent employed
  - 60 percent disabled or higher: 56.9 percent employed
- Overall employment rate for veterans without a service-connected disability: 83.2 percent

**Employment rate of Gulf War era I veterans, by service-connected disability status** (about 25 percent of Gulf War era I veterans reported having a service-connected disability)

- Overall employment rate for those with a disability: 64.7 percent
  - Less than 30 percent disabled: 75.8 percent employed
  - 30 to 50 percent disabled: 69.6 percent employed
  - 60 percent disabled or higher: 40.5 percent employed
- Overall employment rate for those without a service-connected disability: 83.8 percent

**Source:** August 2015 Veterans Supplement (BLS, March 2016, USDL-16-0611, T7), Table 7 (<http://www.bls.gov/news.release/pdf/vet.pdf>)

**Civilian noninstitutional population, 16 years and over (May 2016)**

**Persons with a disability:**

- Labor force participation rate = 20.5 percent
- Employment – population ratio = 18.5 percent
- Unemployment rate = 9.7 percent

**Persons without a disability:**

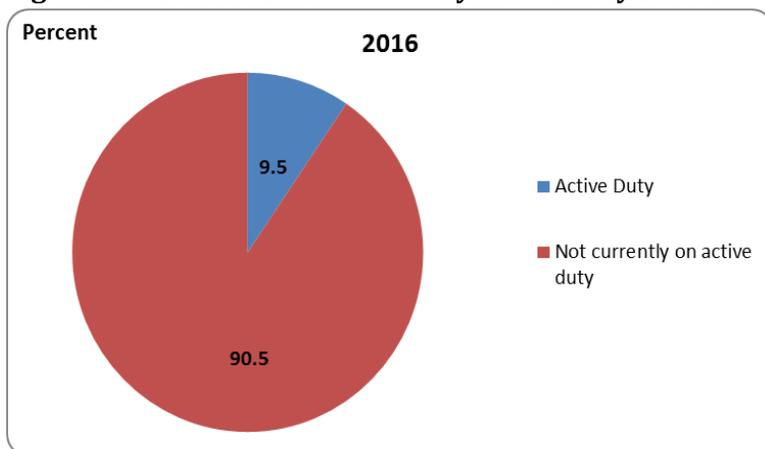
- Labor force participation rate = 68.4 percent
- Employment – population ratio = 65.5 percent
- Unemployment rate = 4.3 percent

**Source:** Table A-6 (<http://data.bls.gov/cgi-bin/print.pl/news.release/empsit.t06.htm>)

## MILITARY SERVICE EXPERIENCES

*MILITARY DUTY STATUS.* The proportion of active duty service members among alumni continues to decline—9.5 percent in 2016 (Figure 5), compared with 15.8 percent in 2015 and 19.7 percent in 2014. This decline should be expected as deployment to combat operations decline across the Armed Forces, and thus, combat-related injuries and illnesses among active duty service members continues to decline. This lower proportion may contribute to some changes in estimates in this report that are related to active duty status (e.g., employment statistics, work income, health care insurance, experiences with and use of VA services, disability ratings).

**Figure 5. Distribution of Alumni by Active Duty Status**



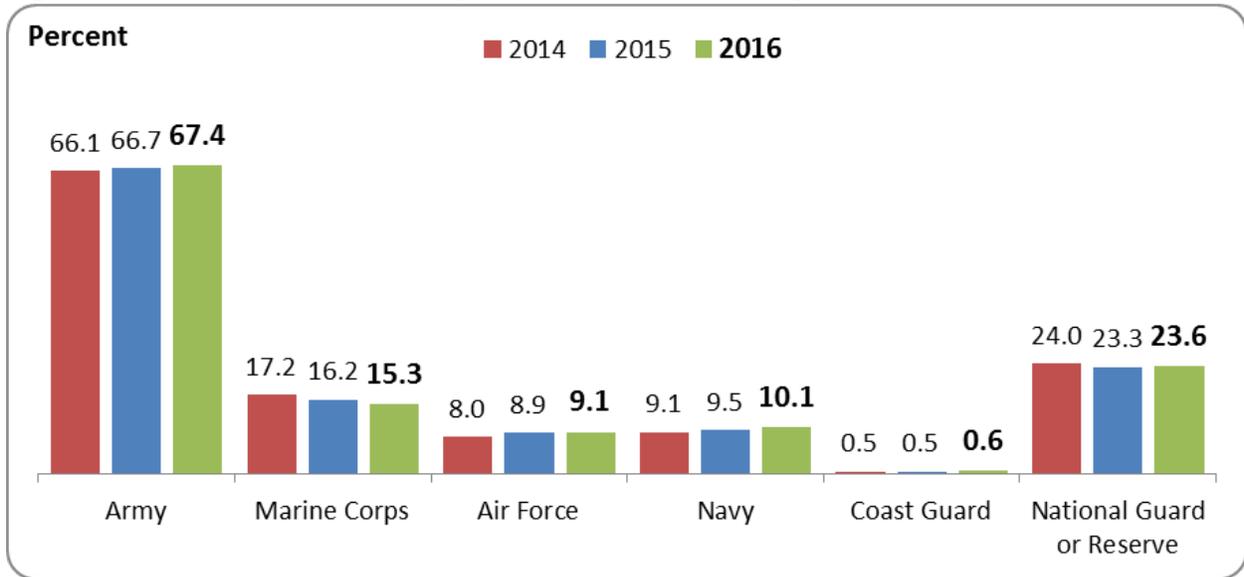
A new question in the 2015 survey asked alumni when they last served on active duty (valid years: 2001–2016). More than half of 2016 alumni (52.2%) last served on active duty before 2012. The percentages per year for last served were highest for 2012 (11.1%), 2013 (13.1%), and 2014 (12.3%).

Among those currently on active duty, 75.9 percent are active duty service members and 24.1 percent are activated National Guard or Reserve members. Among those not currently on active duty, 8.1 percent are members of the National Guard or Reserve. Other alumni reported their status as follows:

- Retired for medical reasons – 44.1%
- Separated or discharged – 43.6%
- Retired for nonmedical reasons – 12.3%

*SERVICE BRANCH.* Two-thirds of alumni (67.4%) have served in the Army, and 15.3 percent in the Marine Corps (Figure 6). Almost one-fourth of alumni (23.6%) have served in the National Guard or Reserve Component. Also, 23.5 percent of alumni have served in more than one branch or component.

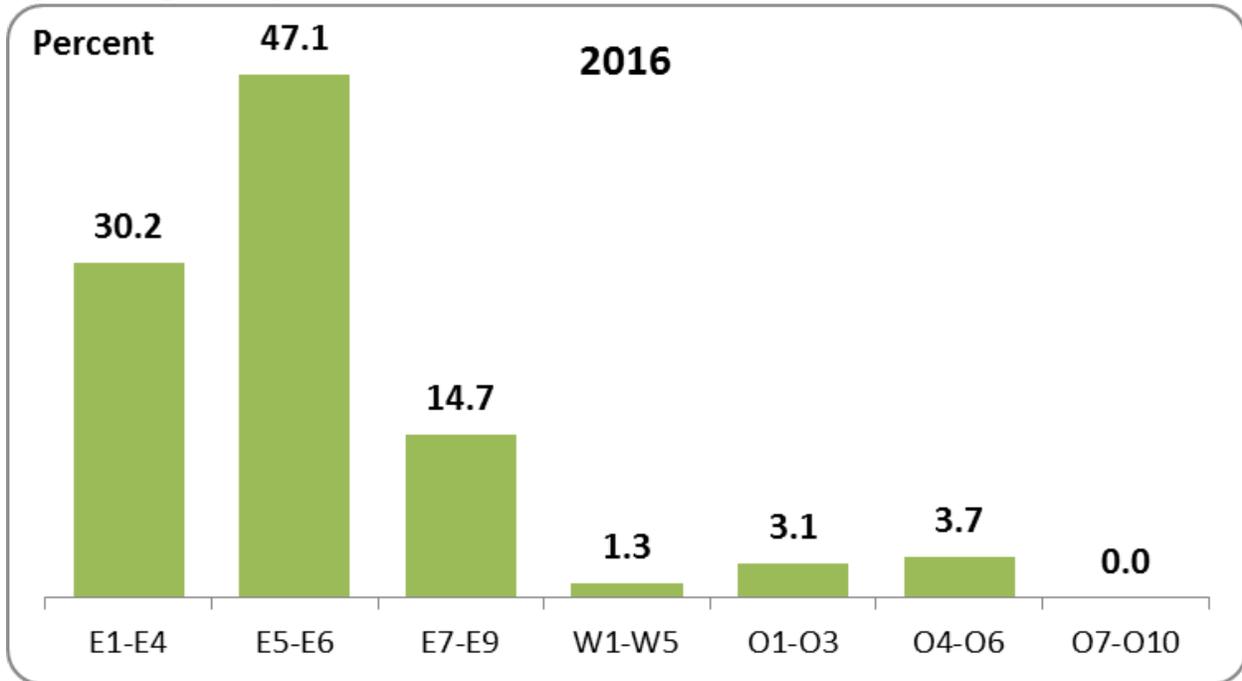
**Figure 6. Distribution of Alumni by Service or Reserve Component**



**NOTE:** Percentages do not sum to 100 because respondents could check more than one Service.

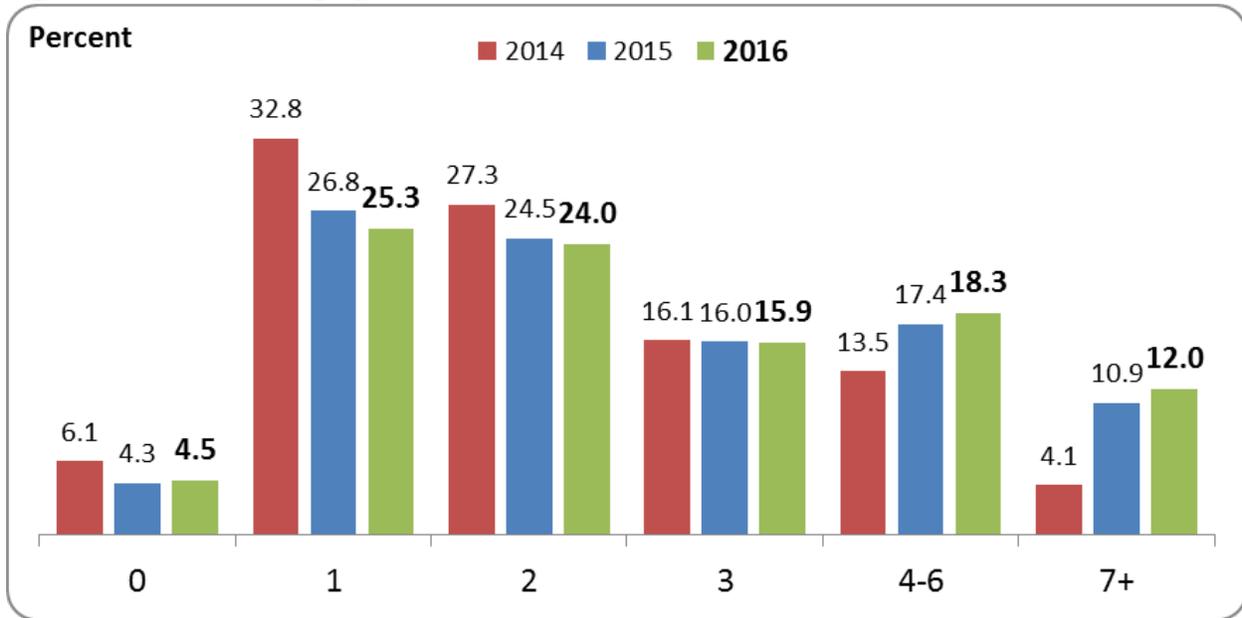
*HIGHEST PAY GRADE.* Highest pay grades achieved by WWP alumni indicate that most are/were enlisted personnel (91.9%), including 61.7 percent with the equivalent rank of sergeant or above (E5–E9). About 1 percent (1.3%) of alumni obtained the rank of warrant officer, and 6.7 percent are/were commissioned officers (Figure 7).

**Figure 7. Highest Pay Grade Attained**



*TOTAL NUMBER OF DEPLOYMENTS.* Multiple deployments are more common among alumni than in previous years. More than 4 of 10 alumni (46.3%) have deployed three or more times (includes possible training deployments), compared with 44.3 percent in 2015. Slightly more than half of alumni (49.3%) have deployed once or twice, and 4.5 percent have never deployed (Figure 8).

**Figure 8. Number of Deployments**

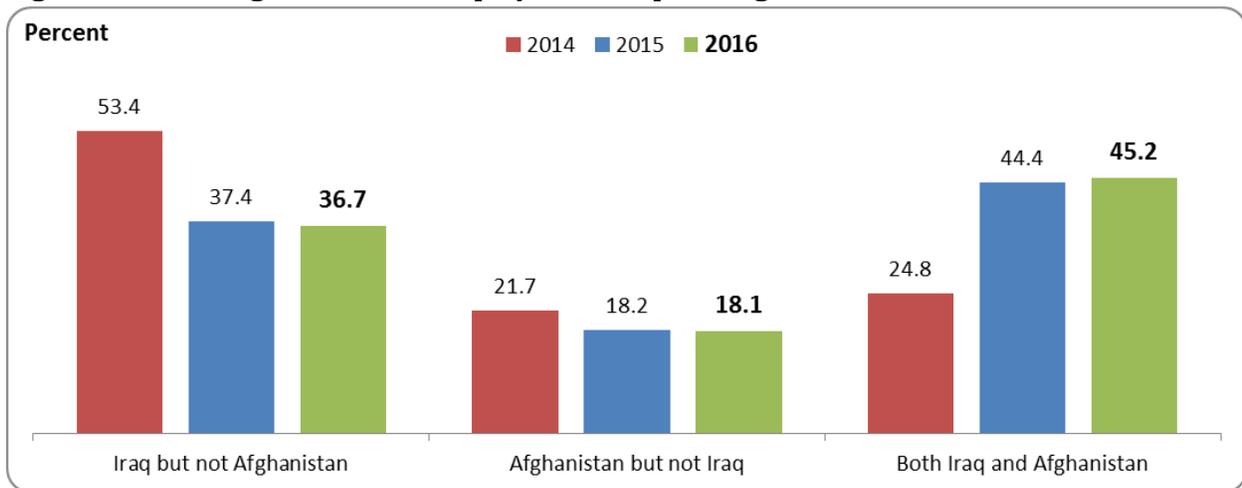


Most alumni who deployed have deployed to a combat area (94.3%). They were asked how many of their deployments were to Iraq, Afghanistan, and other combat areas. The majority of those deploying to each of those areas did so once or twice:

- Iraq: once – 56.9%; twice – 29.9%
- Afghanistan: once – 74.1%; twice – 18.9%
- Other combat areas: once – 61.6%; twice – 21.0%

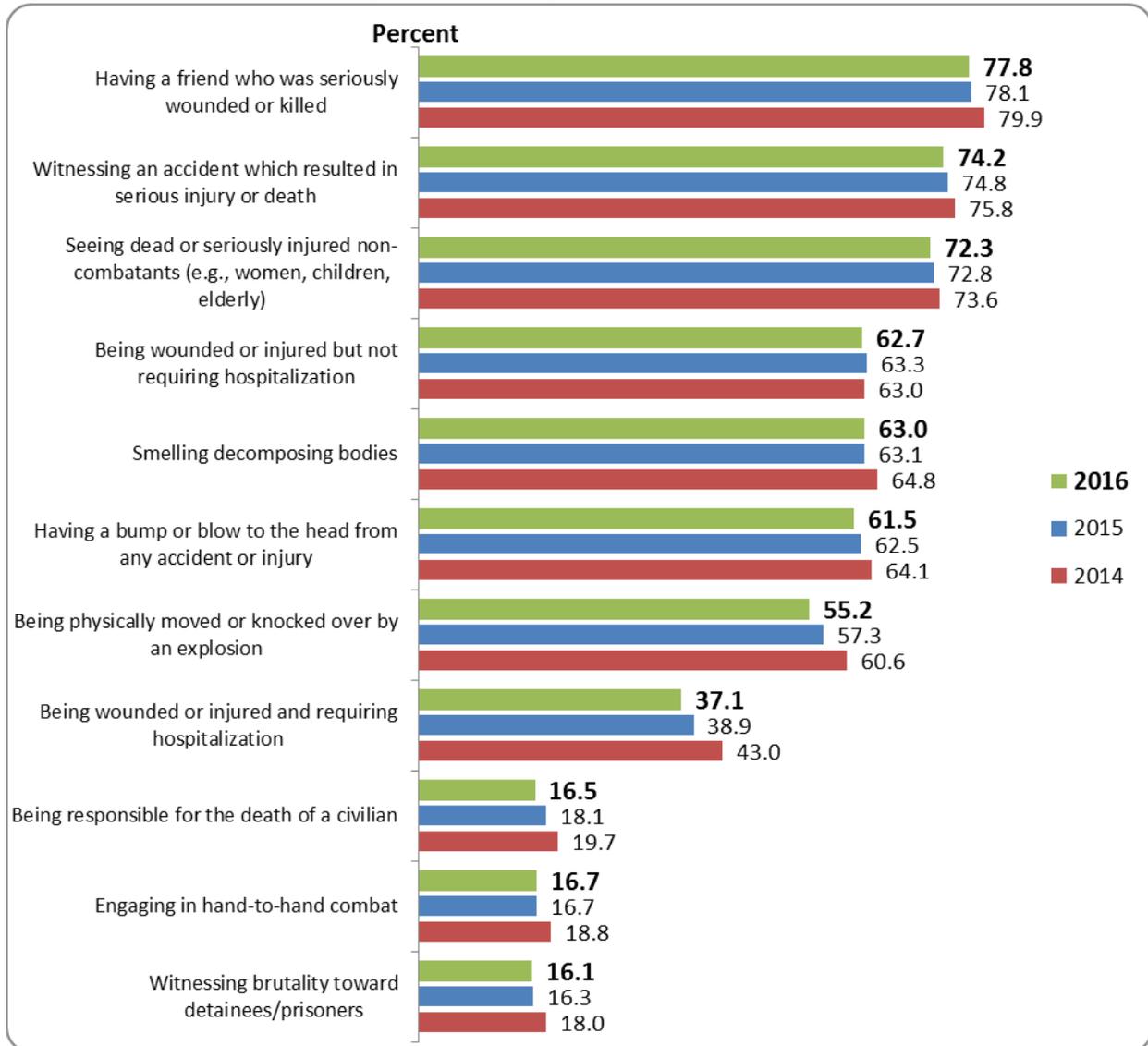
Among alumni deployed to Iraq but not Afghanistan, Afghanistan but not Iraq, or to both countries, the highest 2016 percentage for the three options was “both countries” (45.2%; Figure 9).

**Figure 9. Percentages of Alumni Deployed to Iraq and Afghanistan**



*EXPERIENCES DURING DEPLOYMENT.* After September 11, 2001, deployed alumni experienced or witnessed many potentially traumatic events. Among the 95.1 percent who experienced or witnessed at least 1 of the 11 situations described in Figure 10, more than half (53.3%) had experienced 6 or more of the situations. The results for 2016 are similar to those for 2015, although percentages are decreasing.

**Figure 10. Experiences During Post 9/11 Deployments**



Research indicates that service in a war zone and exposure to combat and casualties have a stronger negative effect than deployment per se on quality-of-life outcomes such as mental and physical health, disability, wealth, and marital outcomes (Edwards, 2012; Norris & Stone, 2013).

RAND's Invisible Wounds study administered the same trauma exposure items appearing in Figure 12 to service members returning from OEF and OIF (2007–early 2008), although the wording in a few items was changed slightly in the WWP survey. Any differences in results

attributable to the wording changes are likely to be minor. Weighted results from the Invisible Wounds study include the following (Schell & Marshall, 2008):

- Having a friend who was seriously wounded or killed – 49.6%
- Witnessing an accident resulting in serious injury or death – 45.0%
- Seeing dead or seriously injured noncombatants – 45.2%
- Being physically moved or knocked over by an explosion – 22.9%
- Having a blow to the head from any accident or injury – 18.1%
- Being injured, requiring hospitalization – 10.7%
- Smelling decomposing bodies – 37.0%
- Being injured, not requiring hospitalization – 22.8%
- Engaging in hand-to-hand combat – 9.5%
- Witnessing brutality toward detainees/prisoners – 5.3%
- Being responsible for the death of a civilian – 5.2%

The proportions of WWP alumni with trauma exposures are notably higher than the proportions reported in the Invisible Wounds study. This is likely due to the fact that many alumni have experienced more combat deployments and traumatic events, and likewise, have more combat-related injuries than service members in the Invisible Wounds Study had experienced at that time.

## INJURIES

*INJURIES AND HEALTH PROBLEMS EXPERIENCED DURING MILITARY SERVICE.* The list of severe injuries and health problems, particularly physical injuries, that alumni experienced during their service after September 11, 2001, are displayed in Figure 11.

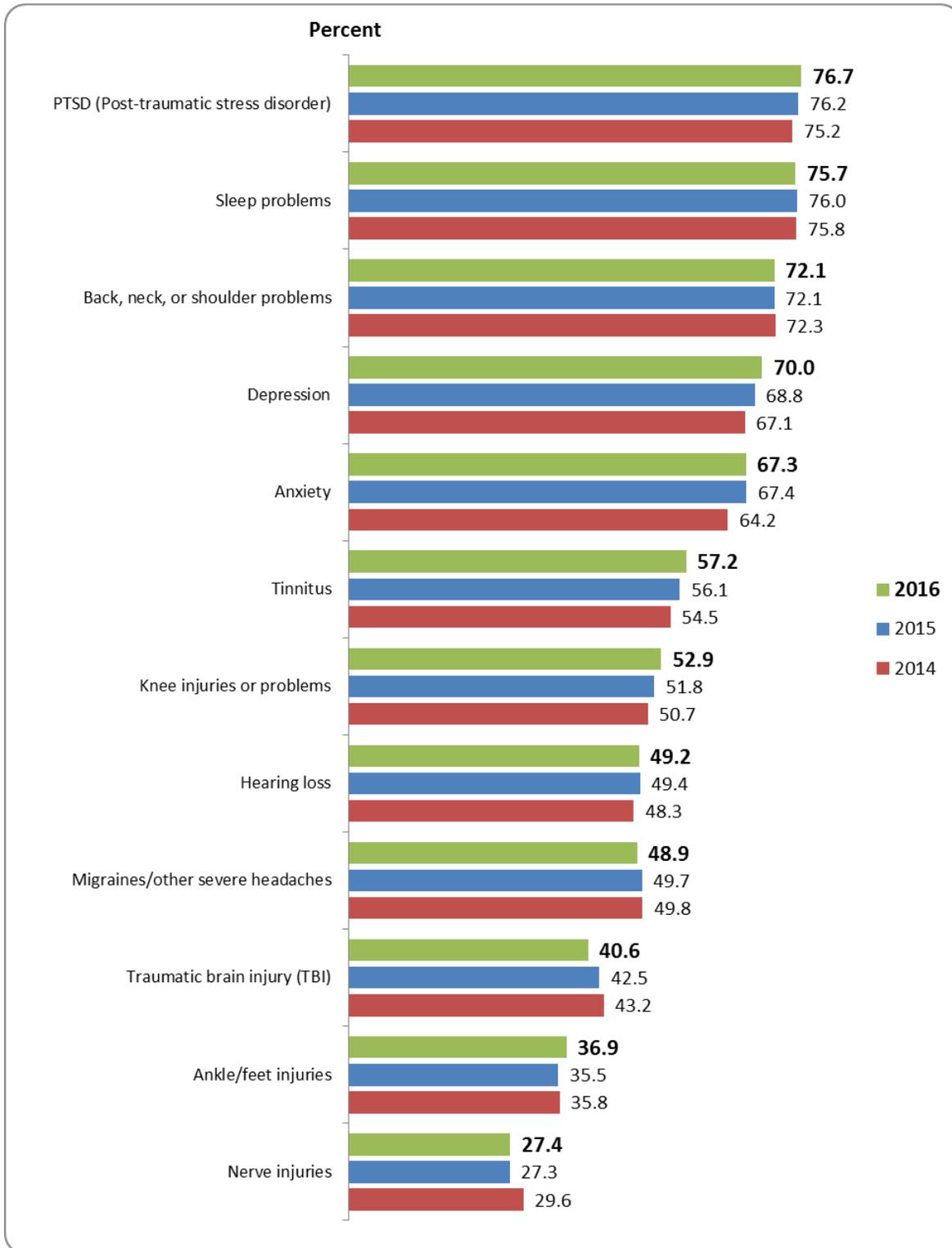
Nearly all alumni experienced at least one severe injury or health problem during their post 9/11 military service, and multiple injuries were common. Among those with injuries or health problems, more than three-fourths (77.2%) experienced between 4 and 12 severe injuries or health problems.

Self-reported post-traumatic stress disorder (PTSD) continues to rank high on the list of health problems experienced by alumni (76.7%). That condition likely contributes to the high report of sleep problems among alumni (75.7%). Delayed-onset PTSD has also been diagnosed among veterans even years after exposure to traumatic events and may also be a factor in the high rates of PTSD that are still being reported by alumni. The percentage of alumni coping with anxiety has been consistent in recent years (67.3% in 2016, 67.4% in 2015, and 64.2% in 2014). The percentage of alumni suffering from depression has also remained high and fairly stable (70.0% in 2016, 68.8% in 2015, and 67.1% in 2014). More than 40 percent of alumni continue to report traumatic brain injury (40.6 in 2016, 42.5% in 2015 and 43.2% in 2014).

Many alumni experienced severe *physical* injuries and health problems during their military service after September 11, 2001. As in 2015, relatively high percentages experienced back, neck, or shoulder problems (72.1%); tinnitus (57.2%) and hearing loss (49.2%); knee injuries or problems (52.9%); and migraine/other severe headaches (48.9%).

Military sexual trauma (MST) was experienced by 6.9 percent of alumni. Among female alumni, 34.5 percent experienced MST, compared with 2.1 percent of male alumni.

**Figure 11. Injuries and Health Problems During Military Service Since 9/11**



*(Continues on next page)*

**Figure 11. Injuries and Health Problems During Military Service Since 9/11 (continued)**

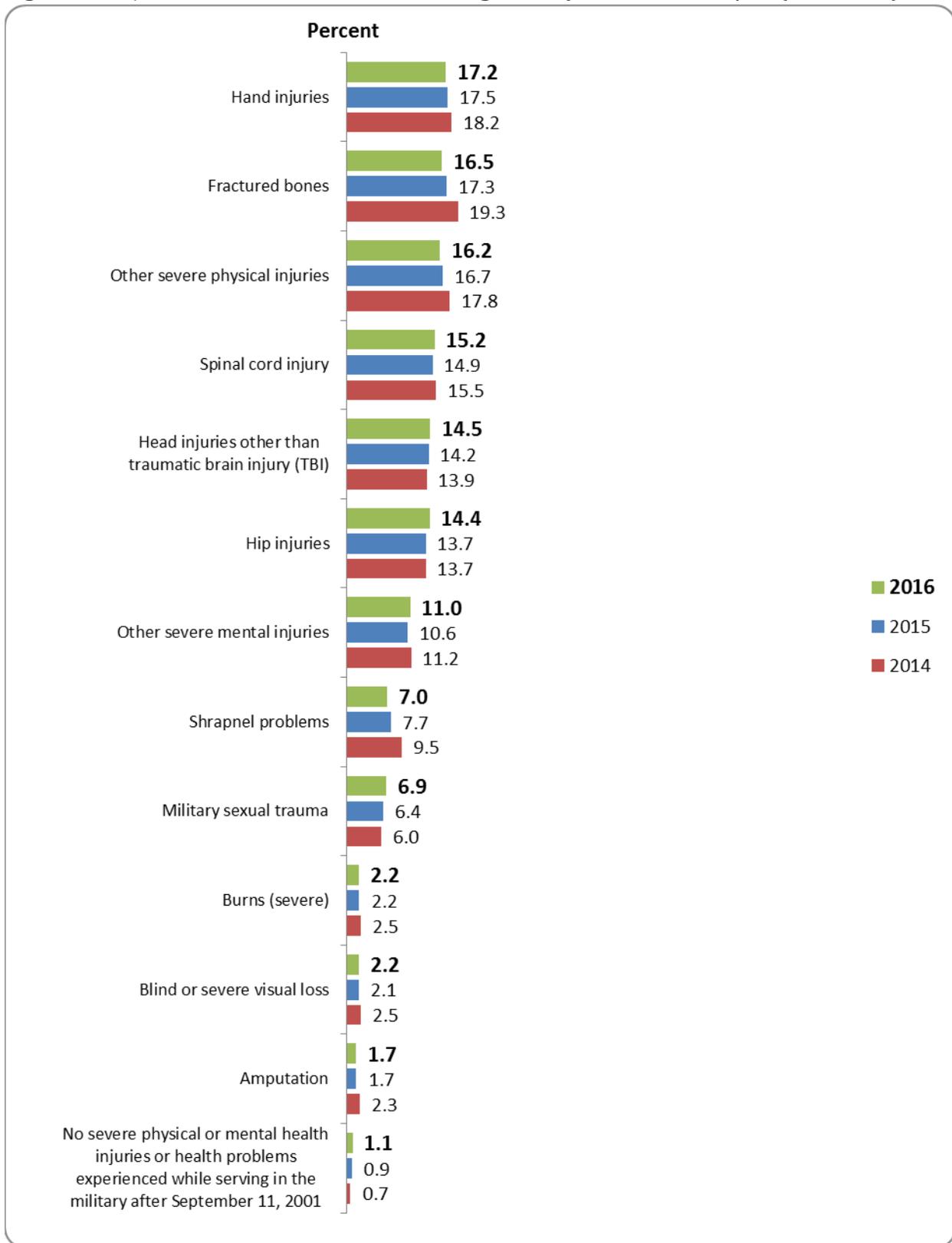
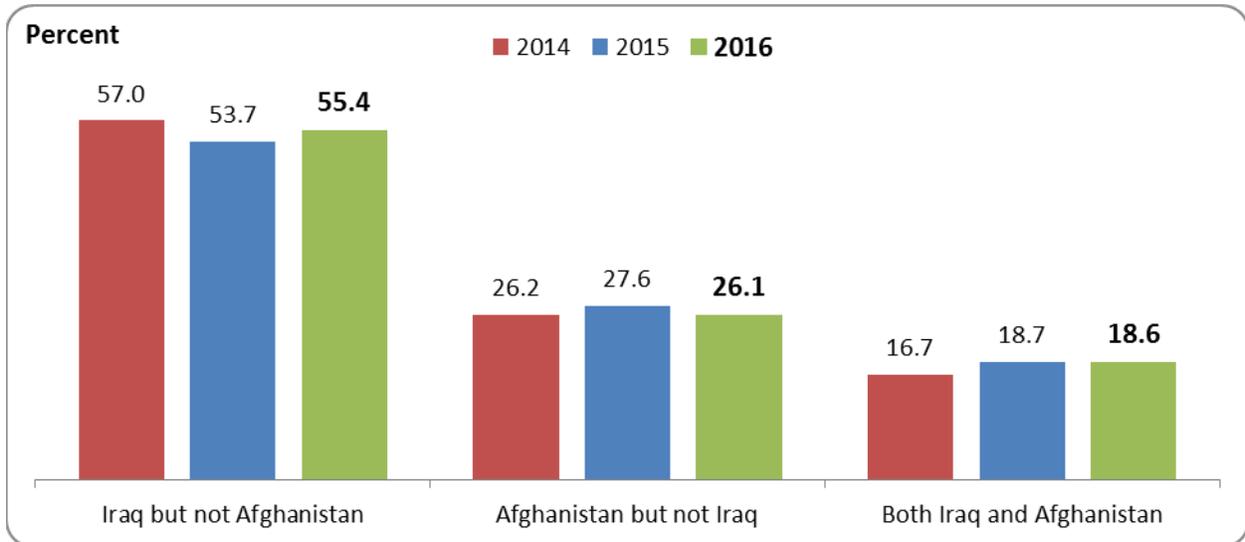


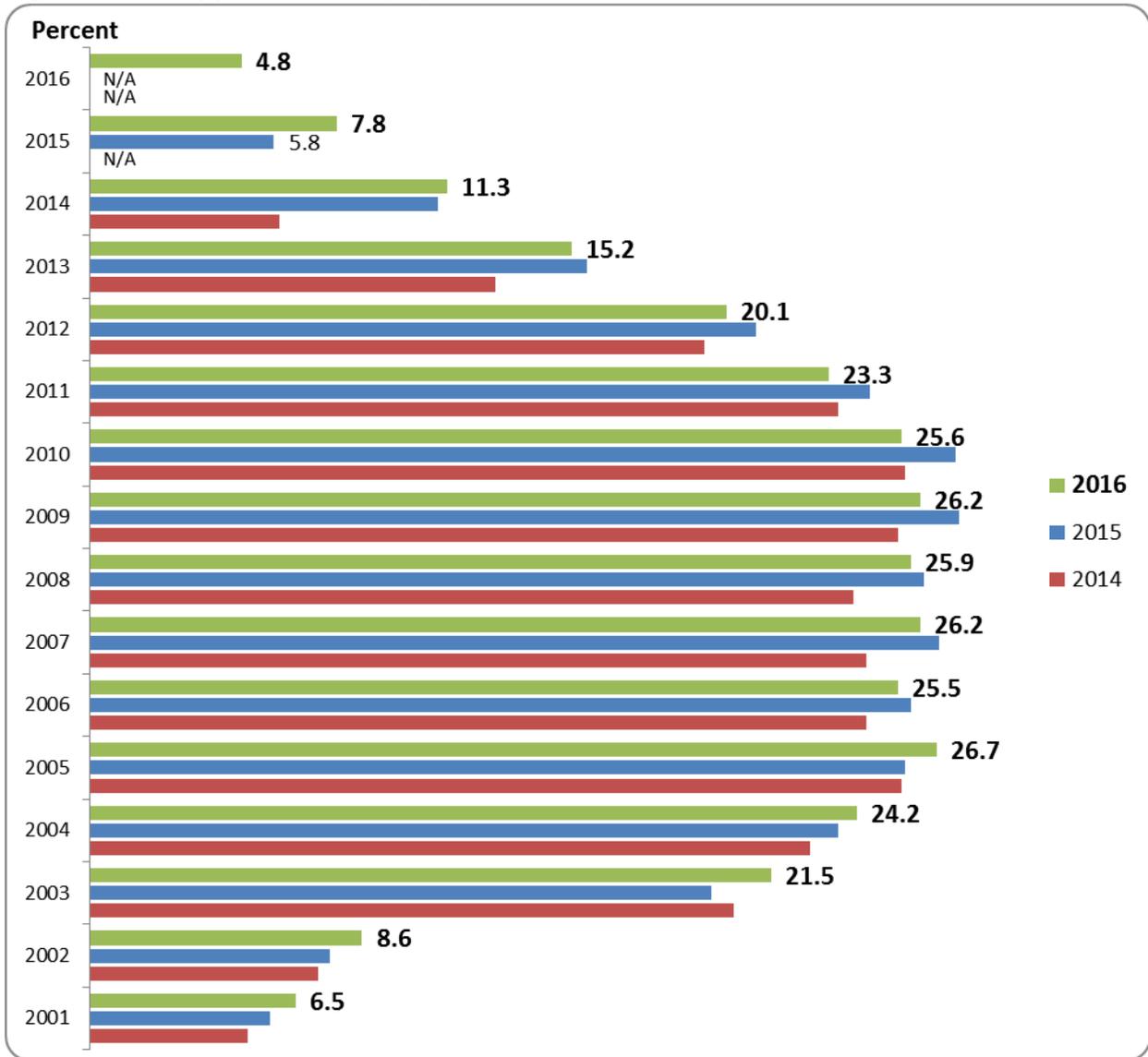
Figure 12 displays the percentages of alumni who experienced injuries or health problems in Iraq but not Afghanistan, Afghanistan but not Iraq, and both Iraq and Afghanistan.

**Figure 12. Place Where Injury or Health Problem Was Experienced**

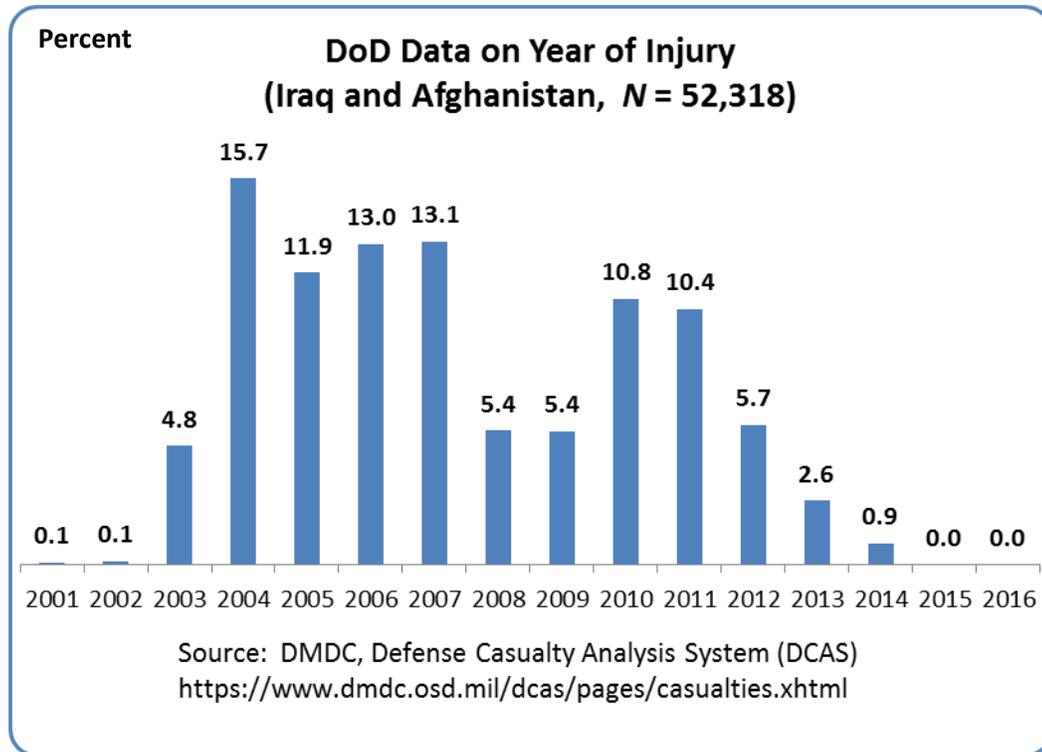


Alumni were also asked to indicate the *years* in which they sustained their injuries or health problems. Alumni in 2016 most commonly reported 2005 through 2010 (Figure 13). Nearly 7 in 10 alumni with injuries sustained injuries in multiple years (69.2%).

**Figure 13. Year(s) Sustained Injury**

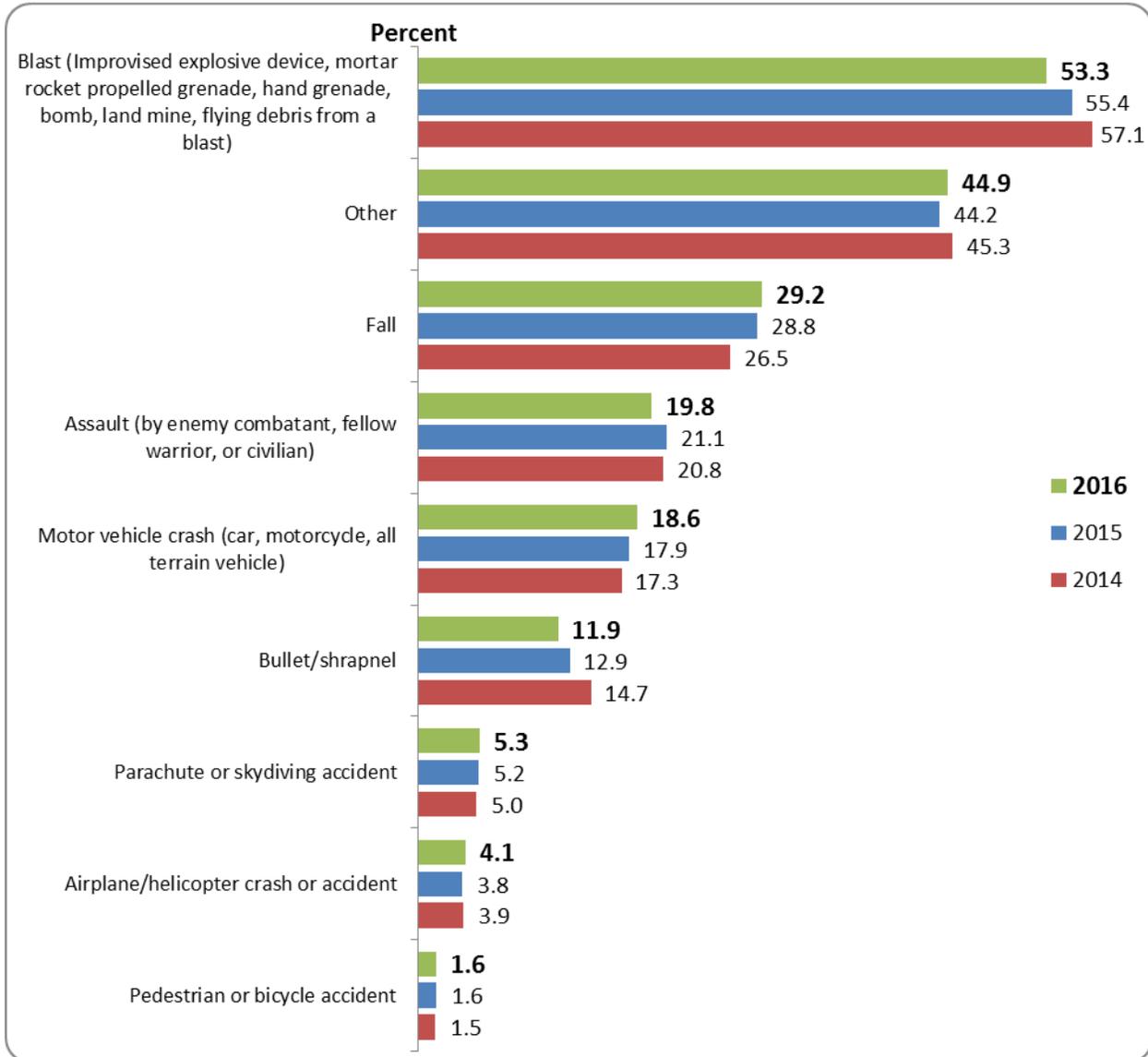


For comparison, Department of Defense data on year of injury for service members deployed to Iraq and Afghanistan from October 2001 through April 11, 2016, are provided in the following chart. Overall, about two-thirds of the injuries have occurred in Iraq (61.6%). Since 2009, most of the injuries have occurred in Afghanistan (93.1%).



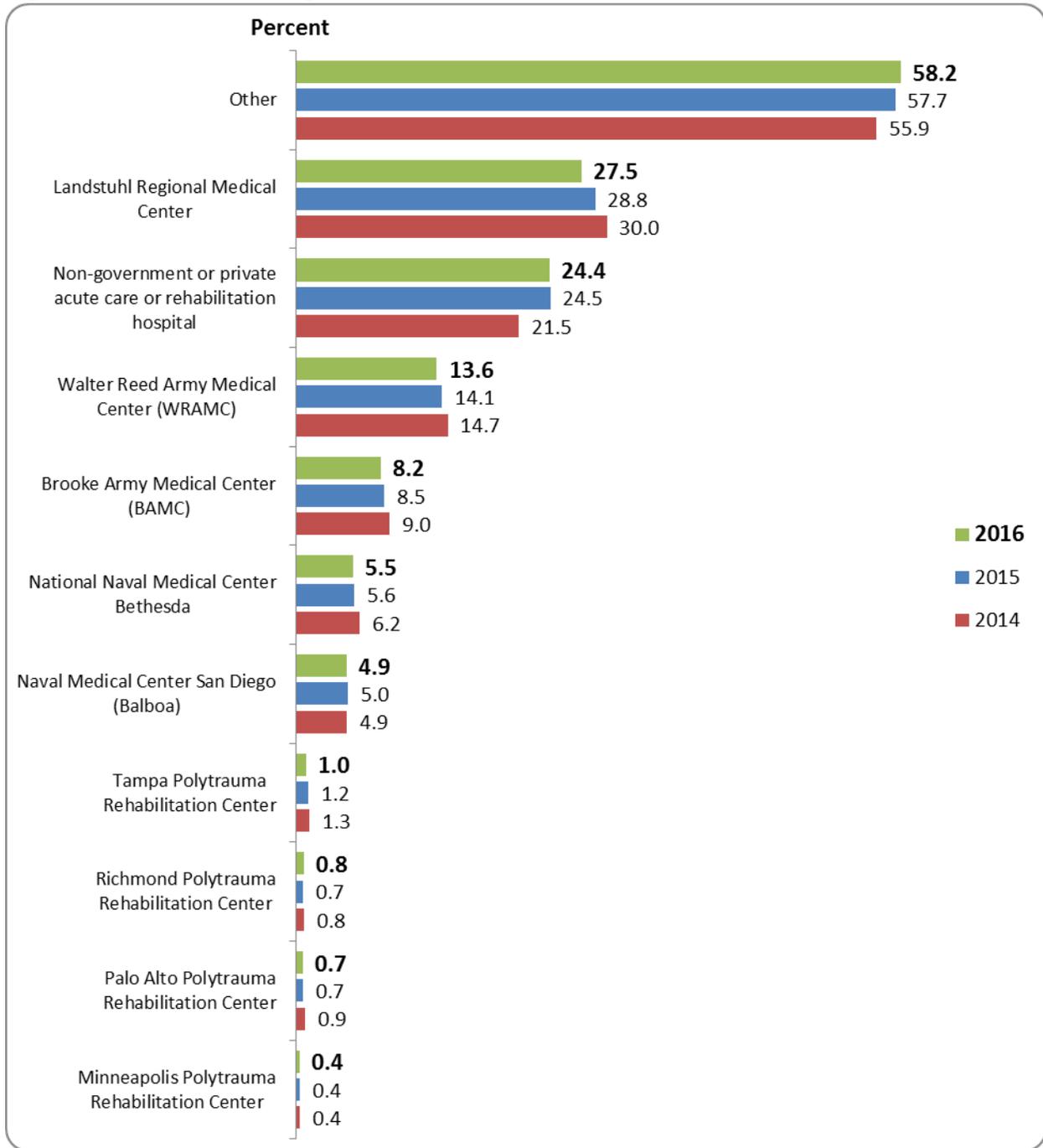
As in the 2 previous years, blasts were the most common cause of injury/health problems among alumni (53.3%) and falls were next in prevalence (29.9%; Figure 14). Injuries from bullets or shrapnel continue to decline. Most alumni experienced one or two causes of their injuries (76.6%). Another 15.7 percent of alumni experienced three causes.

**Figure 14. Causes of Injuries/Health Problems**



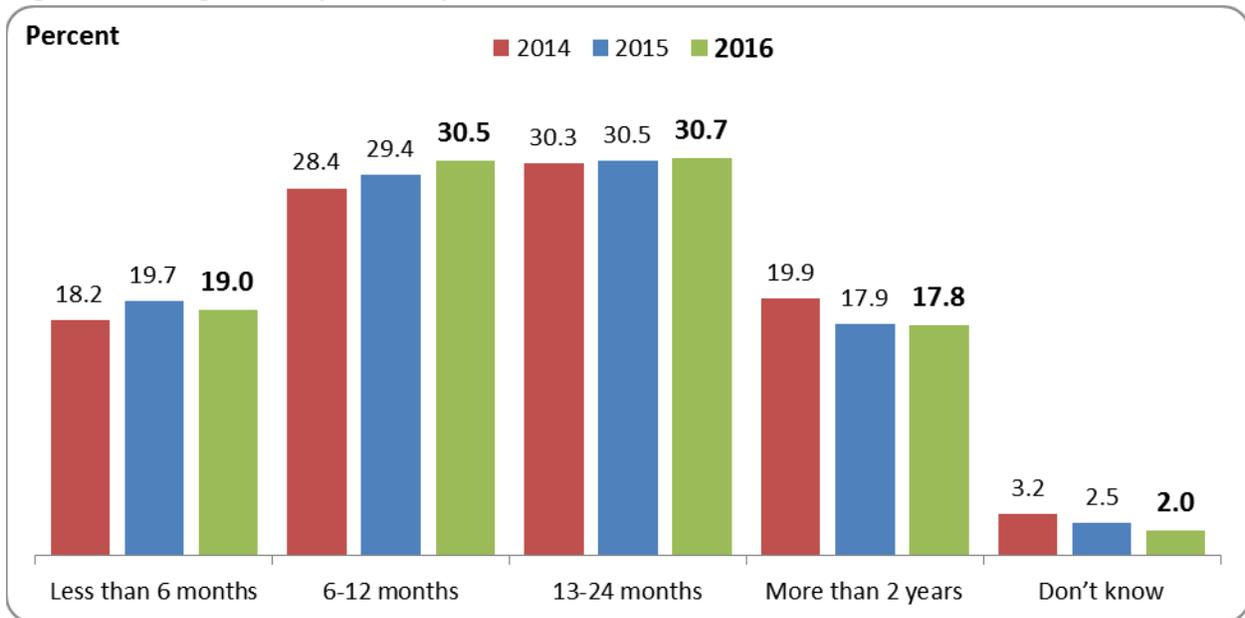
More than half of alumni (56.2%) were hospitalized as a result of their injuries (59.8% in 2014). Nearly thirty percent of them (27.5%) were hospitalized at Landstuhl Regional Medical Center (Figure 15). Among those who were hospitalized, more than one-third were hospitalized in more than one location (33.6%).

**Figure 15. Sites Where Hospitalized**



*ASSIGNMENT TO A WARRIOR TRANSITION UNIT (WTU) OR A WOUNDED WARRIOR BATTALION (WWB).* Service members needing extensive rehabilitative care may be reassigned to either a WTU or a WWB, depending on their branch of service. Almost a third of alumni (31.9%) were assigned to a WTU or WWB because of their medical conditions. The most common lengths of WTU/WWB assignments were 13 to 24 months (30.7%), followed closely by 6 to 12 months (30.5%), as shown in Figure 16.

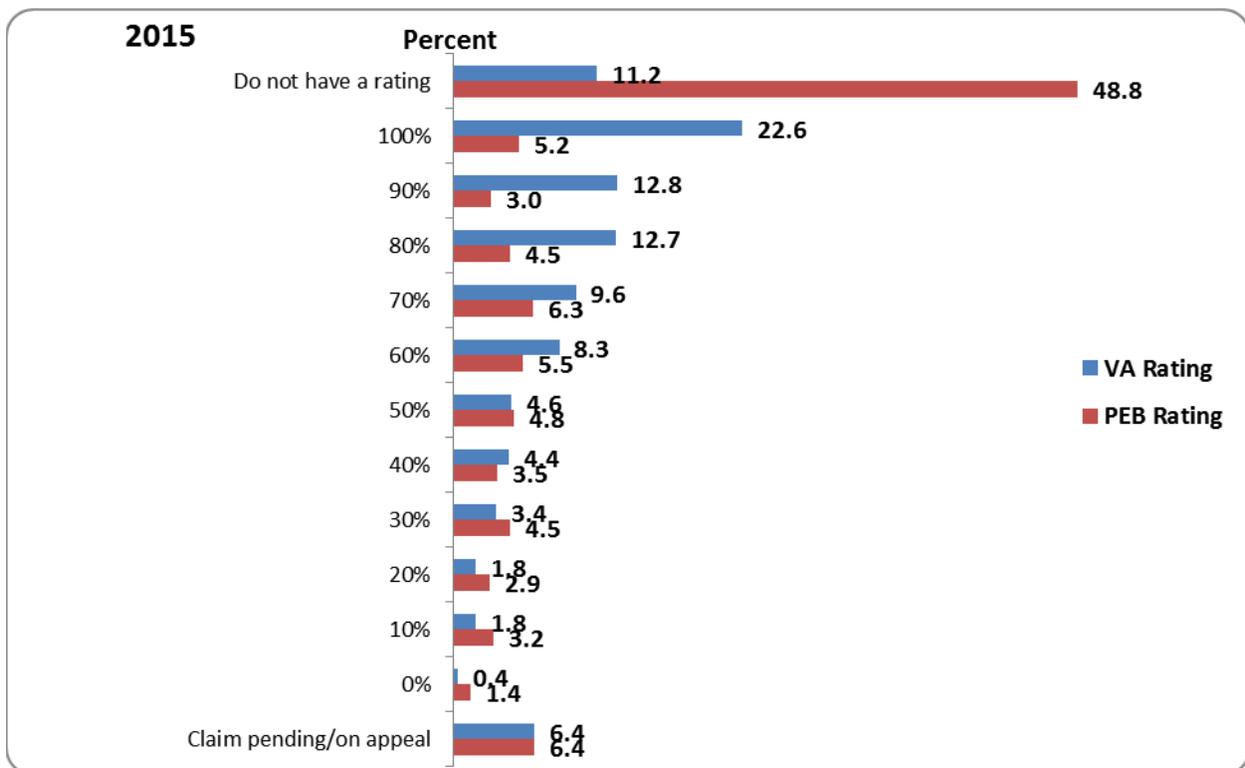
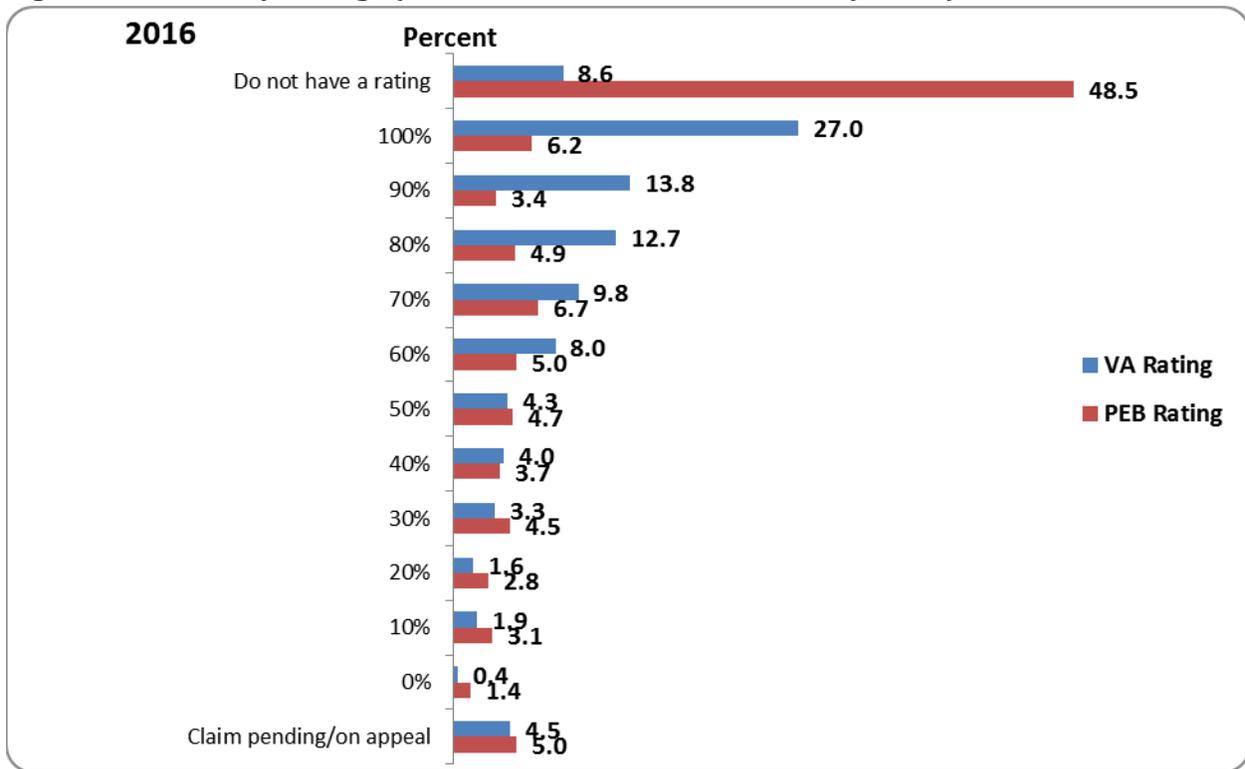
**Figure 16. Length of Stay in WTU/WWB**



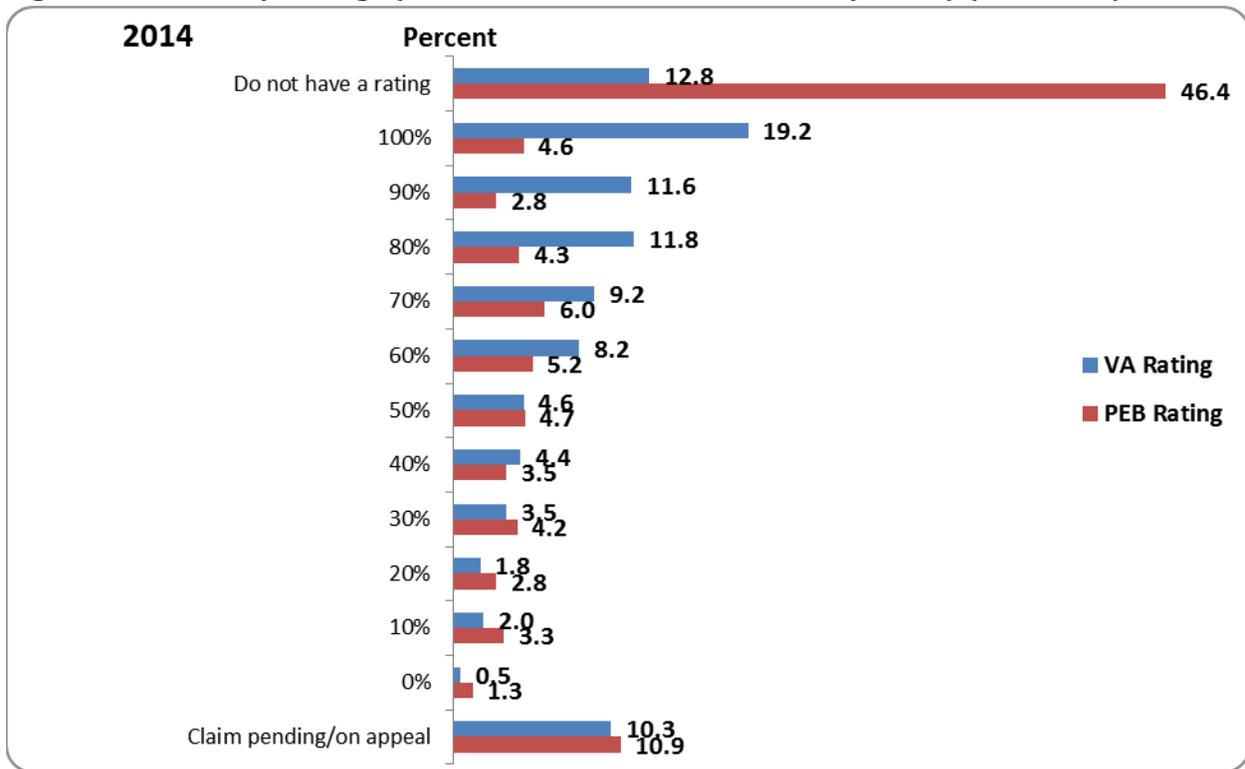
*DISABILITY BENEFITS AND RATINGS.* The percentage of alumni receiving VA disability benefits is now 84.8 percent, up from 78.5 percent in 2015, and 72.0 percent in 2014 (Figure 17). The percentage with disability ratings of 80 percent or higher also increased—53.5 percent, compared with 48.1 percent in 2015 and 42.6 percent in 2014.

PEB (Physical Evaluation Board) disability ratings continue to remain less common than VA ratings among alumni. Only 8.6 percent of alumni in 2016 do not have a VA disability rating (excludes alumni with a claim pending or on appeal), compared with 48.5 percent who do not have a PEB disability rating. The percentage of alumni with a PEB rating of 80 percent or higher is similar for 2016 (14.5%), 2015 (12.7%), and 2014 (11.7%).

**Figure 17. Disability Ratings (VA Service-Connected and Military's PEB)**

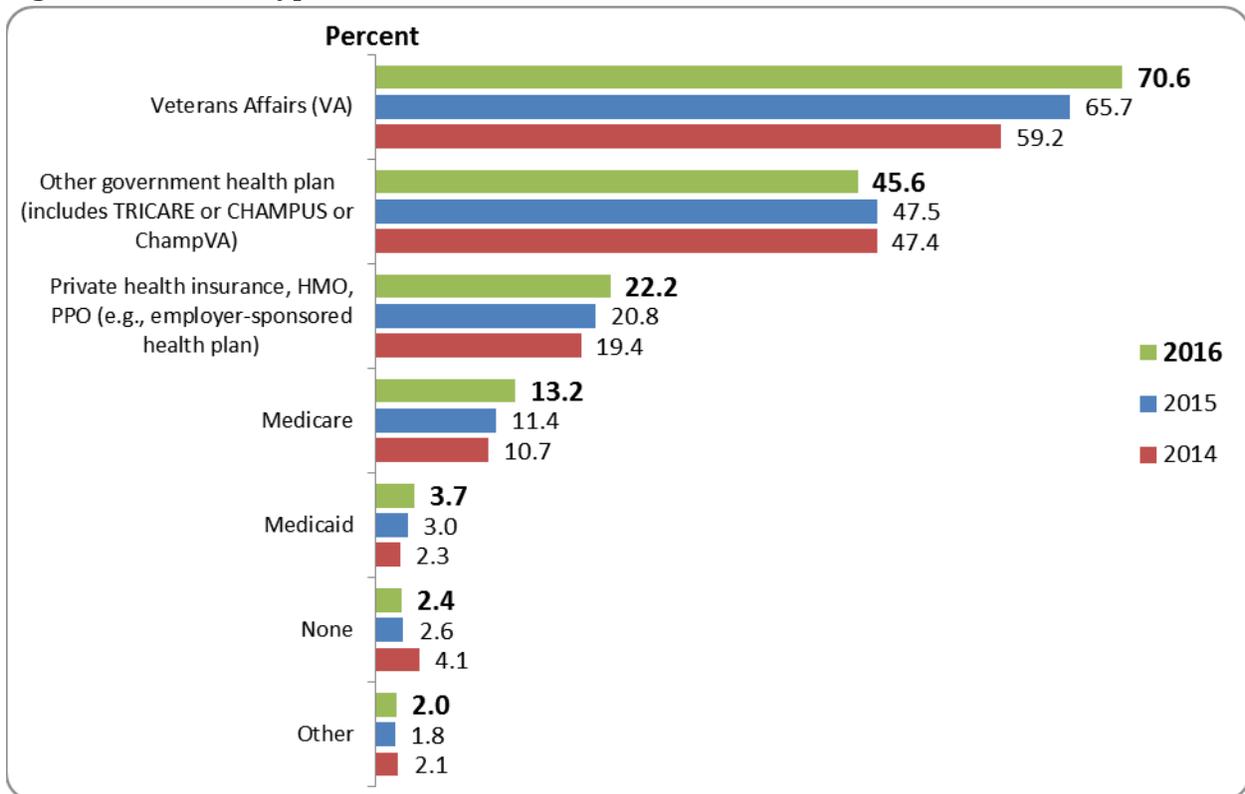


**Figure 17. Disability Ratings (VA Service-Connected and Military’s PEB) (continued)**



*TYPE OF HEALTH INSURANCE.* Health insurance coverage continues to grow among alumni. The percentage of alumni with VA health insurance continues to increase (70.6% in 2016, compared with 65.7% in 2015 and 59.2% in 2014; Figure 18). The next most common types of health insurance among alumni are other government health plans such as TRICARE, CHAMPUS, or ChampVA (45.6%). Less than 3 percent of alumni (2.4%) have no health insurance (compared with 4.1% in 2014). Alumni with health insurance increasingly have two or more types of health insurance (48.3%, compared with 44.6% in 2015). More than two-thirds of alumni with VA health insurance (may have other health insurance as well) use the VA as their primary health care provider (67.5%).

**Figure 18. Current Types of Health Insurance**



*NEED FOR ASSISTANCE IN DAILY ACTIVITIES.* As a result of injuries or health problems related to their post 9/11 military experience, 8.1 percent of alumni are permanently housebound. All alumni were asked to indicate their current requirements for assistance from another person for a range of daily living activities (Table 3). Four activities require more assistance than others—doing household chores, managing money, taking medications properly, and preparing meals.

**Table 3. Level of Assistance Needed With Daily Activities (Average Week)**

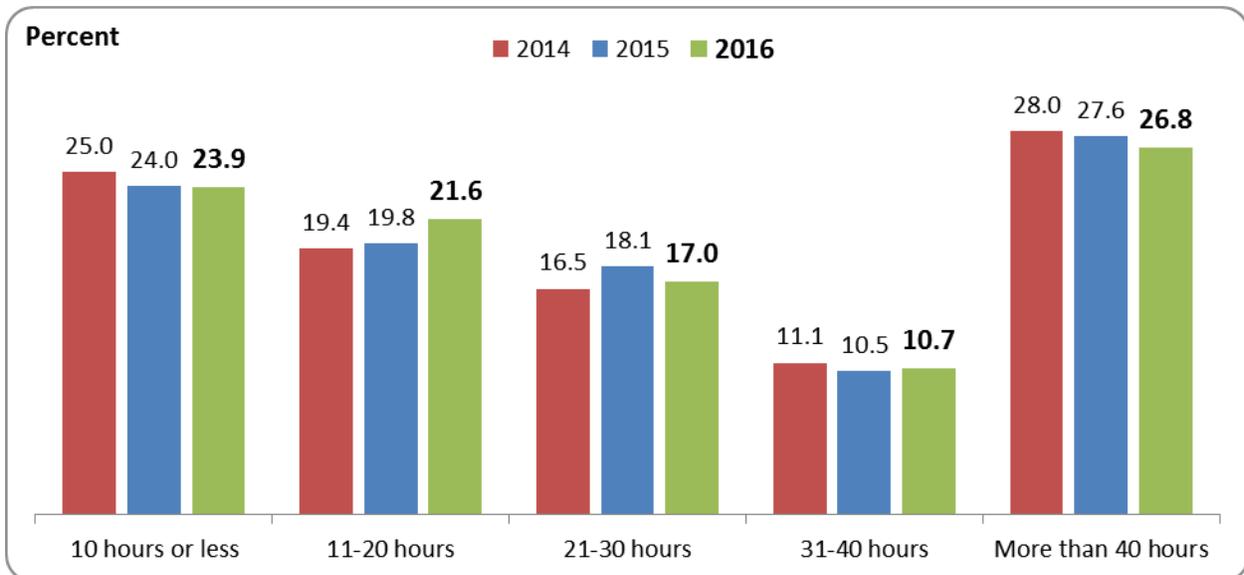
	I can do without assistance (%)	I can do with some assistance (%)	I am completely dependent on assistance (%)	I do not do this activity (%)
Doing household chores				
2016	56.2	33.1	7.5	3.3
2015	57.3	31.8	7.7	3.2
2014	58.5	30.3	8.4	2.8
Managing your money				
2016	60.0	24.9	11.1	4.0
2015	59.3	25.4	11.4	4.0
2014	59.8	24.1	12.1	4.0
Taking medications properly				
2016	60.0	26.9	10.8	2.3
2015	60.4	26.1	11.0	2.4
2014	61.0	25.2	11.5	2.3
Preparing meals				
2016	70.6	19.7	6.4	3.3
2015	71.3	19.1	6.6	2.9
2014	71.6	18.6	7.1	2.8
Dressing				
2016	81.0	16.6	2.0	0.4
2015	82.1	15.7	1.8	0.4
2014	82.2	15.2	2.3	0.3
Bathing				
2016	82.8	14.4	2.1	0.6
2015	84.2	13.4	2.0	0.5
2014	84.9	12.6	2.1	0.4
Walking around your home				
2016	84.8	12.7	1.8	0.8
2015	85.7	11.9	1.7	0.8
2014	86.0	10.9	2.1	0.9
Transferring from a bed or				
2016	85.9	10.6	1.7	1.8
2015	86.6	10.1	1.6	1.6
2014	87.5	8.9	2.0	1.6
Using the telephone				
2016	91.0	6.2	1.8	1.0
2015	91.4	6.0	1.9	0.8
2014	90.8	6.2	2.3	0.8
Eating				
2016	91.3	6.4	1.9	0.5
2015	91.6	6.4	1.7	0.4
2014	91.8	5.9	2.0	0.3
Using the toilet				
2016	91.6	6.2	1.7	0.5
2015	92.4	5.7	1.5	0.4
2014	92.4	5.4	1.9	0.4

Among alumni who need assistance, 62.4 percent need help with three or more activities:

- One to two activities – 37.6%
- Three to four activities – 28.8%
- Five to eight activities – 25.0%
- Nine to all eleven activities – 8.6%

A separate overall question about current need for the aid and attendance of another person because of post 9/11 injuries or health problems indicated that 28.9 percent of alumni do need such help. Almost one-fourth (23.9%) need the help for 10 or fewer hours per week, on average; however, 26.8 percent need more than 40 hours of aid per week (Figure 19).

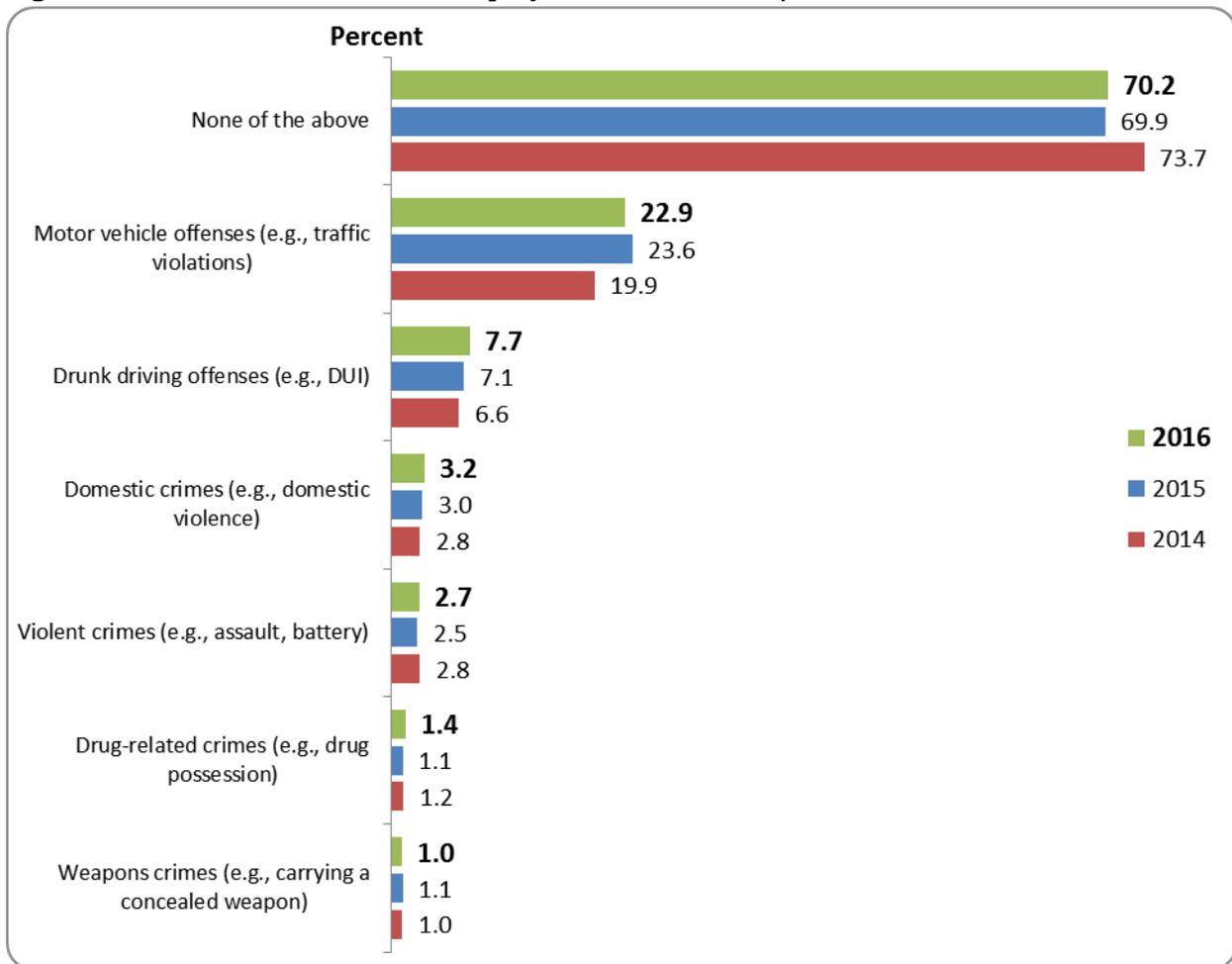
**Figure 19. Average Hours per Week of Aid and Attendance Needed Among Those Needing Assistance**



## OFFENSES/CONVICTIONS SINCE FIRST DEPLOYMENT

WWP alumni who have been deployed were asked if they have been convicted of six types of offenses/crimes since their first deployment. About 7 in 10 alumni (70.2%) have *not* been convicted of any of the offenses (Figure 20). More than one-fifth of alumni overall (22.9%) have been convicted of motor vehicle offenses (e.g., traffic violations). Of those with convictions, alumni are more likely to have multiple convictions than in previous years. In 2016, 77.4 percent were convicted of only one type of offense (a decrease from 79.7 percent in 2015) and 16.7 percent were convicted of two types of offenses (an increase from 14.7 percent in 2014).

**Figure 20. Convictions Since First Deployment for Offenses/Crimes**



## PHYSICAL AND MENTAL WELL-BEING

This section of the report addresses alumni views about their health.

### HEALTH AND DAILY ACTIVITIES

Alumni were asked a series of questions about their health and how it affects their daily activities. The questions were from the Veterans RAND 36 Item Health Survey (also known as the VR-36), a health-related quality of life survey developed for research with veterans. The VR-36 was developed from the RAND 36-Item Health Survey (SF-36), the instrument previously used in WWP surveys. Like the SF-36, the VR-36 measures eight health domains. However, the expanded response options available in the VR-36 significantly influence scores. The changes encompassed in the VR-36 improved the reliability and validity of the instrument compared to the SF-36. (Kazis et al., 2004; Kazis et al., 2006).

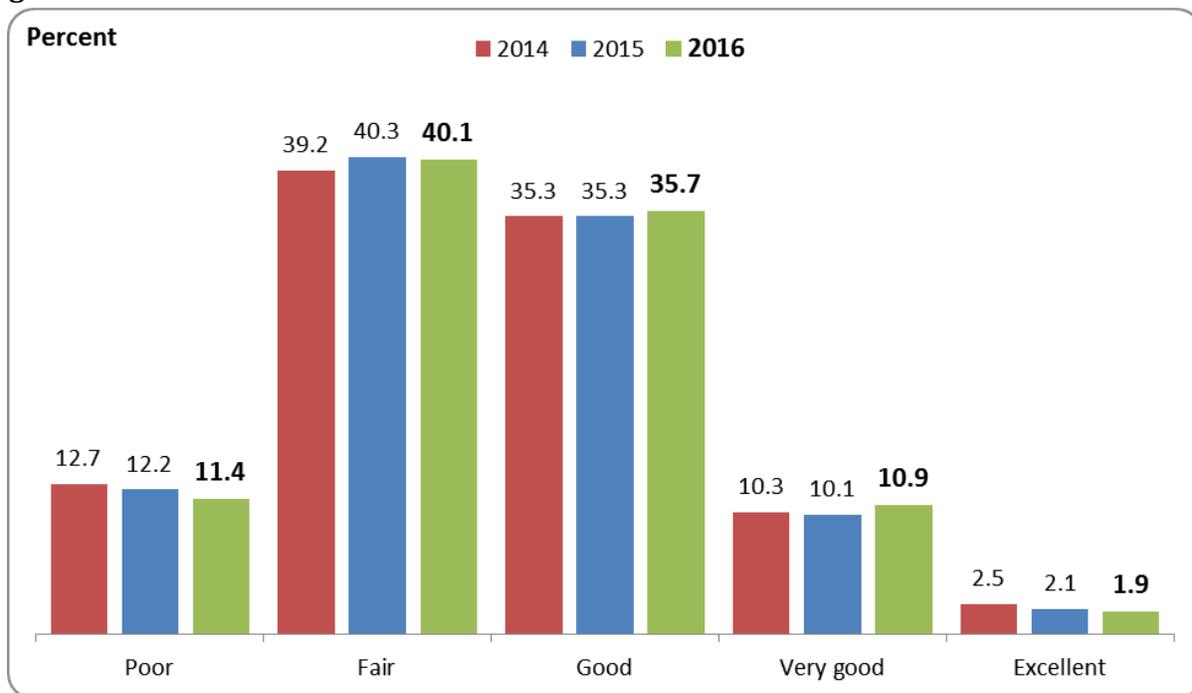
The eight health domains that the VR-36 instrument assesses are:

- Physical functioning
- Role limitations caused by physical health problems
- Role limitations caused by emotional problems
- Bodily pain
- General health perceptions
- Vitality
- Social functioning
- Mental health

From these eight domains, two summary scores are developed: a physical component summary (PCS) score and a mental component summary (MCS) score. This section highlights response rates to select items in the instrument, presents the eight scale composites scores, and offers unadjusted mean PCS and MCS scores for WWP alumni.

*HEALTH ASSESSMENT.* As in 2014 and 2015, slightly more than half of alumni (51.5%) rate their health as being *fair* or *poor*; 12.8 percent rate it as *very good* or *excellent* (Figure 21).

**Figure 21. Health Status Assessment**



Baseline ratings for the Millennium Cohort were much more positive than those for WWP alumni, most likely because the 2001 Cohort population includes many U.S. service members who had never deployed or had not incurred a service-connected injury:

- Excellent – 20.1%
- Very good – 40.7%
- Good – 31.3%
- Fair – 7.1%
- Poor – 0.8%

Results of crossing health assessments by type of injury or health problem reflect the injury/health problem response categories in the 2016, 2015, and 2014 surveys (Figure 22). As in previous surveys, percentages of alumni rating their health as *poor* or *fair* are high in many injury categories.

About 6 in 10 alumni with the following types of injuries rate their health as *poor* or *fair*:

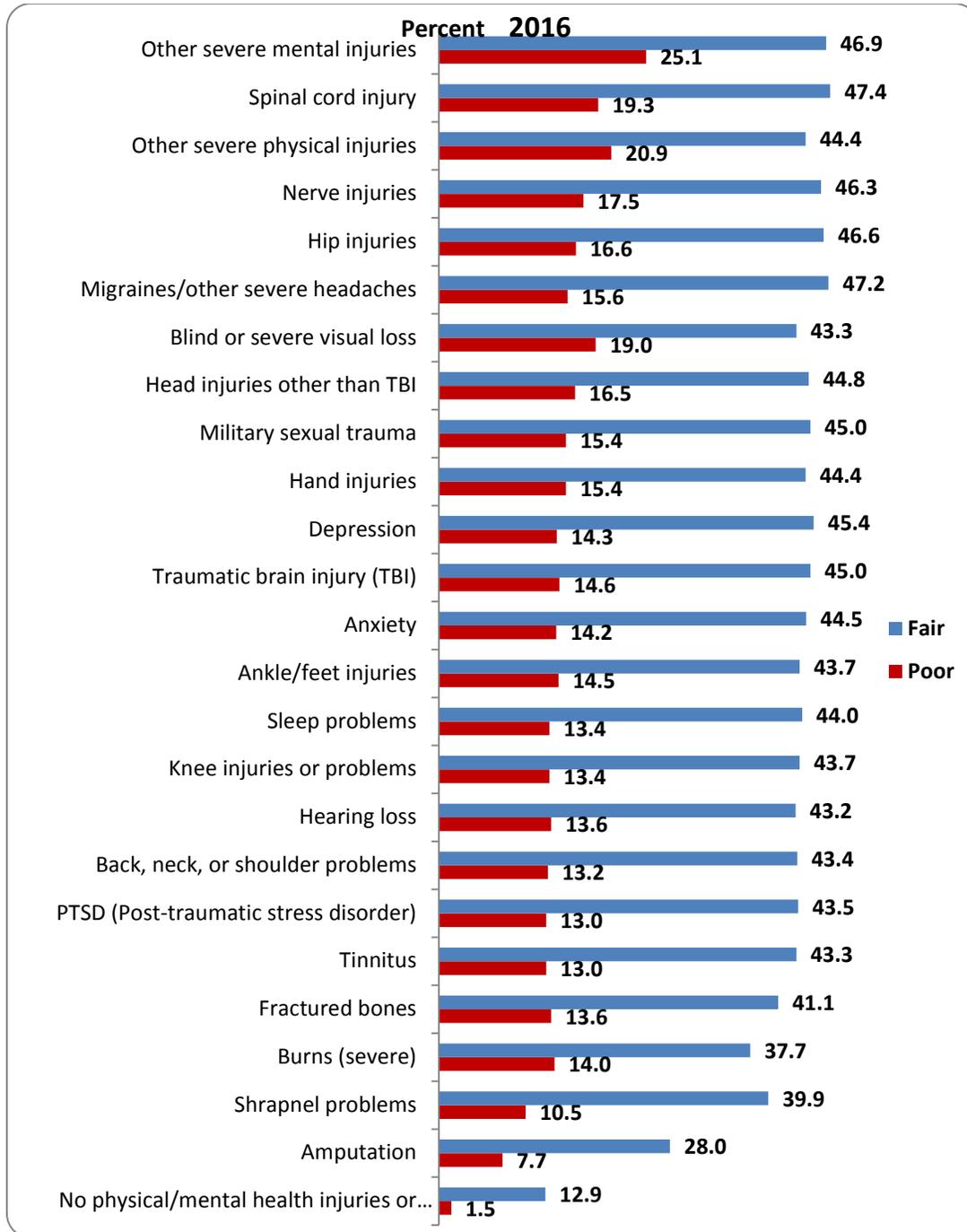
- Spinal cord injuries – 66.8%
- Nerve injuries – 63.9%
- Hip injuries – 63.2%
- Migraines/other severe headaches – 62.9%
- Blind or severe visual loss – 62.4%
- Military sexual trauma – 60.4%
- Head injuries other than traumatic brain injury (TBI) – 61.3%
- Hand injuries – 59.9%
- Depression – 59.7%
- Traumatic Brain Injury – 59.6%

- Anxiety –58.7%

Percentages were nearly as high for alumni in most other specified injury groups.

In the more general injury categories of “Other severe mental health injuries” and “Other severe physical health injuries,” high percentages of alumni rate their health as *poor* or *fair* (72.0% and 65.2%, respectively).

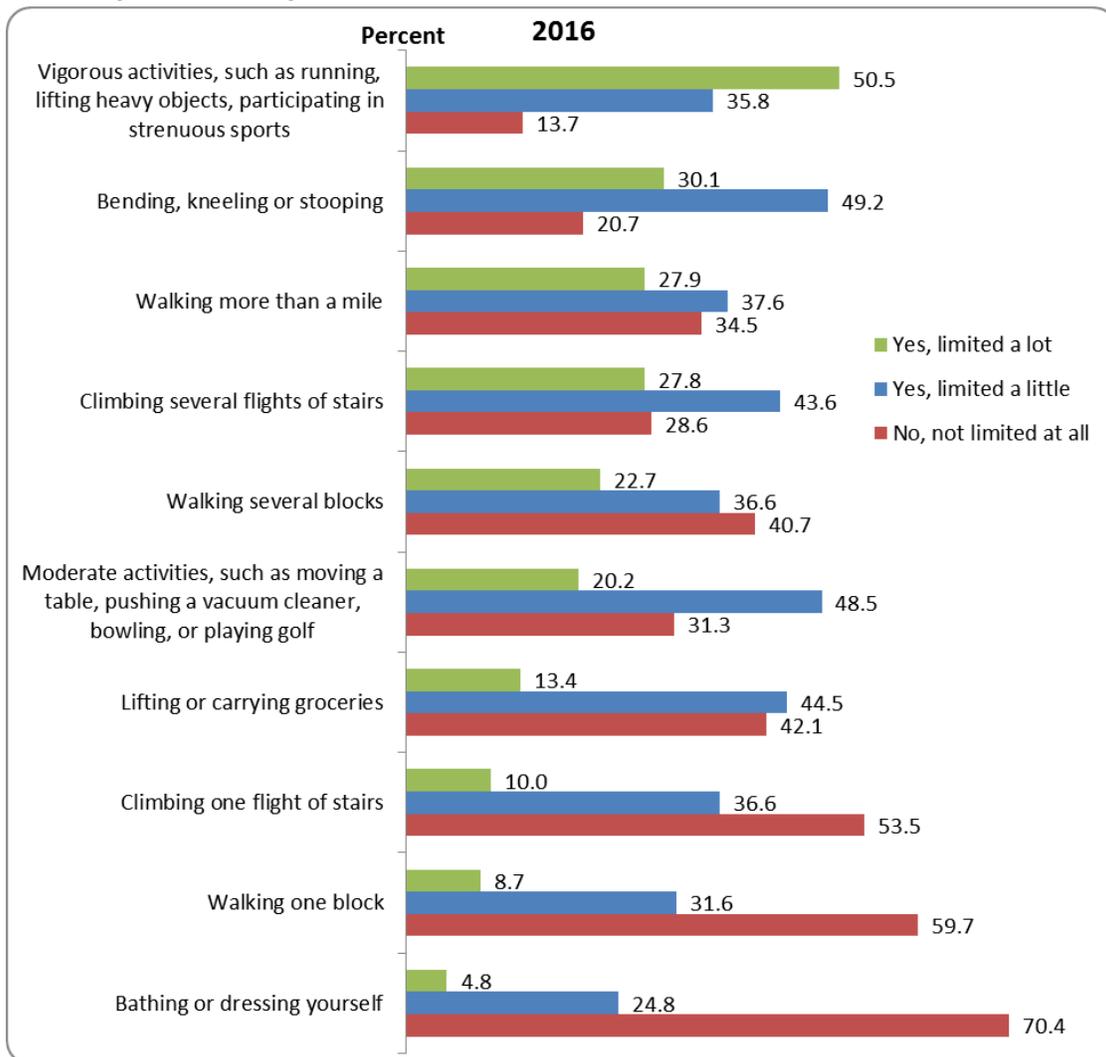
**Figure 22. Health Status Assessment (“Fair” or “Poor”), by Type of Injury**



**LIMITATIONS IN PHYSICAL ACTIVITIES.** WWP alumni were asked to assess how their health limits them in a range of typical daily activities—Does their health limit them *a lot* or *a little*, or are they *not limited at all*? The 2016 results are similar to those for 2015 and 2014.

- The health of about half of alumni (50.5%) currently *limits them a lot* regarding vigorous activities, such as running, lifting heavy objects, or participating in strenuous sports (Figure 23).
- Over forty percent are currently *limited a little* for four types of daily activities: bending, kneeling, or stooping—49.2 percent; moderate activities, such as moving a table, pushing a vacuum cleaner, bowling, or playing golf—48.5 percent; lifting or carrying groceries—44.5 percent; and climbing several flights of stairs—43.6 percent.
- About 7 in 10 alumni are *not limited at all* in bathing or dressing themselves (70.4%), and more than half are *not limited at all* in walking one block (59.7%) or climbing one flight of stairs (53.5%).

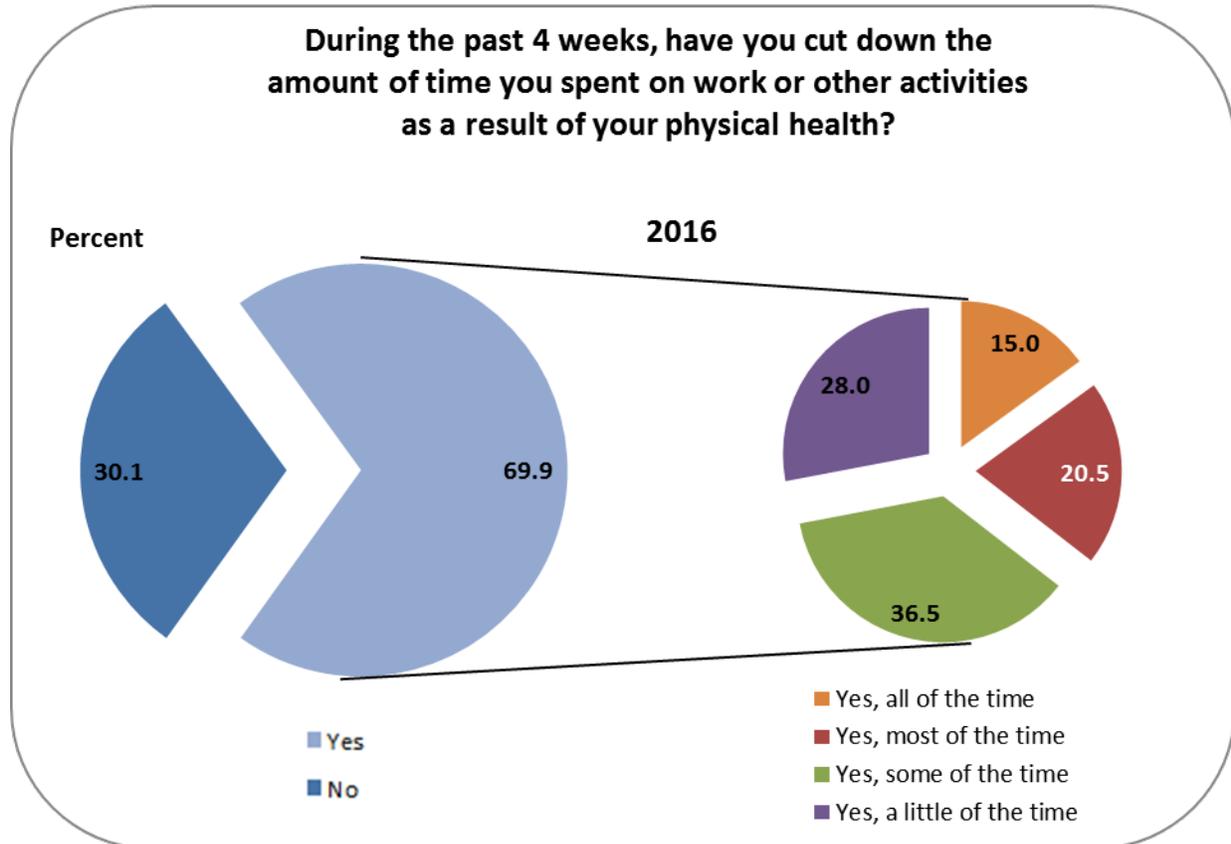
**Figure 23. Physical Activity Limitations**



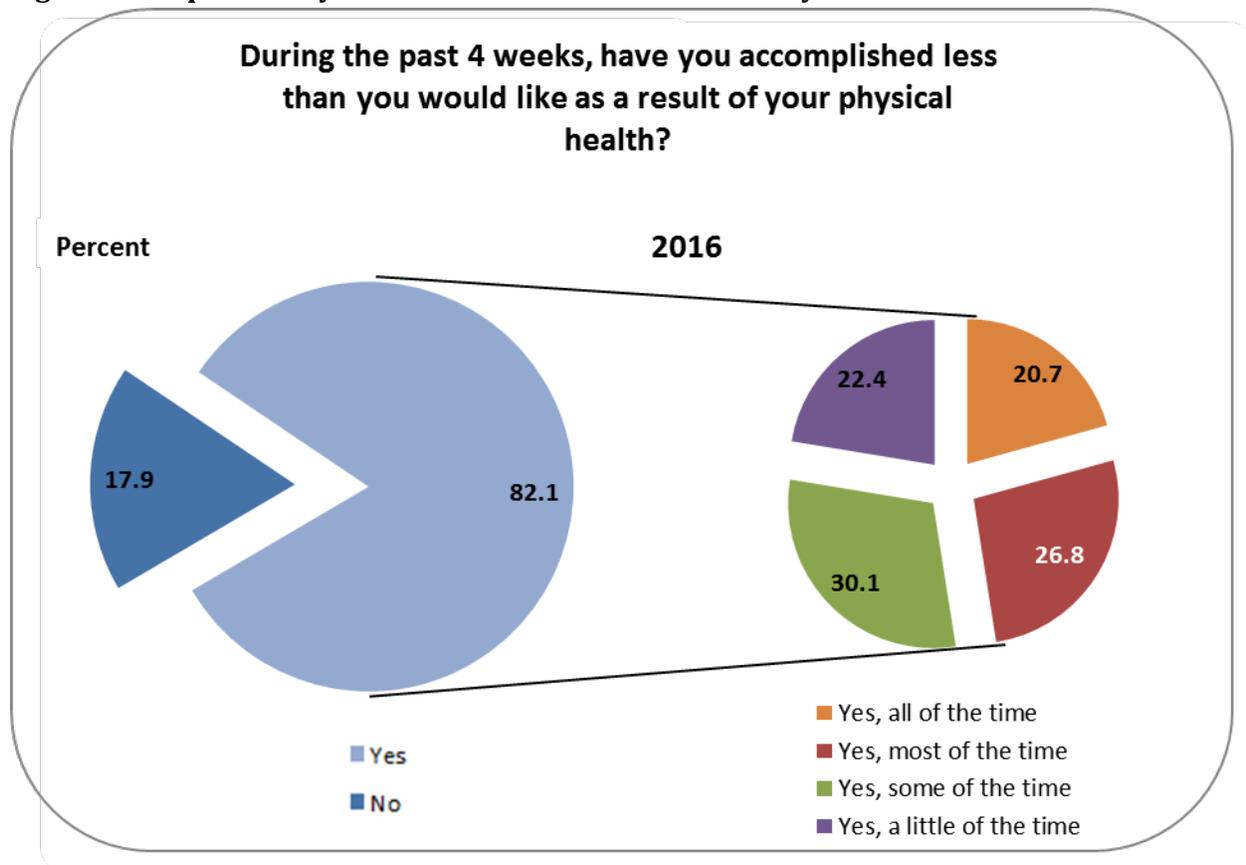
*PHYSICAL HEALTH AND RECENT PROBLEMS WITH WORK OR REGULAR DAILY ACTIVITIES AND PRODUCTIVITY.* The VR-36 instrument inquired about the influence of physical health on work or other daily activities and desired productivity—accomplishing as much as you would have liked—within the past four weeks. Nearly 7 in 10 alumni (69.9%) cut back on the amount of time spent on work or other daily activities because of their physical health (Figure 24, left). Over 8 in 10 alumni (82.1%) were less productive—i.e., they accomplished less—than they would have liked because of their physical health (Figure 25, left).

Clear differences are evident in the influence of physical health on daily activities and desired productivity within the last four weeks. Among those who indicated that their physical health caused them to cut down on the amount of time spent on work or other activities, 35.5 percent said they cut back *all or most of the time* (Figure 24, right). Among those who indicated that their physical health caused them to accomplish less than they would like, 47.5 percent said physical health reduced productivity *all or most of the time* (Figure 25, right).

**Figure 24. Impact of Physical Health on Daily Activities**



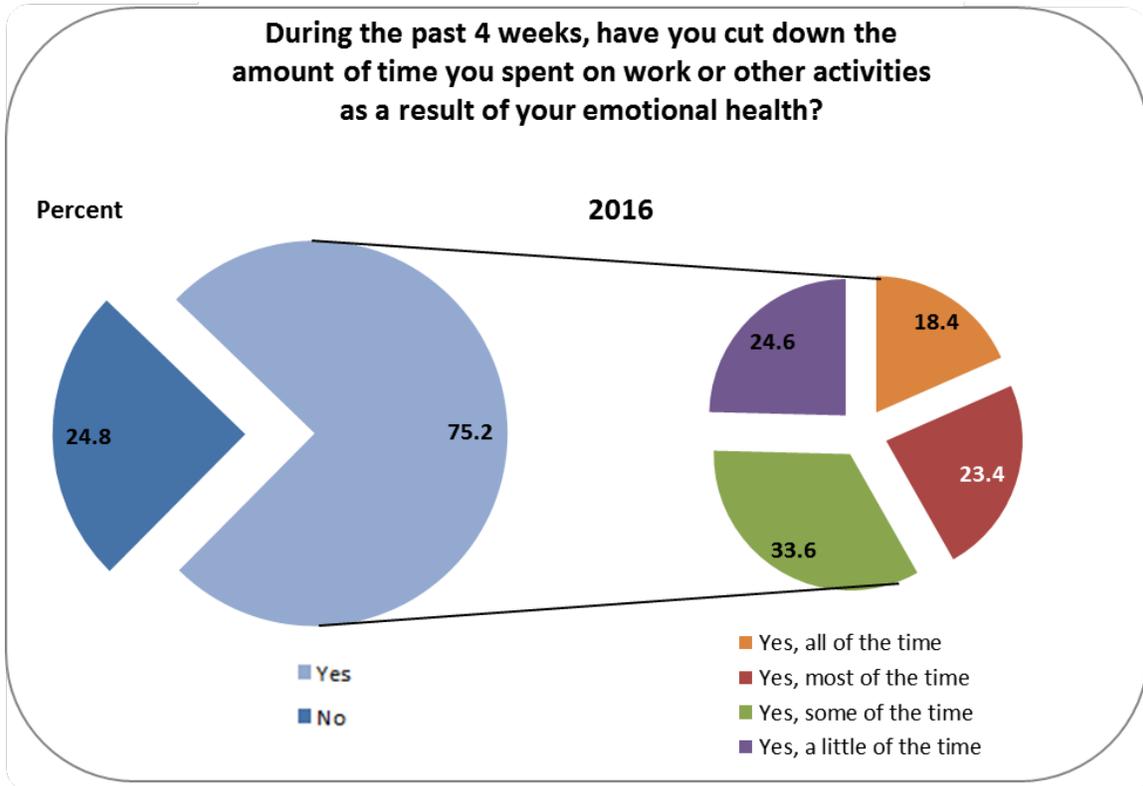
**Figure 25. Impact of Physical Health on Desired Productivity**



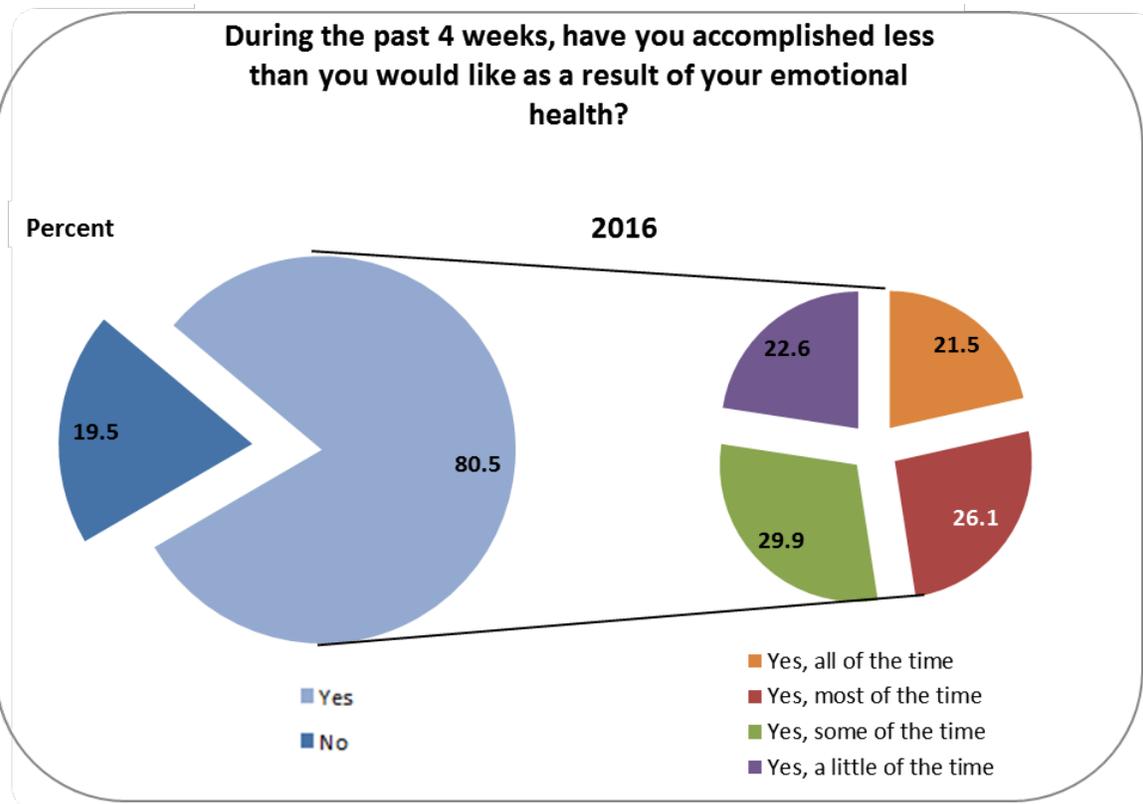
*EMOTIONAL PROBLEMS AND RECENT PROBLEMS WITH WORK OR REGULAR DAILY ACTIVITIES AND PRODUCTIVITY.* The VR-36 instrument also inquired about the influence of emotional problems on work or other daily activities and desired productivity—accomplishing as much as you would have liked—within the past four weeks. About 3 in 4 alumni (75.2%) indicated that they cut back on the amount of time spent on work or daily activities because of emotional problems (Figure 26, left). 80.5 percent indicated that they accomplished less than they would like because of emotional problems (Figure 27, left).

Differences in the influence of emotional problems on daily activities and desired productivity are not striking. Among those who indicated that their emotional problems caused them to cut down on the amount of time spent on work or other activities, 41.8 percent said they cut back *all or most of the time* (Figure 26, right). Among those who indicated that their emotional problems caused them to accomplish less than they would like, 47.6 percent said that emotion problems reduced desired productivity *all or most of the time* (Figure 27, right).

**Figure 26. Impact of Emotional Health on Daily Activities**



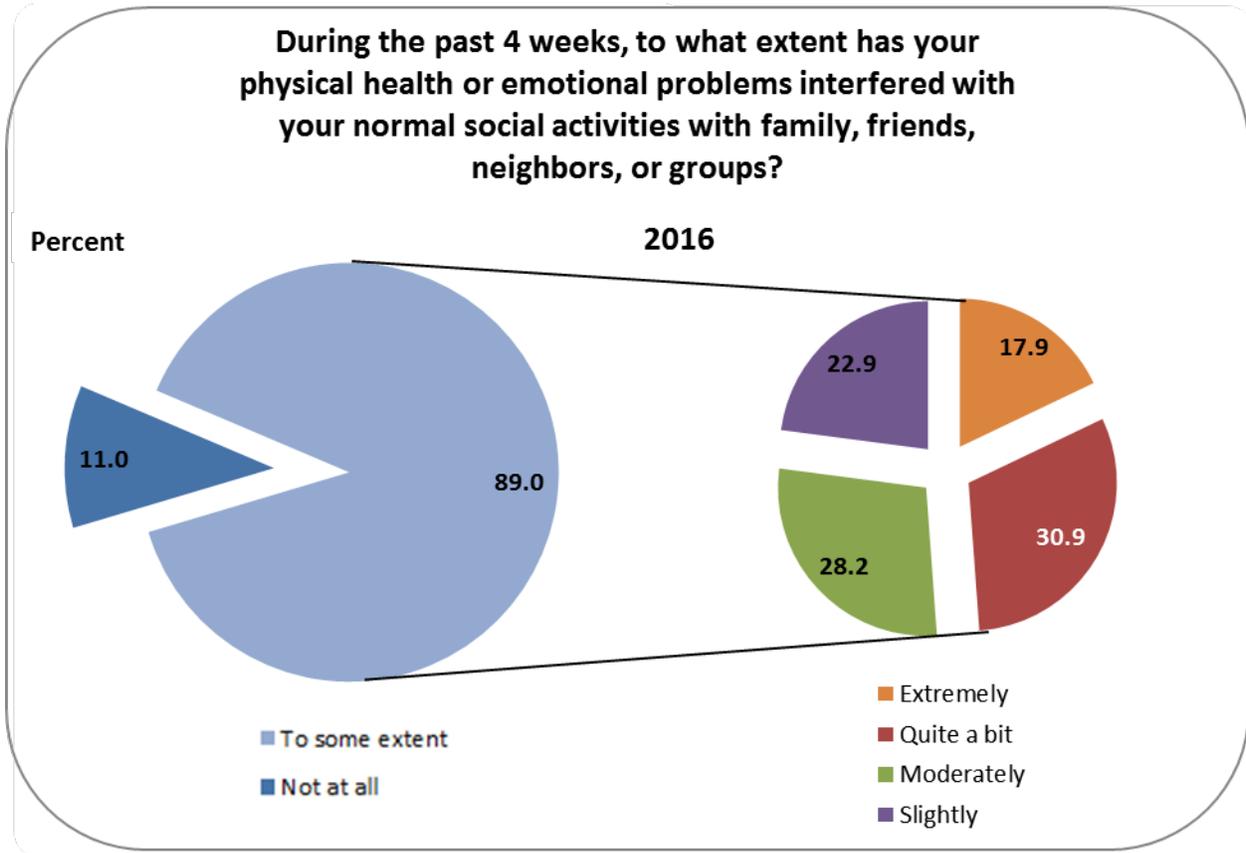
**Figure 27. Impact of Emotional Health on Desired Productivity**



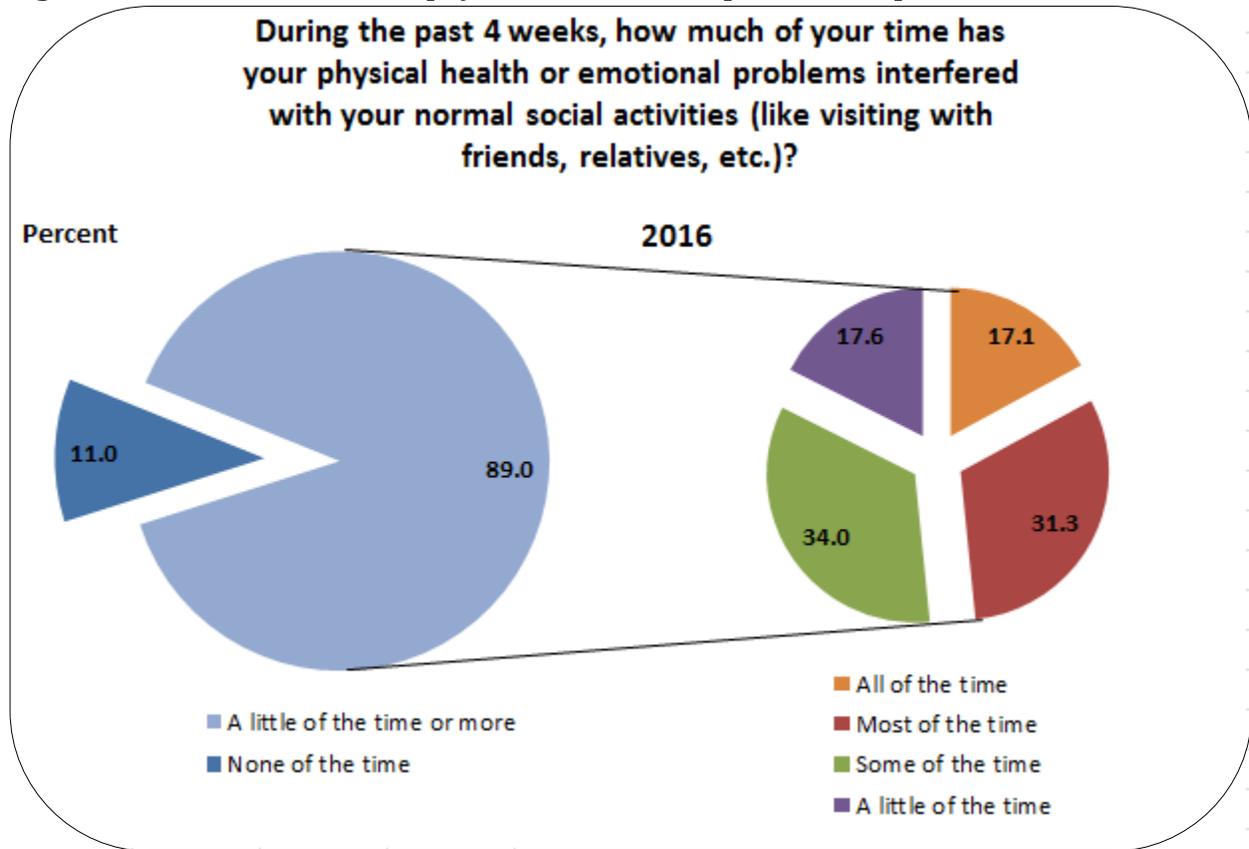
*INTERFERENCE OF PHYSICAL HEALTH OR EMOTIONAL PROBLEMS ON RECENT SOCIAL ACTIVITIES.* Alumni were asked how their physical health or emotional problems interfered with normal social activities with family, friends, neighbors, or groups. Nearly 9 in 10 alumni (89.0%) indicate that at least to some extent (sum of four response options: *slightly*, *moderately*, *quite a bit*, and *extremely*) their physical health or emotional problems interfered with their normal social activity within the last four weeks (Figure 28, left). The same percentage (89%) indicate that the physical or emotional problems interfered *a little of the time* or more with the amount of time they spent on social activities within the last four weeks (Figure 29, left).

Among those who indicate that their physical health or emotional problems influence their normal social activities to some extent, 48.8 percent indicate that these problem interfere *extremely* or *quite a bit* (Figure 28, right). Among those who indicate that their physical health or emotional problems interfered *a little of the time* or more with their normal social activities, 48.4 percent say that they interfered *all of the time* or *most of the time* (Figure 29, right).

**Figure 28. Extent of impact of physical or emotional problems on social activities**

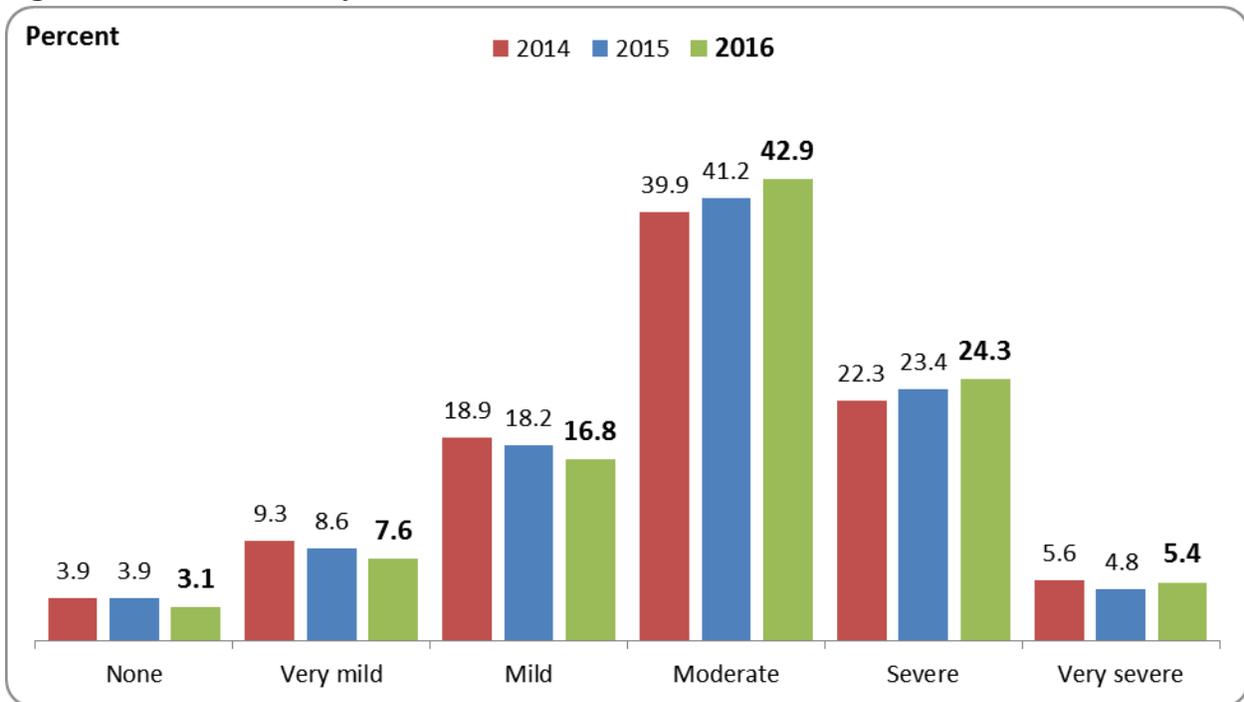


**Figure 29. Amount of time that physical or emotional problems impact social activities**



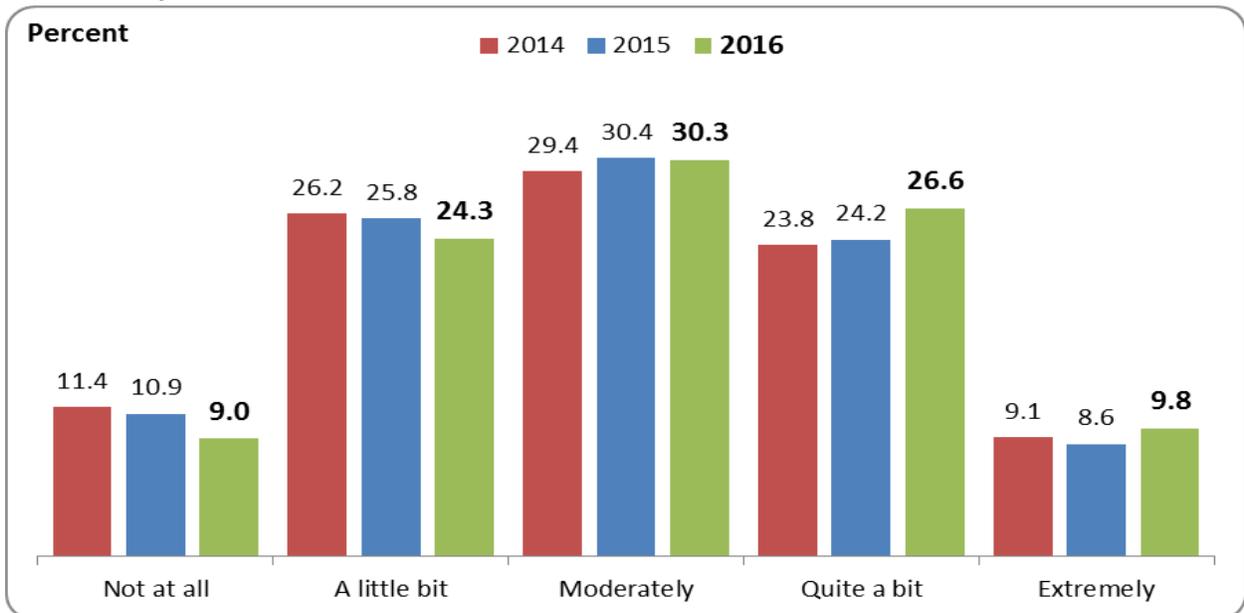
*RECENT BODILY PAIN AND INTERFERENCE OF PAIN WITH NORMAL WORK.* More than 7 in 10 alumni (72.5%) had *moderate, severe, or very severe* bodily pain during the past 4 weeks, and approximately 30 percent had severe or very severe pain (Figure 30).

**Figure 30. Extent of Bodily Pain in the Past 4 Weeks**



For two-thirds of alumni (66.7%), pain interfered with their normal work—including work outside the home and housework—*moderately, quite a bit, or extremely* (Figure 31).

**Figure 31. Extent to Which Pain Interfered With Normal Work (Work Outside the Home and Housework)**



*FEELINGS DURING THE PAST 4 WEEKS.* Feeling tired and feeling worn out during the past 4 weeks continue to be common feelings among many alumni (Table 4). Three quarters of alumni (75.1%) felt tired and 69.0 percent felt worn out *all the time, most of the time, or a good bit of the time* during the past 4 weeks. Also, 49.2 percent felt nervous *all the time, most of the time, or a good bit of the time*. Only 12.4 percent did not feel downhearted or blue at all.

**Table 4. Frequency of Feelings During the Past 4 Weeks**

	All of the time	Most of the time	A good bit of the time	Some of the time	A little of the time	None of the time
Did you feel full of pep?						
2016	1.6	7.8	11.2	24.7	32.6	22.1
2015	1.6	8.2	11.9	26.2	31.8	20.3
2014	2.1	9.0	12.1	25.2	29.5	22.1
Have you been a very nervous person?						
2016	11.8	19.9	17.5	21.8	17.1	11.9
2015	11.0	20.2	17.8	21.0	17.9	12.1
2014	10.6	19.1	18.0	20.6	17.2	14.5
Have you felt so down in the dumps that nothing could cheer you up?						
2016	6.6	16.1	17.1	22.5	20.3	17.4
2015	6.2	15.8	17.0	21.0	20.6	19.5
2014	6.5	15.0	17.3	20.3	19.0	21.9
Have you felt calm and peaceful?						
2016	2.0	10.4	11.6	24.8	34.7	16.6
2015	1.8	10.1	12.5	24.1	34.4	17.1
2014	2.4	11.2	13.0	23.6	32.0	17.9
Did you have a lot of energy?						
2016	1.6	7.1	10.2	23.8	33.3	24.0
2015	1.8	7.3	10.9	24.7	33.3	22.0
2014	2.2	8.0	11.4	23.4	31.1	23.9
Have you felt downhearted and blue?						
2016	7.4	17.9	16.9	24.3	21.2	12.4
2015	6.8	18.0	16.7	23.5	20.8	14.2
2014	7.3	17.1	17.2	22.7	20.1	15.5
Did you feel worn out?						
2016	20.3	28.4	20.4	18.4	9.9	2.7
2015	18.7	27.9	20.9	18.9	10.3	3.4
2014	17.2	26.7	22.1	19.1	10.5	4.4
Have you been a happy person?						
2016	3.3	15.0	15.3	29.5	28.4	8.5
2015	3.0	14.7	15.6	29.5	28.6	8.6
2014	3.6	15.5	16.0	28.3	27.6	9.1
Did you feel tired?						
2016	27.5	29.2	18.3	16.4	7.1	1.4
2015	25.8	28.0	19.6	17.1	7.8	1.7
2014	24.2	27.3	20.2	17.7	8.3	2.3

*ASSESSMENT OF OWN HEALTH.* Alumni were asked to assess how true or false four statements are about their health. Slightly less than half (47.8%) of alumni said it was *definitely* or *mostly false* that they get sick a little easier than other people. Over half (57.3%) of alumni, however, do not think their health is excellent, and 44.3% do not think they are as healthy as anybody they know (Table 5). About 4 in 10 alumni (40.9%) expect their health to get worse (reported the statement is *definitely true* or *mostly true*); over one-third (35.2%) are not sure whether their health will get worse.

The 2016 results differ from those of previous surveys because of a change in labeling the position of a response option. *Don't Know* was replaced with *Not Sure* and the latter was placed in the middle of other response options. Results indicate that in many cases there has been a shifting of the percentage indicating *Definitely False* towards *Not Sure*. However, as a result of instrument changes, comparisons between the 2016 findings and previous ones should be approached with caution.

**Table 5. Assessment of Own Health**

	Definitely true	Mostly true	Not sure	Mostly false	Definitely false
<b>I seem to get sick a little easier than other people.</b>					
2016	8.0	15.4	28.8	24.8	22.9
2015	8.4	17.8	14.0	25.5	34.2
2014	8.9	17.7	12.8	25.8	34.9
<b>I am as healthy as anybody I know.</b>					
2016	5.4	22.0	28.3	26.0	18.3
2015	6.4	28.8	9.2	22.9	32.7
2014	7.0	29.2	8.2	23.4	32.2
<b>I expect my health to get worse.</b>					
2016	13.7	27.2	35.2	13.8	10.1
2015	14.2	31.3	17.7	20.1	16.8
2014	13.9	29.5	15.9	21.9	18.9
<b>My health is excellent.</b>					
2016	3.1	20.3	19.4	28.5	28.8
2015	3.3	25.7	6.2	22.5	42.3
2014	4.0	26.4	5.7	21.8	42.1

**NOTE:** Prior to 2016, the response option *Don't Know* was the last response option. For 2016, *Don't Know* was changed to *Not Sure* and was moved to become the middle option.

#### *NUMBER OF DAYS POOR PHYSICAL HEALTH AND MENTAL HEALTH RESTRICTED ACTIVITIES.*

Alumni were asked how many days physical or mental health issues restricted them from doing their usual activities (such as self-care, work, school, volunteer, or recreation) during the past 4 weeks:

- In 2016, 77.3 percent of alumni indicated that their physical health issues restricted them from doing their usual activities for one or more days during the past 4 weeks. Of those who missed at least one day, the mean number of days missed was 13.2 (median was 12 days).
- In 2016, 75.2 percent of alumni indicated that their mental health issues restricted them from doing their usual activities for one or more days during the past 4 weeks. Of those who missed at least one day, the mean number of days missed was 14.2 (median was 14 days).

Alumni were also asked if they had missed work because of their (1) poor physical health during the past 4 weeks and because of their (2) poor mental health during the last 4 weeks (2 questions). We present findings for two groups of alumni who missed at least one day of work: (1) all alumni and (2) the subgroup of alumni who were currently employed and receiving pay. Because some physical and mental health issues may cause extreme productivity loss, findings for both the average number of days lost as well as the median number—the midpoint—are offered, as the latter is less susceptible to extreme outliers.

#### **2016 Results for All Alumni who missed at least one work day**

The mental health and physical health results are somewhat similar for mean work days missed in the past 4 weeks:

- Mental health problems – mean: 15.2 days; median: 14 days
- Physical health problems – mean: 14.0 days; median: 10 days

#### **2016 Results for Currently Employed Alumni who missed at least one work day**

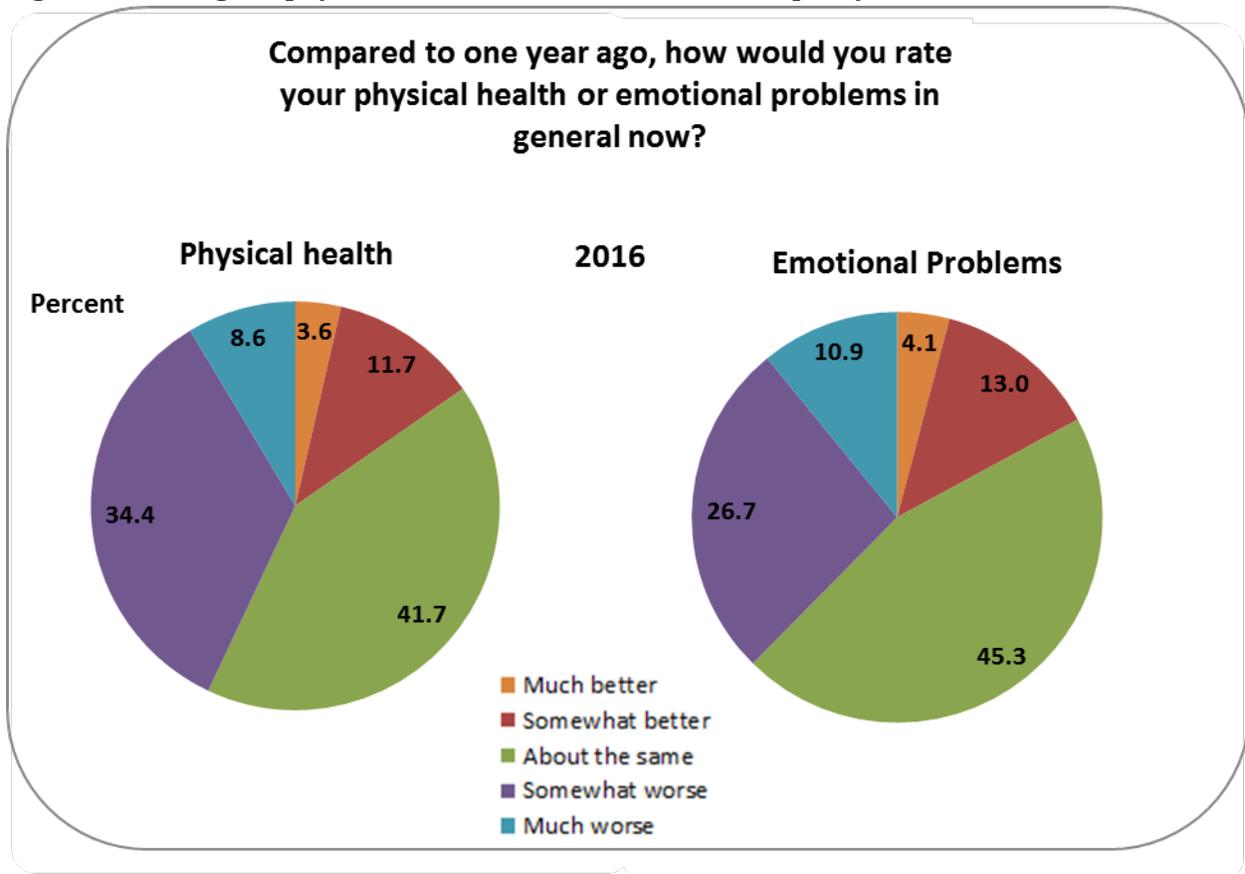
Again, the effects on mean number of work days missed are somewhat similar for poor mental health and poor physical health:

- Mental health problems – mean: 7.1 days; median: 4 days
- Physical health problems – mean: 6.7 days; median: 4 days

In general, mental health problems had a more adverse effect on productivity than physical health.

The VR-36 contains two questions asking alumni to rate their current physical or emotional problems compared to a year ago. Figure 32 reports results from these new questions. About forty-three percent (43.1%) indicate that their physical health is either *somewhat worse* or *much worse*. About two-thirds (37.5%) indicate that their emotional health is either *somewhat worse* or *much worse*.

**Figure 32. Change in physical or emotional health over the past year**



*VETERAN'S RAND-36 ITEM HEALTH SURVEY SCALE SCORES.* Composite scale scores for the VR-36 were calculated so that scale scores range from 0 to 100 with 100 being the best health. The scale scores for WWP alumni are listed below:

- Physical Functioning Scale: 58.9
- Role-Emotional Scale: 54.4
- Role-Physical Scale: 54.2
- Mental Health Scale: 47.4
- General Health Perceptions Scale: 45.0
- Social Functioning Scale: 45.3
- Pain Scale: 42.1
- Vitality Scale: 31.6

Role-Physical and Role-Emotional are shorthand for role limitations caused by physical or emotional problems, respectively. With every ten points representing one standard deviation, WWP alumni scores on the Vitality Scale are nearly two standard deviations lower than those for the general population, representing notably poorer health for WWP alumni in this domain.

For comparison with the WWP results, mean scores are presented for the initial Cohort of the Millennium Cohort study sponsored by the Department of Defense (Ryan et al., 2007):

- Physical Functioning Scale: 91.0
- Role-Physical Scale: 82.2
- Pain Scale: 75.4
- General Health Perceptions Scale: 76.9
- Vitality Scale: 62.1
- Social Functioning Scale: 87.1
- Role-Emotional Scale: 83.7
- Mental Health Scale: 78.6

The comparison indicates less favorable quality-of-life health outcomes for WWP alumni. This difference is possibly largely because of the difference in military experiences between the two groups. Most of the initial cohort in the Millennium Cohort study had *not* been deployed at the time baseline data were collected while nearly all WWP alumni have been deployed to a combat area.

More recent studies have found that veterans report poorer physical health functioning over time after returning from deployment. For example, researchers conducted a retrospective cohort study of 679 service members returning from Afghanistan and Iraq who visited a post-deployment health clinic (Falvo et al., 2012) using the VR-36. The sample was stratified into four groups based on time from post-deployment (1 yr, 2 yr, 3 yr, and 4 yr+). Subscale scores for physical functioning, role limitations due to physical health, and bodily pain are more similar than the Millennium Cohort scores to WWP alumni physical health scores. The scores also reflect worsening health conditions over time, particularly for role limitations and bodily pain:

Time from post deployment	Physical functioning	Role limitations due to physical health	Bodily pain
<b>1 year</b>	46.5 ± 10.1	45.8 ± 10.8	42.4 ± 10.8
<b>2 years</b>	45.6 ± 10.7	45.3 ± 12.2	42.5 ± 11.5
<b>3 years</b>	43.9 ± 10.2	41.1 ± 12.9	41.1 ± 11.2
<b>4 years</b>	41.8 ± 11.8	40.2 ± 13.1	28.8 ± 11.1

The findings from this study indicate that veterans who delay seeking help for physical problems following deployment may experience declining physical health, and to a greater extent than expected in their age group. Falvo et al. state that timely health care visits for screening and treatment of physical problems following deployment are essential in preventing disability and increased use of health care in the future.

As previously mentioned, the eight scale scores are summarized in PCS and MCS scores as a score with a mean of 50 and a standard deviation of 10. This allows comparison with the U.S. population. A score below 50 is below the average in the U.S. population. Though all eight scales contribute to the calculation of the PCS and MCS scores, the PCS puts more emphasis on general health, physical functioning, role limitation due to physical functioning, and bodily pain scales while the MCS emphasizes role limitation due to emotional problems, vitality, mental health and social functioning. The unadjusted mean values for the PCS and MCS for WWP alumni were **38.7** and **34.7**, respectively.

To provide context, scores for the WWP alumni were less favorable than baseline measures for the Millennium Cohort which exhibited an unadjusted mean PCS score of 53.4 and an MCS score of 52.8 (Smith, et al., 2007). Both of the WWP alumni scores are more than 10 points lower than those of the Millennium Cohort. A 10-point difference in a score has been associated with having approximately 2 chronic conditions, 30 percent more hospitalizations, and 20 percent more outpatient visits (Wilson and Kazis, 1997). The PCS score for WWP alumni is similar to estimates found among veterans enrolled in the Veterans Health Administration (VHA) who have 0 or 1 medical comorbidities: 39.6 for zero medical comorbidities, and 37.5 for one medical comorbidity. The MCS score of WWP alumni is similar to the mean MCS scores of veterans with more than two mental comorbidities, 33.9 (Kazis et al., 2004b).

## HOW HAVE YOU BEEN FEELING?

The survey included one question on problems that may have bothered alumni in the past 2 weeks and another question on frightening military experiences that affected them in the past month. Past military experiences continue to affect alumni in adverse ways.

*HOW OFTEN PROBLEMS BOTHER THEM.* OVER the past 3 survey years, the most common problems bothering respondents *nearly every day* are various types of sleeping problems (43.2 %) and feeling tired or having little energy (37.6%) as shown in Table 6. Many other problems bothered them as well during the 2 weeks prior to the survey. Results are similar to those for 2015 and 2014.

**Table 6. Frequency in the Past 2 Weeks of Being Bothered by Various Types of Problems**

	Not at all	Several days	More than half the days	Nearly every day
Little interest or pleasure in doing things				
2016	19.8	34.9	24.3	21.0
2015	21.1	35.0	23.2	20.7
2014	22.7	32.8	23.5	21.0
Feeling down, depressed, or hopeless				
2016	24.0	35.6	22.2	18.2
2015	25.6	34.8	21.6	18.0
2014	26.1	33.8	21.9	18.3
Trouble falling or staying asleep, or sleeping too much				
2016	10.0	23.0	23.8	43.2
2015	10.0	23.0	23.7	43.3
2014	11.2	22.2	24.2	42.4
Feeling tired or having little energy				
2016	7.8	27.7	26.9	37.6
2015	8.8	27.9	26.7	36.6
2014	9.6	26.9	28.1	35.4
Poor appetite or overeating				
2016	21.0	29.3	23.7	26.0
2015	22.5	28.0	23.9	25.6
2014	24.0	25.7	24.3	26.1
Feeling bad about yourself—or that you are a failure or you have let yourself or your family down				
2016	27.9	30.3	20.4	21.4
2015	29.0	30.1	20.2	20.7
2014	31.3	28.9	19.7	20.2
Trouble concentrating on things such as reading the newspaper or watching television				
2016	20.6	30.3	23.5	25.7
2015	21.1	29.6	23.4	25.9
2014	22.7	28.0	23.7	25.7
Moving or speaking so slowly that other people could have noticed. Or the opposite—being so fidgety or restless that you have been moving around a lot more than usual				
2016	40.9	28.1	17.9	13.1
2015	41.9	27.6	17.6	13.0
2014	42.1	26.3	17.4	14.2

The items in this question make up the Patient Health Questionnaire eight-item depression scale (PHQ-8). The calculated scale scores indicate that **62.4** percent (61.3 in 2015) of alumni are experiencing current major depression, represented by a scale score of 10 or higher:

- No significant depressive symptoms (score of 0 to 4) – **15.1%** (16.1% in 2015)
- Mild depressive symptoms (score of 5 to 9) – **22.5%** (22.6% in 2015)
- Moderate (score of 10 to 14) – **23.7%** (23.2% in 2015)
- Moderately severe (score of 15 to 19) – **21.6%** (21.5% in 2015)
- Severe (score of 20 to 24) – **17.0%** (16.6% in 2015)

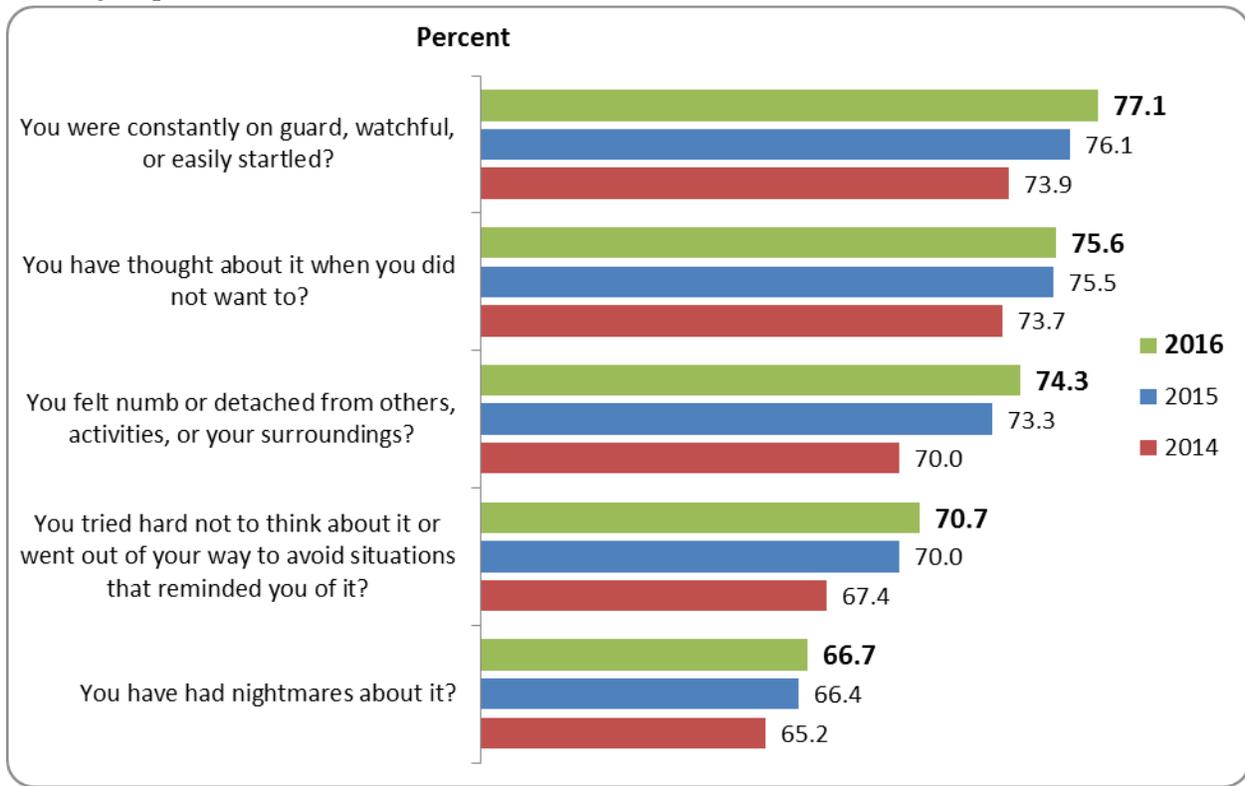
These findings are mostly similar to the 2015 and 2014 results but are considerably higher than RAND found when it used the same scale in its Invisible Wounds study (the data were collected by telephone between August 2007 and January 2008) and reported that nearly 14 percent of OEF/OIF veterans met the criteria for major depression (RAND, 2008). In the general U.S. civilian population, the comparable percentage for persons experiencing current depression is 8.6 percent (Kroenke et al., 2009).

Findings from the WWP survey indicate that major depression may be much more widespread among alumni than the RAND study on a similar population suggests. Taken as a whole, WWP survey data indicate that nearly all WWP alumni experience factors that may cause major depression, including severe injury, serious illness, social isolation, or stressful life events like job loss or changes in career. Major depression may also manifest and be recognized over time after experiencing any of these factors. The anonymity provided by a web-based survey may also contribute to higher rates for major depression found among WWP alumni than found using other data collection methods, such as phone.

*LINGERING EFFECTS OF FRIGHTENING, HORRIBLE, OR UPSETTING MILITARY EXPERIENCES.*

Between 65-75% of alumni had a military experience that was so frightening, horrible, or upsetting that in the past month they have not been able to escape from memories or effects of it (Figure 33).

**Figure 33. Percentages Reporting “Yes” to Lingering Effects in the Last Month of Traumatic Military Experiences**



The survey items in Figure 35 are from a scale designed to screen for post-traumatic stress disorder: Primary Care PTSD Screen (PC-PTSD). This four-item screen is used in primary care and other medical settings and has been used by the VA to screen for PTSD in veterans. Generally, the results of the PC-PTSD are considered “positive” for PTSD if a patient answers *yes* to any three of the four items (Prins, Quimette, Kimerling, et al., 2003). A positive response to the screen, however, does not necessarily indicate that a person has PTSD. Nevertheless, a positive response does indicate that a person may have PTSD or trauma-related problems and may warrant further examination by a mental health professional.

In the WWP survey, the first item in the scale was revised and separated into two items because the item asked about two possible situations (original item: You have had nightmares about it or thought about it when you did not want to?). Responses to those two items were combined (included respondents who answered *yes* to either of the items but counted them only once if they said *yes* to both) when the PC-PTSD scale score was calculated for WWP respondents. The WWP survey results indicate that **72.4** percent of alumni had positive scores for PTSD (compared with 71.9% in 2015 and 69.0% in 2014).

In a study of Post-Deployment Health Re-Assessment (PDHRA) data, Milliken, Auchterlonie, and Hoge (2007) reported that 40.8 percent of Army active duty soldiers and 52.2 percent in the Reserve Component screened positive for PTSD.

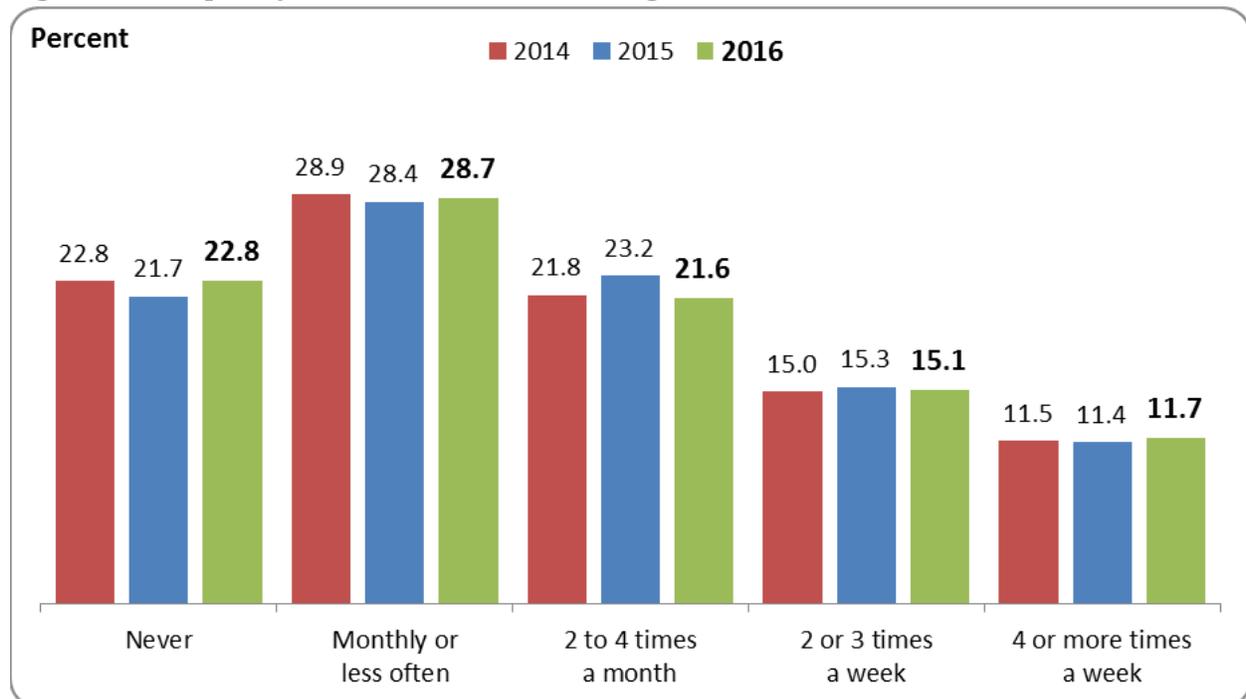
The WWP alumni estimates for PTSD are much higher than reported in other studies of service members and veterans who have served in Iraq and Afghanistan (the estimates often range from about 7% to 20%, but some are higher). Differences in estimates are attributed to (1) differences in the study populations, (2) differences in the number and types of trauma-related events experienced during combat deployments, (3) the timing of screenings (symptoms can be delayed), (4) the method of conducting the screenings and diagnoses, and (5) concerns among active duty service members and veterans about adverse effects on their careers and the fear of being stigmatized if they report their symptoms (Bagalman, 2013; Fulton, et al., 2015; Institute of Medicine, 2014; Milliken, Auchterlonie, & Hoge, 2007). The presence of a severe injury or health problem sustained during active duty military service since September 11, 2001—an eligibility requirement for WWP alumni—is clearly a population characteristic that contributes to the higher incidence of these medical conditions in the WWP survey population.

## HEALTH-RELATED MATTERS

The WWP survey also included questions about drinking, diet, exercise, and sleep habits, with some representing short-form scales. Scale scores follow question results.

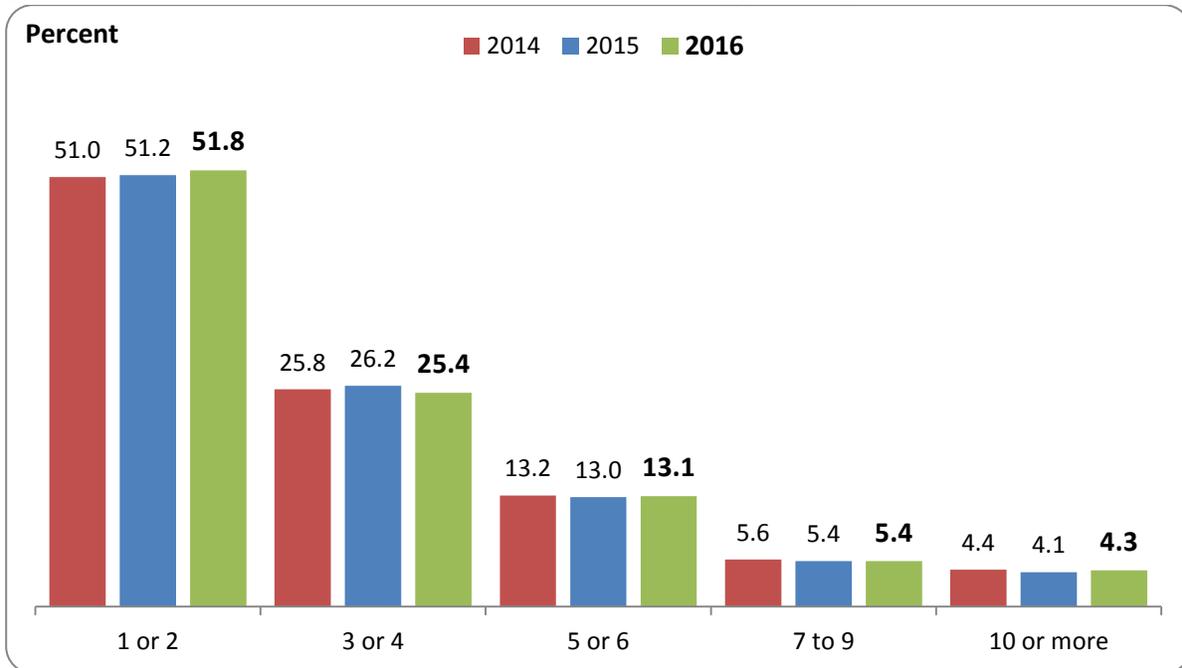
*USE OF ALCOHOLIC BEVERAGES.* The 2016 data on alcohol use are quite similar to the data for 2015. In the past 12 months, use of alcoholic beverages (i.e., beer, wine, or hard liquor) varied among alumni. About one-fifth (22.8%) did not drink at all during the past 12 months, and more than one-fourth (28.7 %) drank monthly or less often. Slightly more than 1 in 4 alumni (26.9%) reported having drinks containing alcohol two or more times a week (Figure 34).

**Figure 34. Frequency of Use of Alcoholic Beverages**



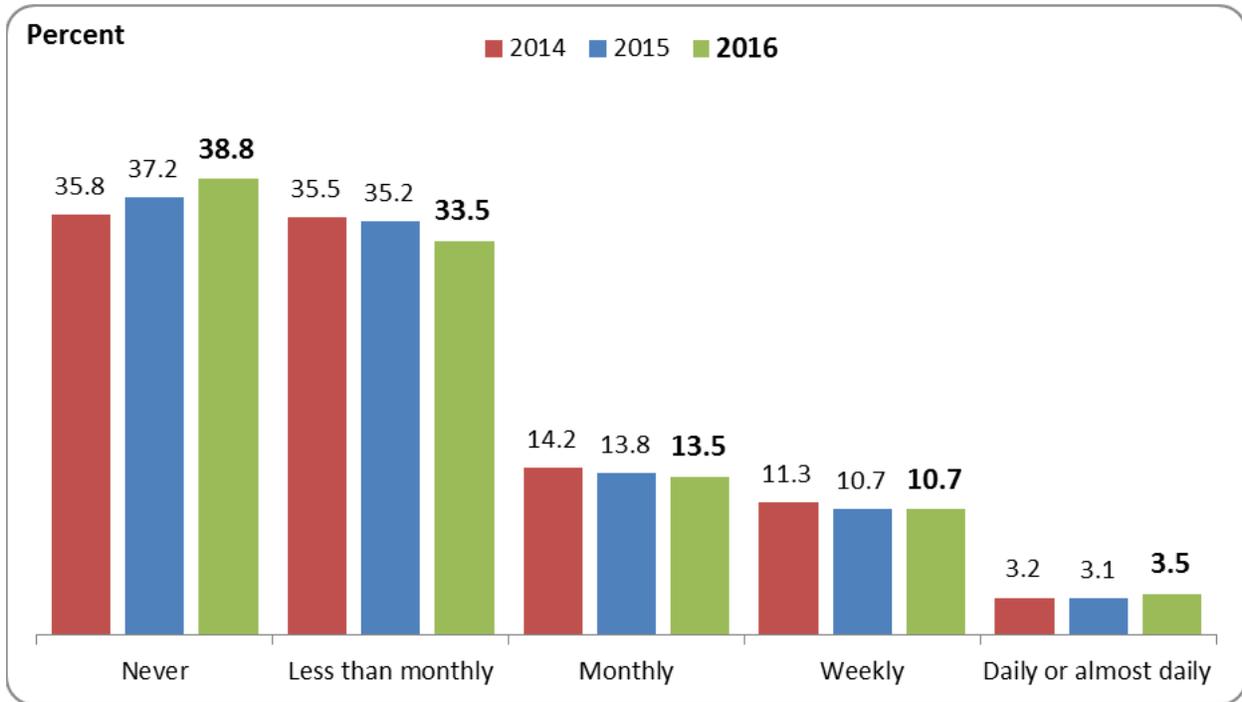
Also, on a typical day when alumni did have a drink with alcohol, most alumni had one or two drinks (51.8 %) and 25.4 percent had three or four drinks (Figure 35). The remaining alumni reported varying numbers of drinks on a typical day.

**Figure 35. Number of Alcoholic Drinks Consumed on a Typical Day**



Relatively low percentages of alumni who reported drinking alcohol in the past 12 months had six or more drinks on one occasion weekly (10.7%) or *daily/almost daily* (3.5 %) (Figure 36).

**Figure 36. Frequency of Having Six or More Drinks With Alcohol on One Occasion**

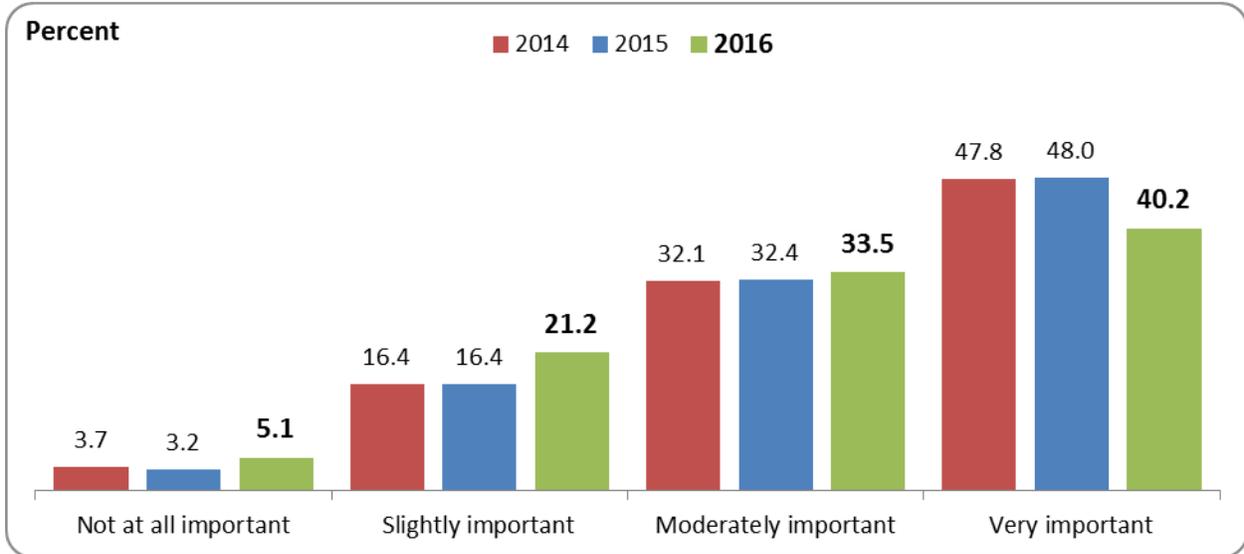


The three questions about alcohol use in the past 12 months are from the AUDIT-C scale. Scores on the AUDIT-C can range from 0 to 12. A score of 4 or higher represents a positive alcohol screen for at-risk drinking for males, and a score of 3 or higher is positive for females (Dawson, Grant, Stinson, & Zhou, 2005). The WWP mean score for male alumni is **3.3**, and the mean score for WWP female alumni is **2.2**. These scores are essentially the same as 2015 and 2014 scores.

The survey included two questions about the use of alcohol in the past 4 weeks. About one-fifth of alumni (21.7%) used alcohol more than they meant to in the past 4 weeks, and 17.5 percent felt they wanted to or needed to cut down on their drinking in the past 4 weeks. These two alcohol questions are from the Post-Deployment Health Assessment/Post-Deployment Health Reassessment (PDHA/PDHRA) alcohol screen. An answer of *yes* to both questions is coded as a positive alcohol screen. In 2016, 14.6 percent of WWP alumni had a positive alcohol screen (13.9% in 2015 and 12.6% in 2014).

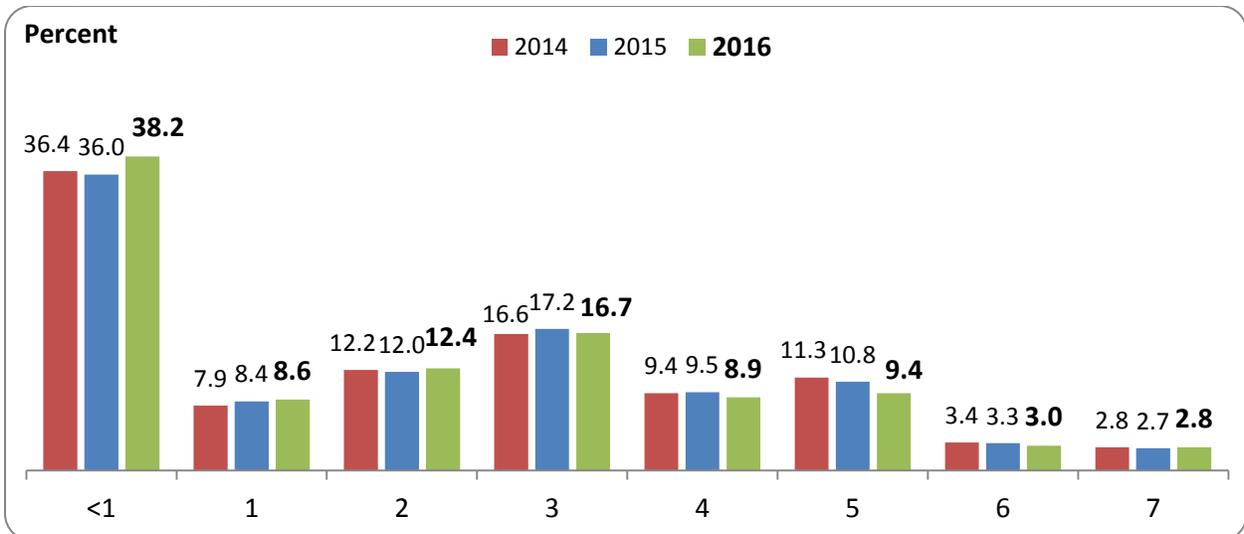
*IMPORTANCE OF A HEALTHY DIET AND GOOD NUTRITION.* Nearly three-fourths of alumni (73.7%) said it is either *very important* or *moderately important* to them to maintain a healthy diet and good nutrition for their overall health and wellness (Figure 37).

**Figure 37. Importance of Maintaining a Healthy Diet and Good Nutrition**



*PHYSICAL ACTIVITY AND EXERCISE.* About 2 in 5 alumni (40.8%) do moderate-intensity physical activities or exercise (such as a brisk walk, jog, cycle, play adapted sports, or swim) 3 or more days a week; 38.2 percent do such physical activity less than once a week (Figure 38). The 2016 survey results are similar to those for 2015 and 2014.

**Figure 38. Frequency of Moderate-Intensity Physical Activity or Exercise in a Typical Week (# days a week)**

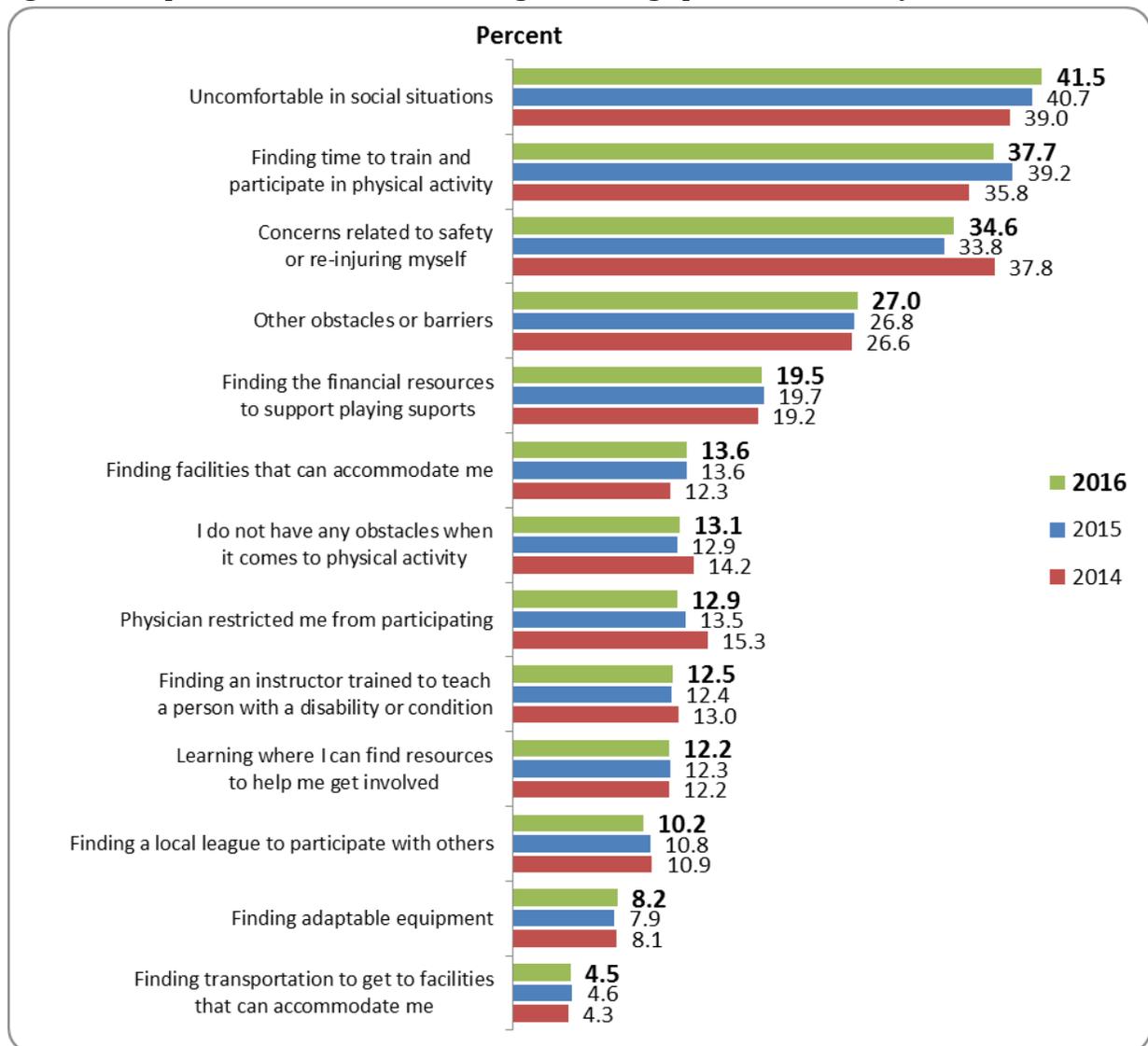


Alumni were presented with a list of 13 possible reasons that make it difficult for them to exercise or participate in sports or other physical activities. They were instructed to choose all reasons that apply. Though the ranking of 2<sup>nd</sup> and 3<sup>rd</sup> place responses switched, the top three reasons chosen were the same as in 2015 and 2014 (Figure 39):

- Uncomfortable in social situations – 41.5%
- Finding time to train and participate in physical activity – 37.7%
- Concerns related to safety or re-injuring myself – 34.6%

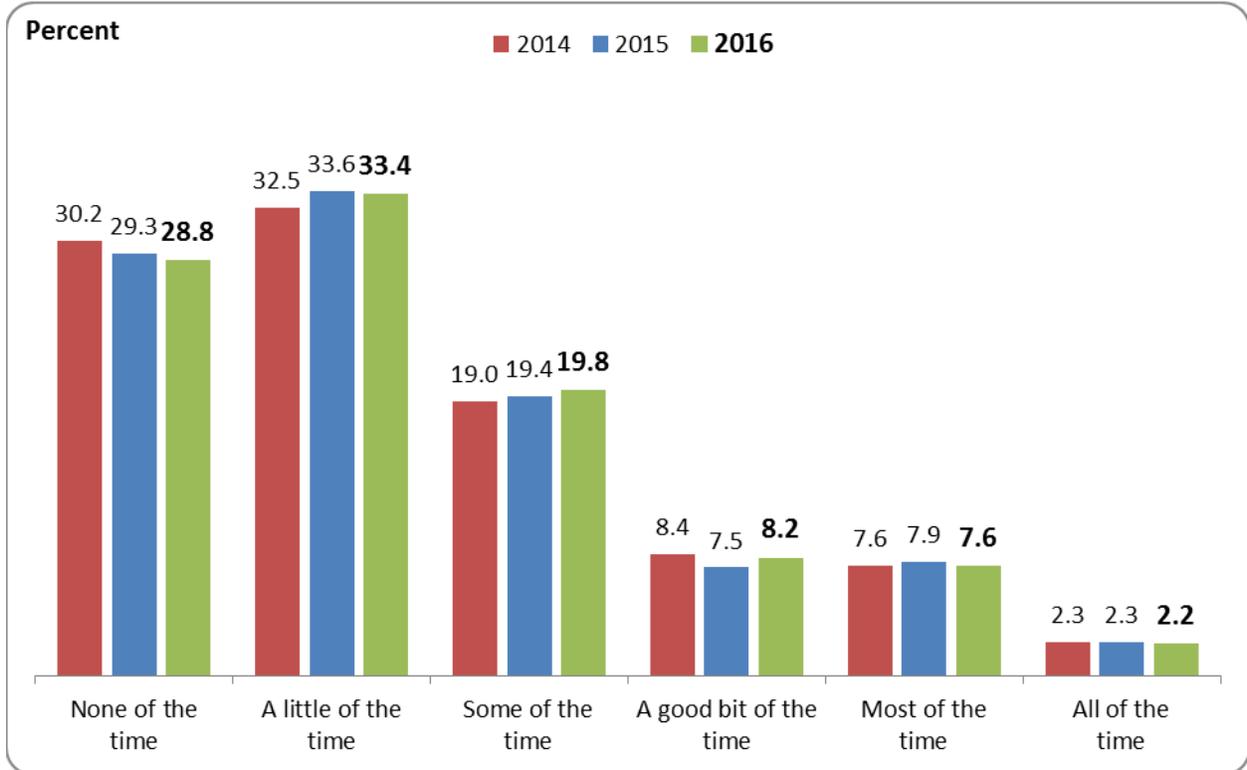
More than 8 in 10 alumni (86.9%) reported at least one barrier to physical activities. Among those who did report barriers, 31.2 percent reported one barrier, 24.9 percent reported two barriers, 18.7 percent reported three barriers, 10.9 percent reported four barriers, and lower percentages (0.2% – 6.2%) reported 5 to 12 barriers.

**Figure 39. Reported Barriers to Exercising and Doing Sports or Other Physical Activities**

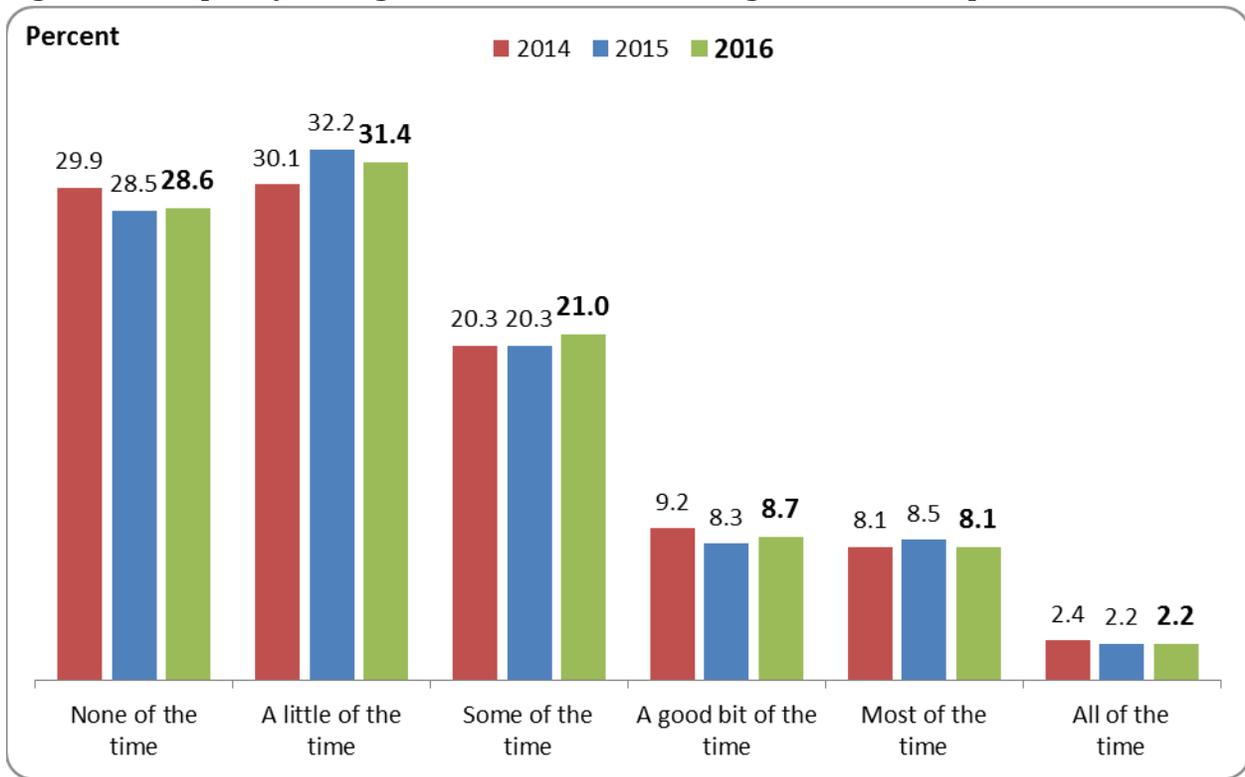


*AMOUNT OF SLEEP.* Relatively few alumni are getting sufficient sleep. Only 17.9 percent got enough sleep a *good bit of the time, most of the time, or all of the time* during the past 4 weeks to feel rested upon waking in the morning (Figure 40). Only 18.9 percent got the amount of sleep they needed a *good bit of the time, most of the time, or all of the time* during the past 4 weeks (Figure 41).

**Figure 40. Frequency During the Past 4 Weeks of Getting Enough Sleep to Feel Rested**



**Figure 41. Frequency During the Past 4 Weeks of Getting Amount of Sleep Needed**



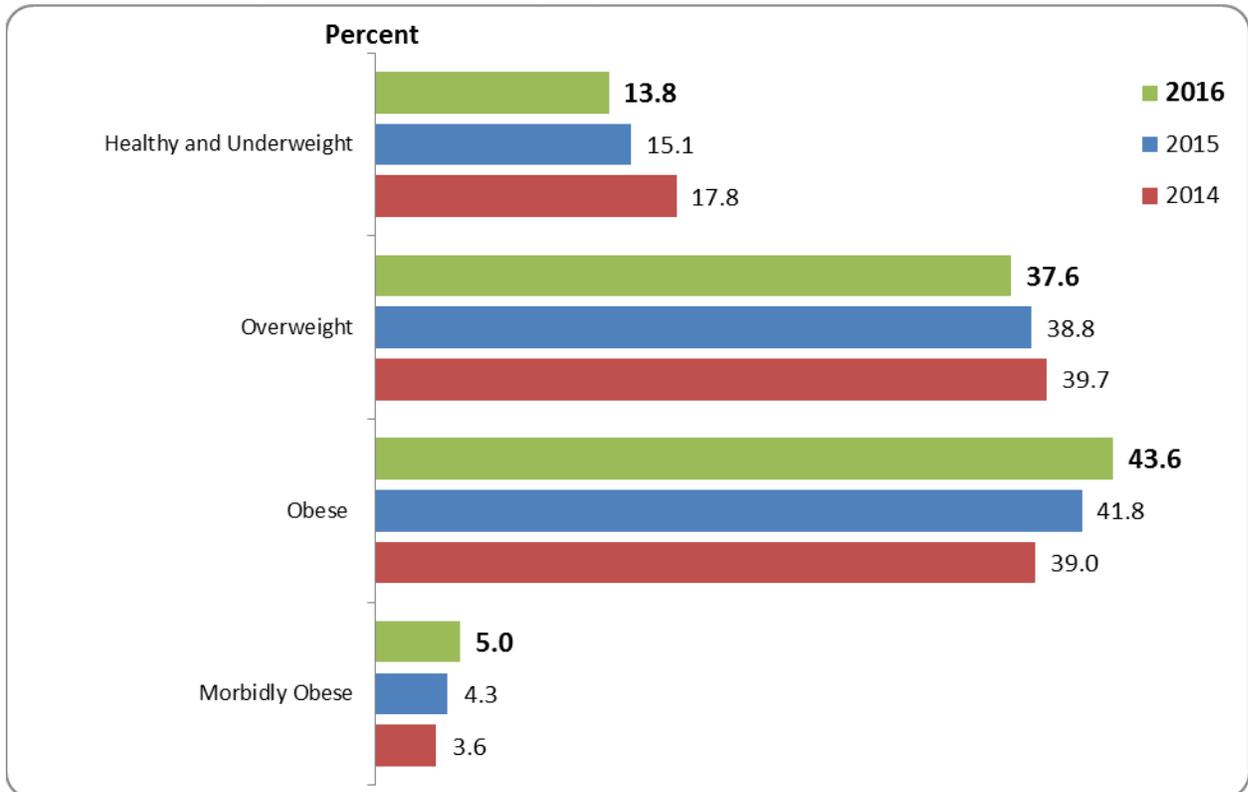
The two questions on sleep make up a Sleep Adequacy Scale from the Medical Outcomes Study Sleep Scale. The mean score for the WWP alumni is **28.1** (median score: 20.0; unchanged from 2015). The range of possible scores is 0 to 100, with higher scores representing less of a problem sleeping (Hays & Stewart, 1992). In 2005, Hays and others reported that the mean score for a nationally representative sample was 60.5.

Additional information on sleep issues by past and current service members was reported by Seeling et al. (2010). This group of researchers used data from 41,225 Millennium Cohort members who completed baseline (2001–2003) and followup (2004–2006) surveys. Using other standard scales, they found that deployment to Iraq and Afghanistan significantly affected sleep quality and quantity—sleep duration was significantly shorter and trouble sleeping was more likely among deployed and postdeployed groups compared with those who had not deployed.

A recent study by RAND addressed gaps in research about sleep problems among military members in an effort to learn more about the prevalence of sleep problems among service members following deployment, the consequences of such sleep problems, and available sleep-related programs and policies to promote healthy sleep (Troxel et al., 2015). The study authors note that lack of sleep is linked with many health problems, both mental and physical, and that sleep problems are particularly prevalent among service members who have deployed to Iraq and Afghanistan.

*HEIGHT AND WEIGHT.* The average (mean) height and weight among 2016 alumni are 5'9" and 209 pounds (similar to the 2015 and 2014 results). The average BMI for alumni is 30.4, which is at the low end of the range for being classified as obese (BMI = 30 or greater). Almost one-half (48.6%) of WWP alumni fall in the obesity range (compared with 46.0% in 2015 and 42.6% in 2014), and another 37.6 percent are overweight (compared with 38.8% in 2015 and 39.7% in 2014). See Figure 42 for additional information on Alumni's BMI scores.

**Figure 42. Alumni Body Mass Index Scores (BMI)**



According to age-adjusted data from the *National Health and Nutrition Examination Survey* (NHANES), 36.4 percent of U.S. adults aged 20 and older were obese in 2011-2014 (National Center for Health Statistics, 2016). The age-adjusted rate of obesity for males aged 35-44 years is 39.8 percent; for males aged 45-54 years, the age-adjusted rate is 36.6 percent. In these age groups, females have higher rates of obesity: 39.1 percent for those aged 35-44 and 41.7 percent for those aged 45-54.

In a study (with Millennium Cohort participants) that examined possible reasons for weight gain after discharge from military service (Littman et al., 2013), researchers found that an increased weight gain at the time of discharge may help to explain reports of high rates of obesity among veterans. They documented weight gain that increased before and around the time of discharge over the course of 6 years and found a near tripling of obesity from 12 percent to 31 percent. Subgroups at higher risk for weight gain after discharge included those younger in age, less educated, overweight/obese at time of discharge, active duty versus National Guard/Reserve, women, and deployers with combat experience. They speculate that while in the military the need to meet body weight standards may be stronger than service members'

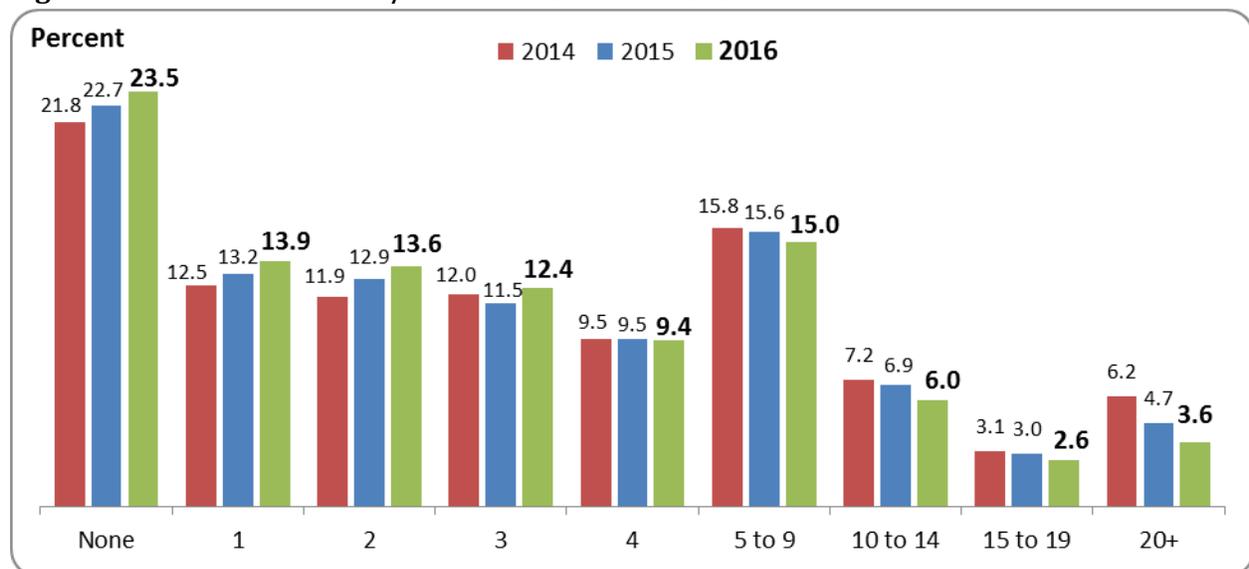
internal motivation to maintain a healthy weight. In the WWP alumni population, injuries that limit physical activity before and after discharge, depression, and stress from emotional problems and the transition to civilian life are likely to be contributing factors to weight gain.

## HEALTH CARE SERVICES

WWP alumni were asked questions about the kinds of medical and mental health services they have received.

*HEALTH CARE VISITS FOR SELF.* Alumni were asked to report how many times they went to a doctor’s office or clinic to get health care for themselves (not counting times they went to emergency rooms) during the past 3 months. About 2 in 5 alumni (39.8%) had one to three visits; 23.5 percent reported no visits. The frequency of visits was relatively high (10 or more visits) for 12.2 percent of alumni (Figure 43).

**Figure 43. Number of Doctor/Clinic Visits in the Past 3 Months**



*HEALTH CARE VISITS TO ANY PROFESSIONAL FOR MENTAL HEALTH/EMOTIONAL PROBLEMS.* More than half of alumni (53.3 %) visited a health care professional (such as a doctor, a psychologist, or a counselor) in the past 3 months to get help with issues such as stress or emotional, alcohol, drug, or family problems. Among those alumni, 75.7 percent (similar to 75.0% in 2015) visited a regular medical doctor or primary care physician for those problems. During those past 3 months, slightly more than half (56.2%) visited their doctors one to three times about mental health issues. A relatively small percentage of alumni (4.2%), however, had 20 or more visits, contributing to a mean number of visits during the past 3 months of 5.5 (range 1 to 100).

*HEALTH CARE VISITS TO MENTAL HEALTH SPECIALISTS.* Alumni who had visited any health care professional about issues with stress or emotional, alcohol, drug, or family problems also reported on visits to a mental health specialist, such as a psychiatrist, psychologist, social worker, or counselor in the past 3 months. Among them, 90.9 percent made such a visit. Slightly

less than two-thirds (64.5%) visited a specialist about such issues 1 to 5 times in the past 3 months. The mean number of visits was 6.1 (range 1 to 100).

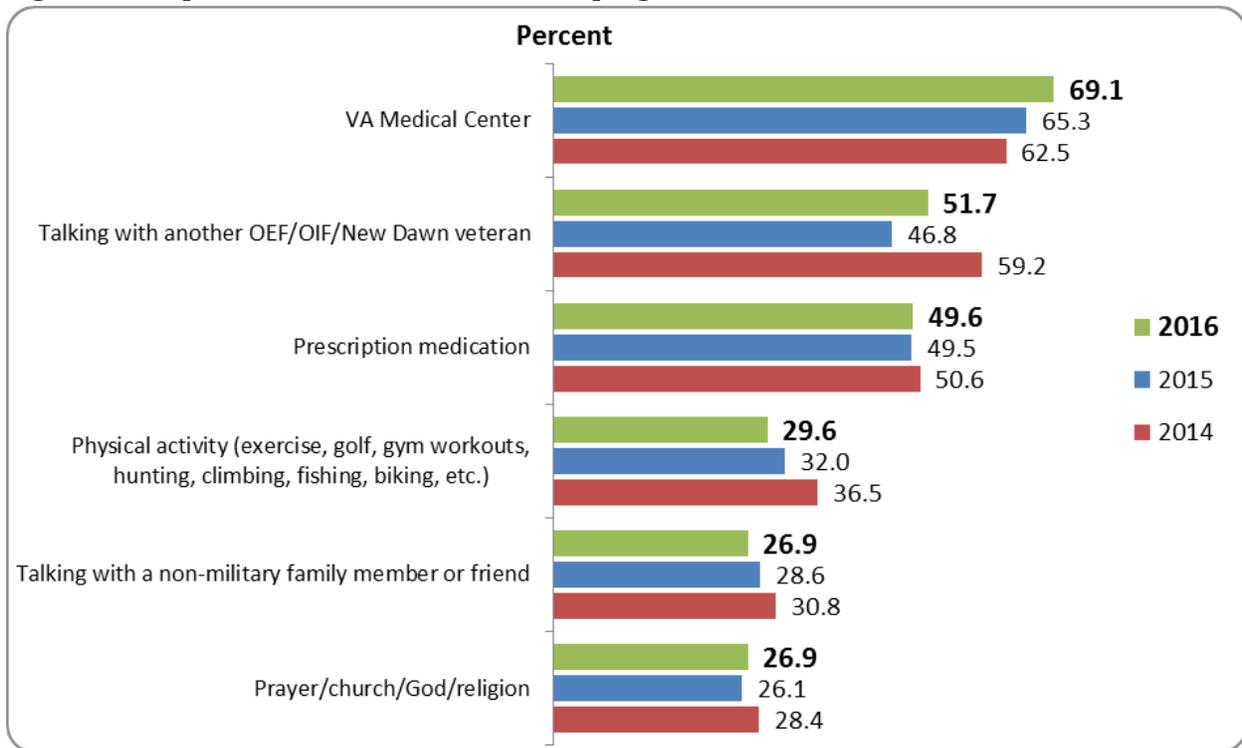
*MEDICATION USE FOR MENTAL HEALTH OR EMOTIONAL PROBLEMS.* Among alumni who had visited any health care professional in the past 3 months about issues such as stress, emotional, alcohol, drug, or family problems, 78.0 percent had been prescribed medication for a mental health or emotional problem. Most of them (89.3%) took the medications for the duration as prescribed by their doctor.

*COUNSELING FOR MENTAL HEALTH OR EMOTIONAL PROBLEMS.* Among alumni who reported visiting any health care professional in the past 3 months, 75.6 percent had received counseling—individual, family, or group—for a mental health or emotional problem. More than half of them (58.4%) had made 5 or fewer visits in the past 3 months. About 5.2 percent made 20 or more visits during that time. The mean number of visits was 6.8 (range 1 to 100).

*RESOURCES AND TOOLS USED TO HELP COPE WITH FEELINGS OF STRESS OR EMOTIONAL OR MENTAL HEALTH CONCERNS.* The top three resources or tools used by alumni in the past 3 years have remained the same (Figure 44).

- The most common resource was the VA Medical Center (69.1%, in 2016 vs. 65.3% in 2015), followed by “Talking with another OEF/OIF/New Dawn veteran,” (51.7%) which ranked third in 2015. Prescription medication fell to being the third most common resource (49.6%), even though the 2016 estimate was very similar to the 2015 estimate of 49.5 percent.
- Other resources and tools beyond the top three that were used by more than one-fourth of alumni since deployment included physical activity (29.6%), talking with a non-military family member or friend (26.9%), and prayer/church/God/religion (26.9%).
- In the past 4 survey years, around one-fifth of alumni with concerns said they used the Vet Center—23.6 percent in 2016, 22.7 percent in 2015, and 22.3 percent in 2014.

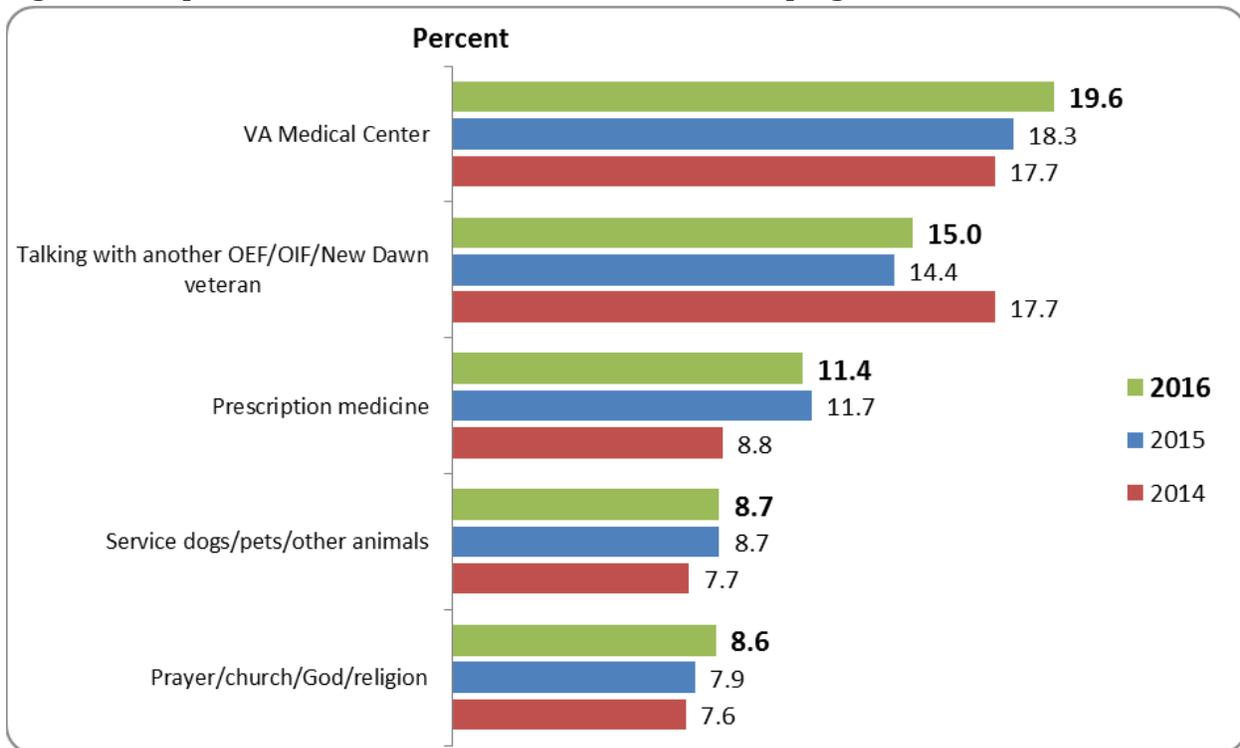
**Figure 44. Top 5 Resources and Tools for Coping With Stress or Concerns**



The mean number of listed resources and tools selected by alumni was 5.1 (the range was 1 to 20 resources/tools). Slightly less than five percent (4.9%) of alumni have not had any mental health concerns since deployment (compared with 5.4 % in 2015 and 5.5% in 2014).

The alumni who identified resources they had used were asked which ONE had been the most effective in helping them. In 2016, the two resources that were the most effective in helping the alumni were a VA Medical Center (19.6%) and talking with another OEF/OIF/New Dawn veteran (15.0%) as shown in Figure 45. Prescription medicine was third (11.4%), and service dogs/pets/other animals was fourth (8.7%).

**Figure 45. Top 5 Most Effective Resources and Tools for Coping With Stress or Concerns**



*DIFFICULTY IN GETTING MENTAL HEALTH CARE/PUTTING OFF CARE/DID NOT GET NEEDED CARE.* About a third of alumni (34.8%) had difficulty getting mental health care, put off getting such care, or did not get the care they needed during the past 12 months. These alumni were then asked about a list of possible reasons for their difficulties in getting mental health care. Three response options were added to this question in the 2015 survey in order to understand better the difficulties represented by the *Other* response option in previous years. Alumni could select more than one response.

*MOST COMMON REASONS.* A logistical response option added in 2015 was, again, the most common reason for difficulty getting or for putting off mental health care (Figure 46):

- Personal schedules that conflicted with the hours of operation of VA health care – 36.4%

The next two most common reasons were related to personal feelings:

- Did not feel comfortable with existing resources within DoD or VA – 35.2 %
- Felt that treatment might bring up painful or traumatic memories that they wanted to avoid – 33.7%

The fourth and fifth most common reasons were logistical:

- Difficulty in scheduling appointments – 31.5%
- Inconsistent treatment or lapses in treatment (resulting, for example, from canceled appointments and switches in providers) – 30.9%

*ADVERSE EFFECTS ON CAREER/STIGMA.* Effects on career or stigma associated with seeking mental health treatment were considerations for about 1 in 5 alumni:

- Concerned that their future career plans would be jeopardized – 21.7%
- Felt they would be considered weak for seeking mental health treatment – 21.3%
- Felt they would be stigmatized by peers or family for seeking mental health treatment – 19.2%

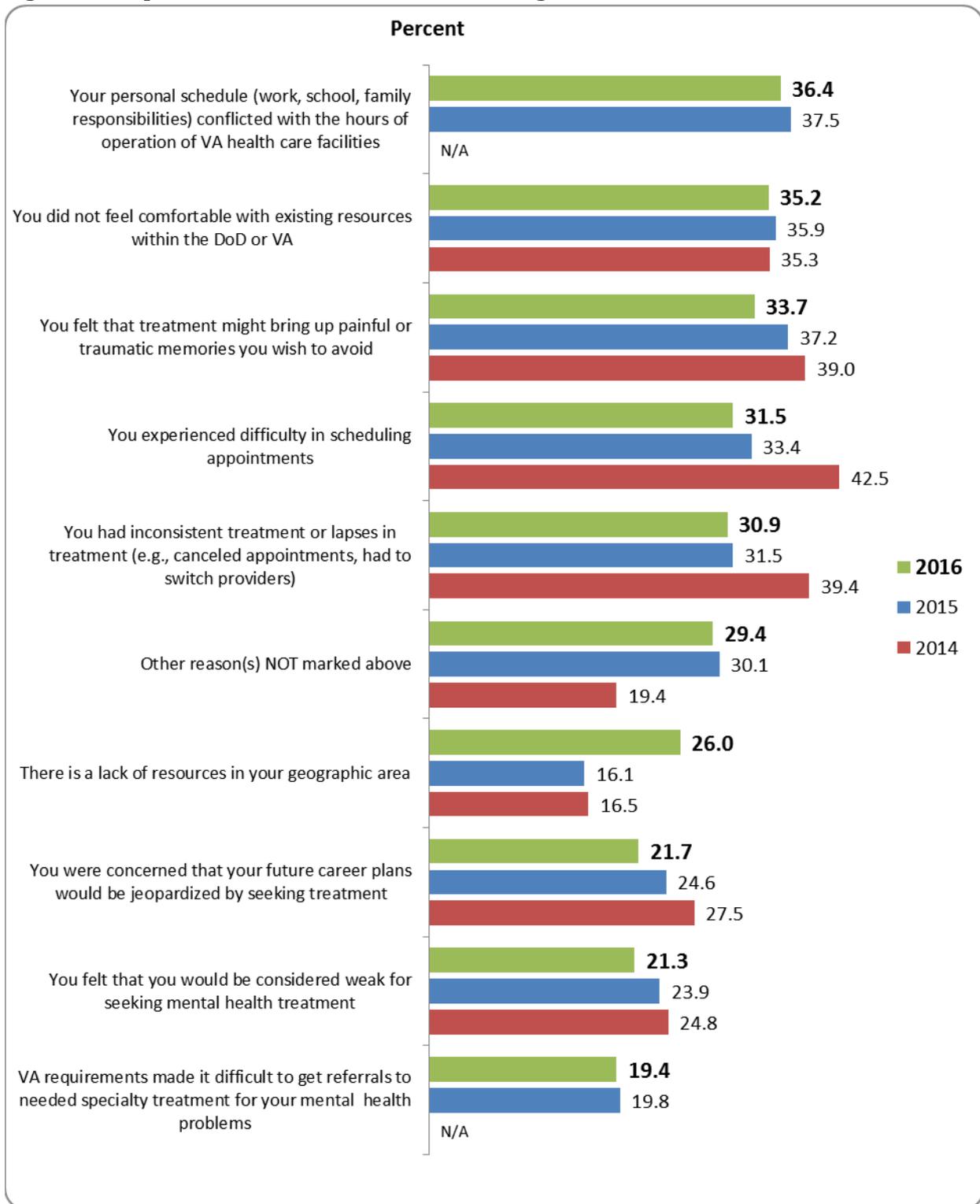
Notably, lack of geographic resources was reported by over one-quarter of alumni (26.0%) this year, which is a large increase from previous years.

*ALUMNI EXPERIENCING DIFFICULTIES WHO USE THE VA AS THEIR PRIMARY HEALTH CARE PROVIDER.* A comparison between alumni using the VA as their primary health care provider and all alumni experiencing difficulties in getting mental health care (including active duty members) indicated that the 2016 and 2015 estimates were the same or similar for both groups for most of the reasons. However, one reason differed by about four percentage points:

- You were concerned that your future career plans would be jeopardized by seeking treatment – 17.4% for alumni using VA as their primary health care provider vs. 21.7% for all alumni with difficulties

To address difficulties in getting state-of-the-art care for wounded warriors with PTSD and traumatic brain injury, Wounded Warrior Project announced the launch of the Warrior Care Network in June 2015. This 3-year program is designed to connect wounded warriors and their families with world-class individualized mental health care. The network includes four founding academic health care partners (Emory’s Veterans Program at Emory University, Atlanta; the Red Sox Foundation and Massachusetts General Hospital Home Base Program, Boston; Operation Mend Program at University of California, Los Angeles; and Road Home Program at Rush University Medical Center, Chicago) and collaboration with area VA facilities and programs. Eligible warriors will have access to the network regardless of where they live or their ability to pay for services.

**Figure 46. Top 10 Reasons for Difficulties in Getting Mental Health Care**



**NOTE:** New response option was added in 2015.

*DIFFICULTY IN GETTING PHYSICAL HEALTH CARE/PUTTING OFF CARE/DID NOT GET NEEDED CARE.* In the 2014 survey, two new questions were added. The first asked if alumni had difficulty in the past 12 months getting physical health care, or put off getting such care, or did not get the physical health care they thought they needed. If so, the second question asked what were the reasons. More than 4 in 10 alumni (43.3 %) experienced such difficulty.

*MOST COMMON REASONS.* The most common reason for difficulties experienced by alumni remained the same as last year, but the 2016 percentage is lower:

- Had difficulty scheduling appointments – 40.3% (42.4% in 2015)

About 3 in 10 alumni chose the next most common reasons:

- Had personal schedules (work, school, family responsibilities) that conflicted with the hours of operation of VA health care facilities – 31.3 %
- Felt that VA requirements made it difficult to get referrals to needed specialty treatment for physical problems – 30.9%
- Felt there was a lack of availability in VA specialty clinics (orthopedics, dental, etc.) – 30.6%

In 2016, a lower percentage of alumni (26.5%, down from 29.0% in 2015) experienced lapsed and inconsistent treatment because of canceled appointments and switches in providers. This decrease could be due partly to the addition of three new response options that captured more specifically the reasons for difficulties in getting physical health care (Figure 47).

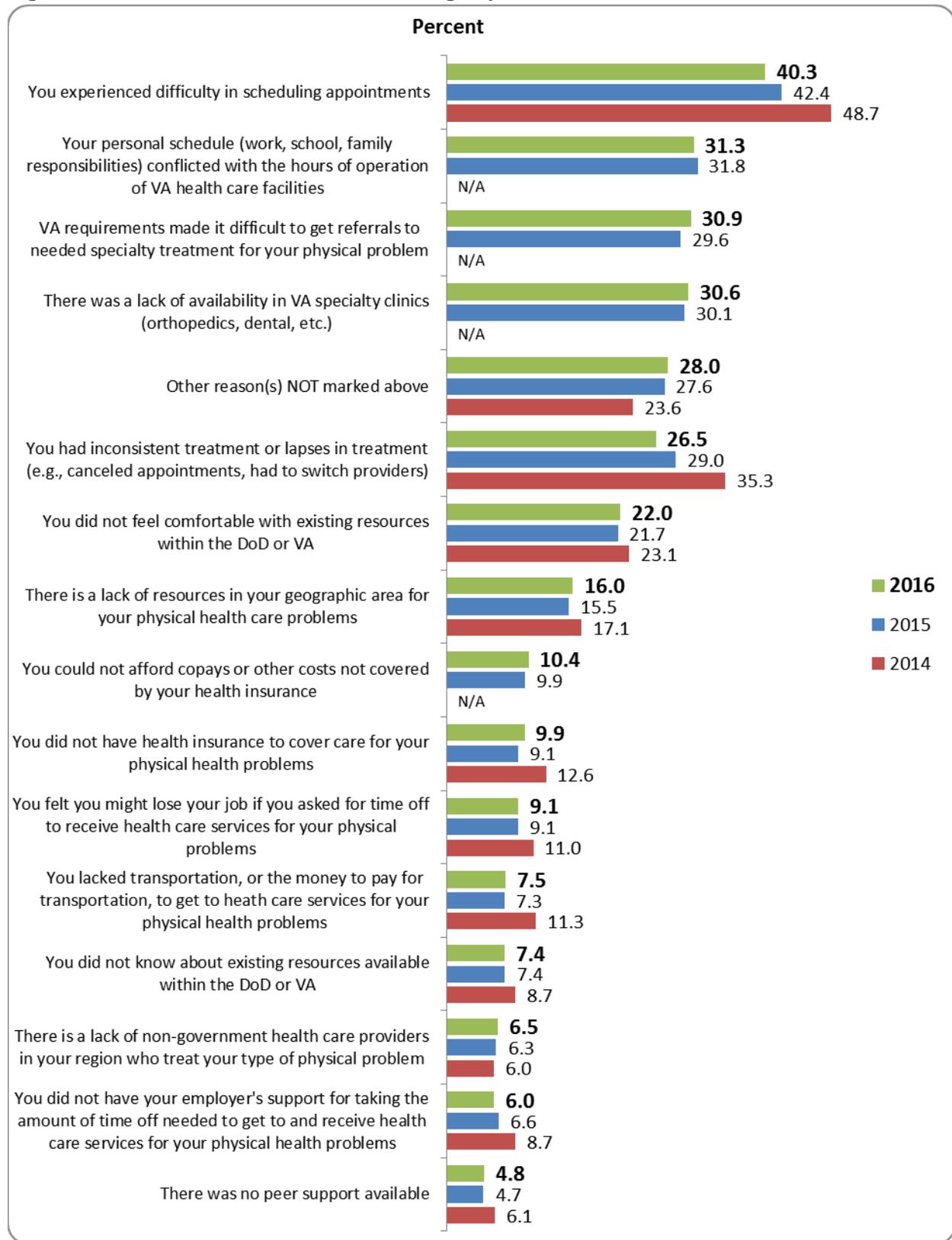
*VARIOUS OTHER REASONS.* Lower percentages of alumni who experienced difficulty in getting physical health care marked the following reasons:

- Did not feel comfortable with existing resources within the DoD or VA – 22.0%
- Reported a lack of resources in their geographic area – 16.0%
- Could not afford co-pays or other costs not covered by health insurance – 10.4%
- Did not have health insurance to cover needed care – 9.9%
- Felt they might lose their jobs if they asked for time off to get physical health care – 9.1%

*ALUMNI EXPERIENCING DIFFICULTIES WHO USE THE VA AS THEIR PRIMARY HEALTH CARE PROVIDER.* A comparison between alumni who use the VA as their primary health care provider and all alumni experiencing difficulties in getting physical health care (including active duty members) yielded the following differences:

- Felt there was a lack of availability in VA specialty clinics (orthopedics, dental, etc.) – 37.3 % for VA as primary provider vs. 30.6% for all alumni with difficulties
- VA requirements made it difficult to get referrals to needed specialty treatment for your physical problems – 36.6% for VA as primary provider vs. 30.9% for all alumni with difficulties
- You did not have health insurance to cover care for your physical health – 5.3% for VA as primary provider vs. 9.9% for all alumni with difficulties
- Your experienced difficulty in scheduling appointments – 44.5% for VA as primary provider vs. 40.3% for all alumni with difficulties

**Figure 47. Reasons for Difficulties in Getting Physical Health Care**



NOTE: New response options were added in 2015.

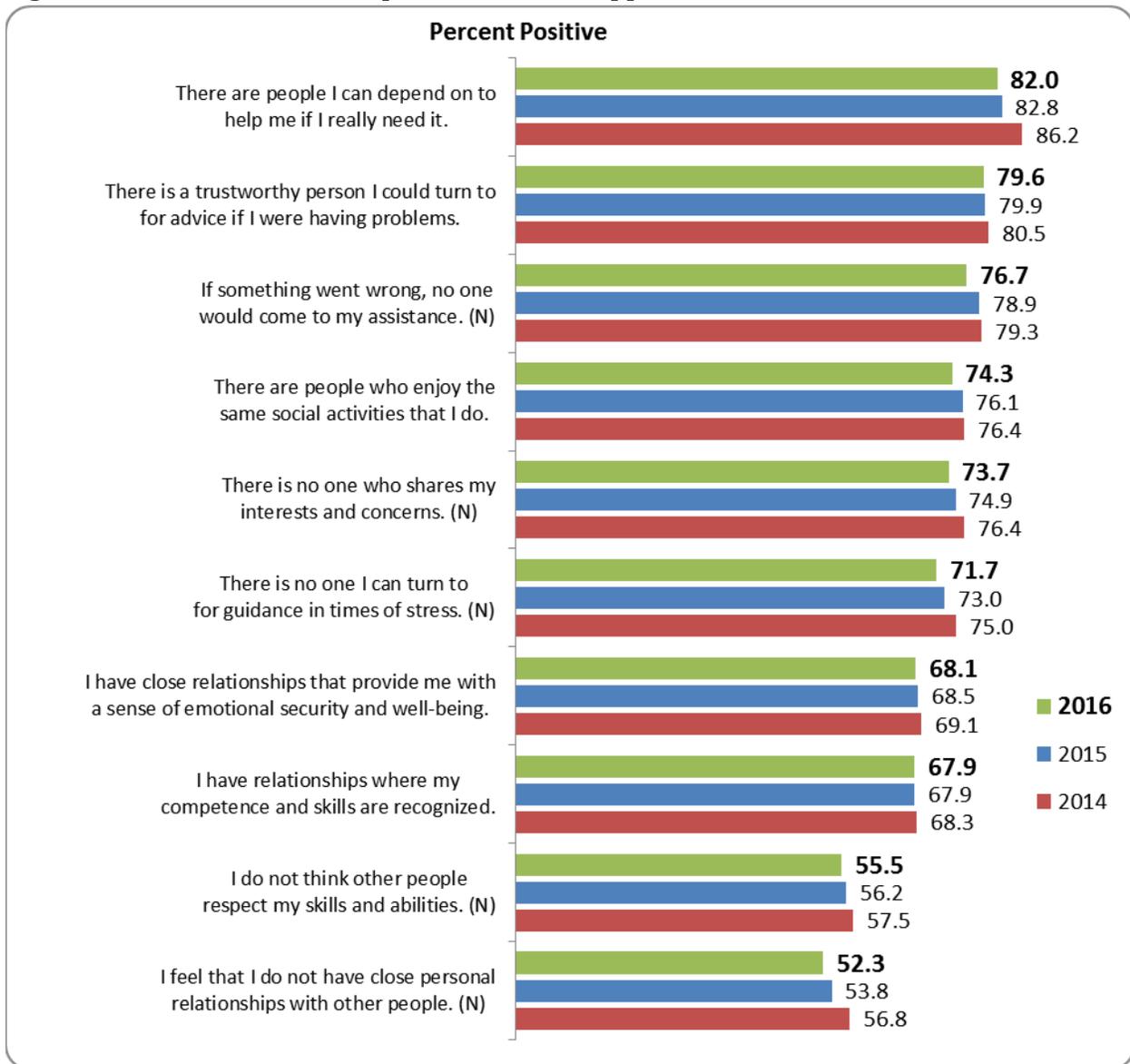
## SOCIAL SUPPORT

WWP alumni were asked to state to what extent they agree or disagree with 10 statements about their current relationships with friends, family members, co-workers, community members, and others. These statements, which reflect what individuals receive from relationships with other people in their current social network, make up a short version of the Social Provisions Scale developed by Russell and Cutrona in 1984 (Cutrona & Russell, 1987). Survey response frequencies are highlighted, and information about scale scores is presented.

*RESPONSE FREQUENCIES.* A positive answer to the current relationship statements means that the respondent *agreed* or *strongly agreed* with positively worded statements and *disagreed* or *strongly disagreed* with negatively worded questions (N indicates a negatively worded question; Figure 48). At least two-thirds of alumni agreed with each of the five positive statements (range 67.9 to 82.0%). Between about half and three-quarters of alumni *disagreed* or *strongly disagreed* with the negatively worded statements (range 52.3 to 76.7%). In other words, their feelings were more positive. The negatively worded statements which the smallest percentage of alumni disagreed or strongly disagreed with were:

- “I do not think other people respect my skills and abilities” (55.5% positive.)
- “I feel that I do not have close personal relationships with other people” (52.3% positive).

**Figure 48. Percent Positive Responses to Social Support Statements**



**NOTES:** An (N) after a statement indicates that the item is negatively worded. Percent positive for negatively worded statements is the percentage who *disagreed* or *strongly disagreed* with the statement.

*SCALE SCORES.* The statements from the Social Provisions Scale—Short Version that is used in the WWP survey assess five provisions and can also be used to develop a total social provision score (Cutrona & Russell, 1987). Mean scores for the five provisions could range from 2 to 8, and the range for the total score is 10 to 40. Higher scores indicate a greater degree of perceived support. The WWP mean survey scores for these five provisions and the total score are as follows:

- Guidance (advice or information) – **5.9** (5.9 in 2015, 6.0 in 2014)
- Reassurance of Worth (recognition of one’s competence, skills, and value by others) – **5.4** (5.4 in 2015 and 2014)
- Social Integration (a sense of belonging to a group that shares similar interests, concerns, and recreational activities) – **5.7** (5.8 in 2015 and 2014)
- Attachment (emotional closeness from which one derives a sense of security) – **5.4** (5.4 in 2014 and 5.5 in 2014)
- Reliable Alliance (assurance that others can be counted on in times of stress) – **6.0** (6.1 in 2015 and 6.2 in 2014)
- **Total Social Provisions Score – 28.4** (28.5 in 2015 and 28.9 in 2014)

The ranges of alumni scores for the Social Provisions Scale have remained essentially the same since the 2011 survey.

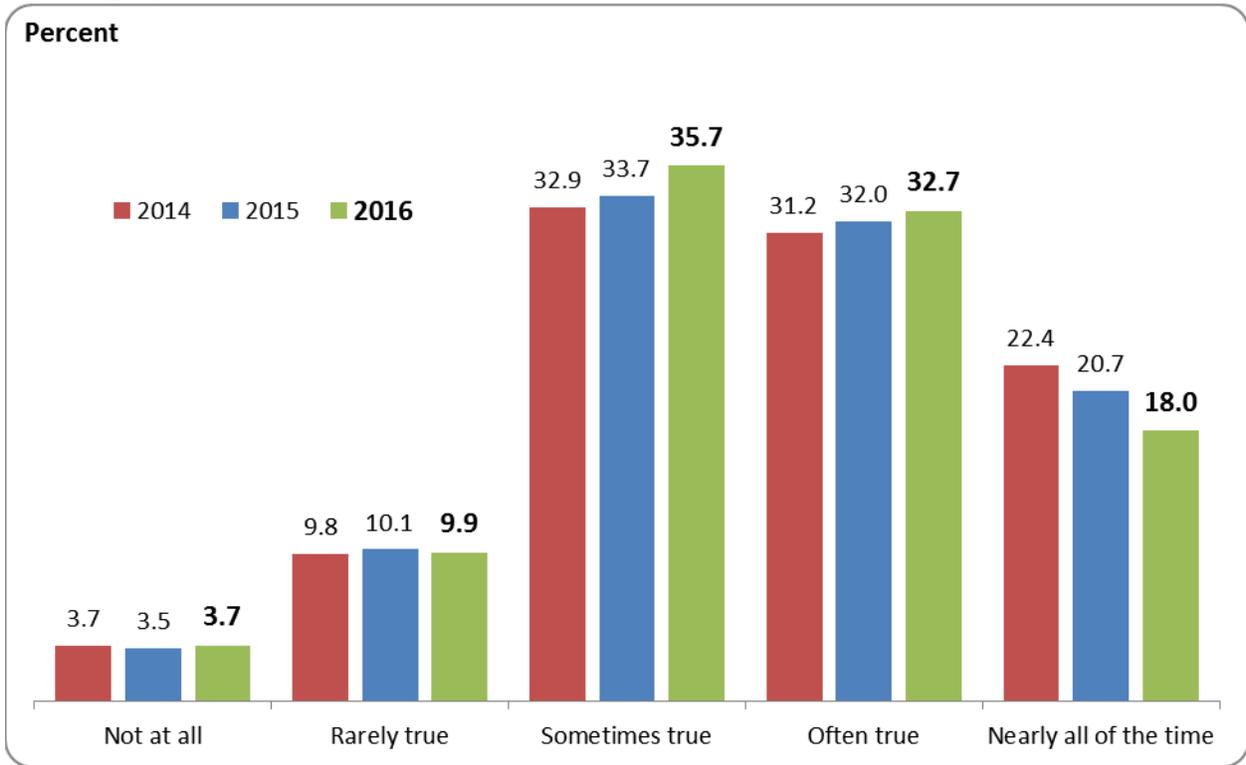
## ATTITUDES

Beginning this year, the survey used the 10-item version of the Connor-Davidson Resilience Scale (also known as the CD-RISC 10-Item Resilience Scale) to address current attitudes among alumni. This instrument is widely used to assess resilience—the ability to overcome adversity—among those who have been exposed to extremely stressful situations and may suffer from forms of anxiety including PTSD. The 10-item version of the CD-RISC instrument was developed by Campbell-Sills and Stein as an abbreviated version of the original 25-item instrument. On the 10-item version, the final scale score ranges from 0 to 40 with higher scores indicating greater resilience.

The addition of eight questions is the difference between 10-item version of the CD-RISC and the 2-item version used in previous WWP surveys. To provide continuity with previous survey results, findings from the two continuous questions are first reported; then, the total scale score from the 10-item version is presented.

*RESILIENCE.* About half of alumni (50.7%) think it is *often true* or *true nearly all the time* that they are able to adapt when changes occur (Figure 49). A slightly lower percentage (47.7%) said it is *often true* or *true nearly all the time* that they tend to bounce back after illness, injury, or other hardships (Figure 50). The percentages of alumni who think those statements are *rarely true* or *not at all true* are relatively low (under 16%).

**Figure 49. Ability to Adapt When Changes Occur (How True Is It That They Can Adapt to Change?)**



**Figure 50. Ability to Bounce Back After Illness, Injury, or Other Hardships (How True Is It That They Tend to Bounce Back?)**

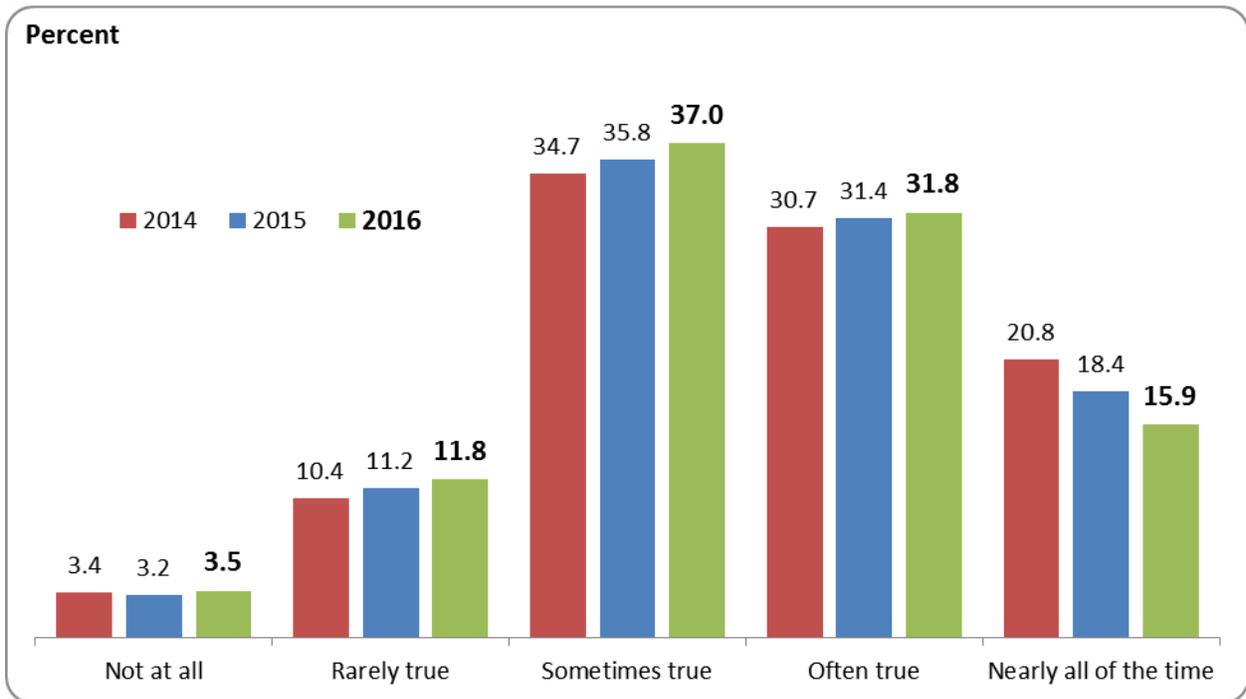


Table 7 presents responses to all of the 10 questions used this year to explore current attitudes among alumni. About 1 in 5 alumni (20.8%) indicated that “I think of myself as a strong person” *nearly all of the time*. Similar percentages indicated that they try to see the humorous side of problem (18.7%) or are able to adapt when changes occur (18.0%) *nearly all of the time*. Each statement was *sometimes true, often true, or true nearly all of the time* for at least 3 in 4 alumni.

**Table 7. Percentage of Alumni By Responses to Questions About Current Attitudes, 2016**

	Not at all true	Rarely true	Sometimes true	Often true	True nearly all of the time
I am able to adapt when changes occur.	3.7%	9.9%	35.7%	32.7%	18.0%
I tend to bounce back after illness, injury, or hardships.	3.5%	11.8%	37.0%	31.8%	15.9%
I can deal with whatever comes.	3.9%	10.7%	37.7%	30.4%	17.4%
I try to see the humorous side of problems.	5.8%	13.5%	33.4%	28.6%	18.7%
I feel that coping with stress can strengthen me.	6.9%	14.8%	37.8%	26.3%	14.1%
I can achieve goals despite obstacles.	3.2%	10.5%	39.3%	31.3%	15.7%
I can stay focused under pressure.	6.2%	13.5%	33.3%	29.7%	17.4%
I am not easily discouraged by failure.	6.9%	17.8%	35.5%	26.0%	13.8%
I think of myself as a strong person.	4.4%	11.1%	33.0%	30.7%	20.8%
I can handle unpleasant feelings.	5.8%	13.8%	36.8%	27.0%	16.5%

The mean CD-RISC 10-Item Resilience Scale score for WWP alumni is **23.9**. This is much lower than mean scores found for the general U.S. population: 31.8 (Campbell-Sills et al., 2009). The WWP alumni mean score is also notably lower than the mean score found in a study of combat veteran couples, 31 (Melvin et al., 2012). The National Post-Deployment Adjustment Study, a study among U.S. Iraq and Afghanistan Era Veterans, also found higher resilience, with a mean score of 30.5 (Green et al, 2014) The WWP mean score is similar to the mean score for undergraduate college students with psychiatric disorders, 19.6 (Hartley, 2012).

Lower CD-RISC Resilience Scale scores are often found for those with PTSD. Alumni who screened positive on the self-reported Primary Care PTSD score in the 2016 WWP Alumni Survey had a mean Resilience Scale score of 22.0 while those who did not test positive for PTSD had a mean score of 28.9.

*CURRENT FEELINGS.* Alumni were asked to assess the extent to which 13 statements are true in describing their feelings (“their way of seeing the world”). These statements are from the 13-item version of the Orientation to Life Questionnaire (OLQ; Antonovsky 1987), which provides another measure of an individual’s resilience and ability in coping with daily stress.

Some minor adjustments were made to the WWP survey to address several problems that surfaced during pretesting of the OLQ statements. Pretest participants asked if they were supposed to respond for *now* or for before their injuries—they said their answers would differ for the two time periods. Alumni are instructed in the WWP survey to answer for how they are feeling *now*, and items 2 and 4 were revised to refer to *now*. In addition, the last response option was changed from *Mostly true* to *Almost always true* because the revised response fits better with the other frequency response options (*Rarely true, Occasionally true, Often true, Usually true*) used in the WWP survey.

Figure 51 presents percent positive responses to the statements—that is, the percentage responding *Often true, Usually true, or Almost always true* to positively worded statements and the percentage responding *Rarely true or Occasionally true* to negatively worded statements.

Items with the lowest positive responses continue to be:

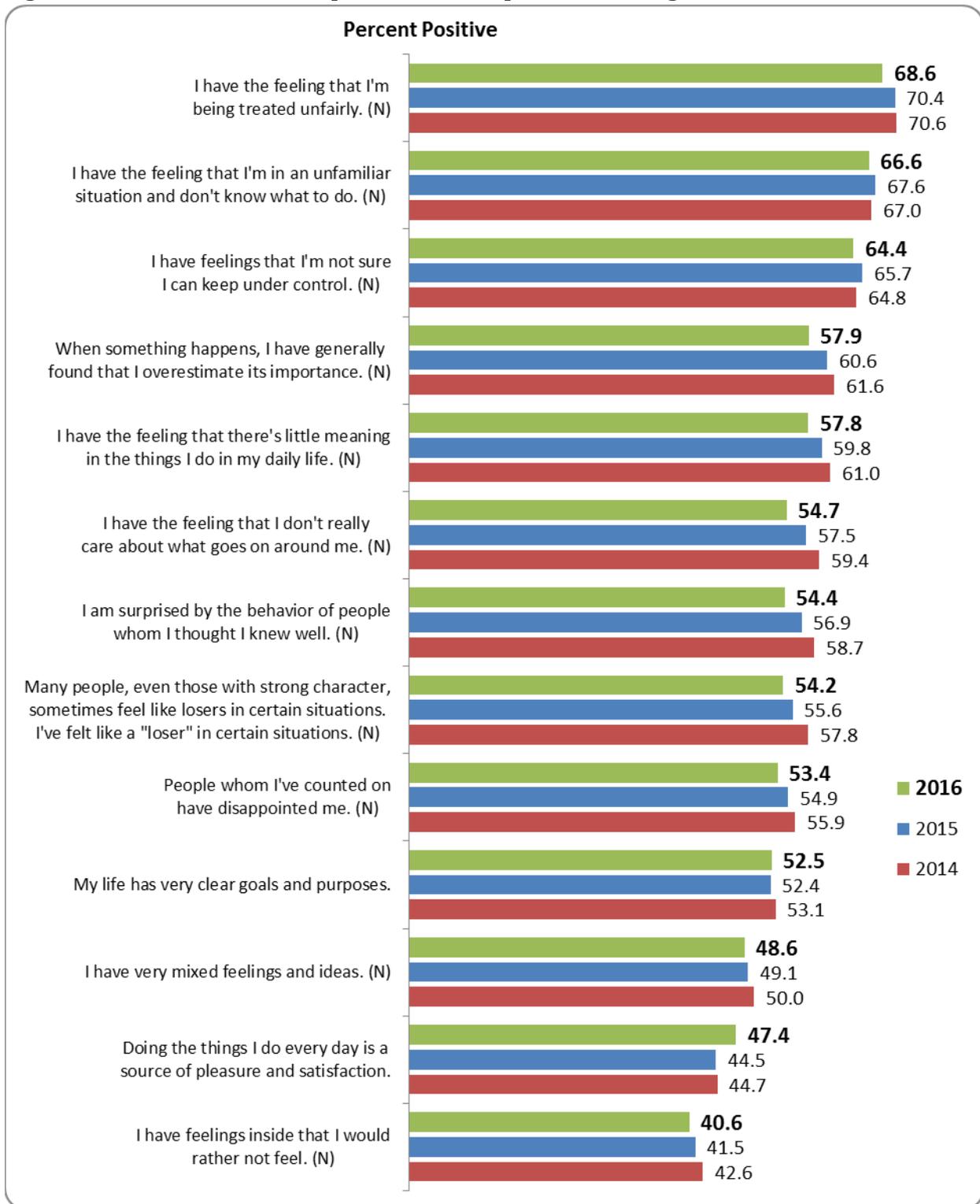
- “I have feelings inside that I would rather not feel” (40.6% *Rarely true* or *Occasionally true*)
- “Doing the things I do every day is a source of pleasure and satisfaction (47.4% *Often true, Usually true, or Almost always true*)

Scale scores for alumni were calculated for the Overall score 13-item version of the OLQ Scale (maximum possible score = 65), as well as for three subscales: Meaningfulness (maximum score = 20), Manageability (maximum score = 20), and Comprehensibility (maximum score = 25). Those with high OLQ Scale scores are better able to deal with stressful situations in life (Antonovsky and Sagy, 1986; Flannery and Flannery, 1990). Given the minor adjustments to the scale when it was incorporated into the WWP survey, users of the data should be aware that comparisons of the following scale score results with other reported OLQ scores may be problematic.

OLQ mean scores for WWP alumni follow:

- Meaningfulness – **12.3** (12.3 in 2015 and 12.5 in 2014)
- Manageability – **14.4** (14.5 in 2015 and 14.6 in 2014)
- Comprehensibility – **17.2** (17.2 in 2015 and 17.4 in 2014)
- Overall OLQ Scale – **43.8** (44.0 in 2015 and 44.4 in 2014)

**Figure 51. Percent Positive Responses to Descriptions of Feelings**



**NOTES:** An (N) after the statement indicates that the item is negatively worded. Percent positive for negatively worded statements is the percentage who answered *Rarely true* or *Occasionally true* to the statement.

## ECONOMIC EMPOWERMENT

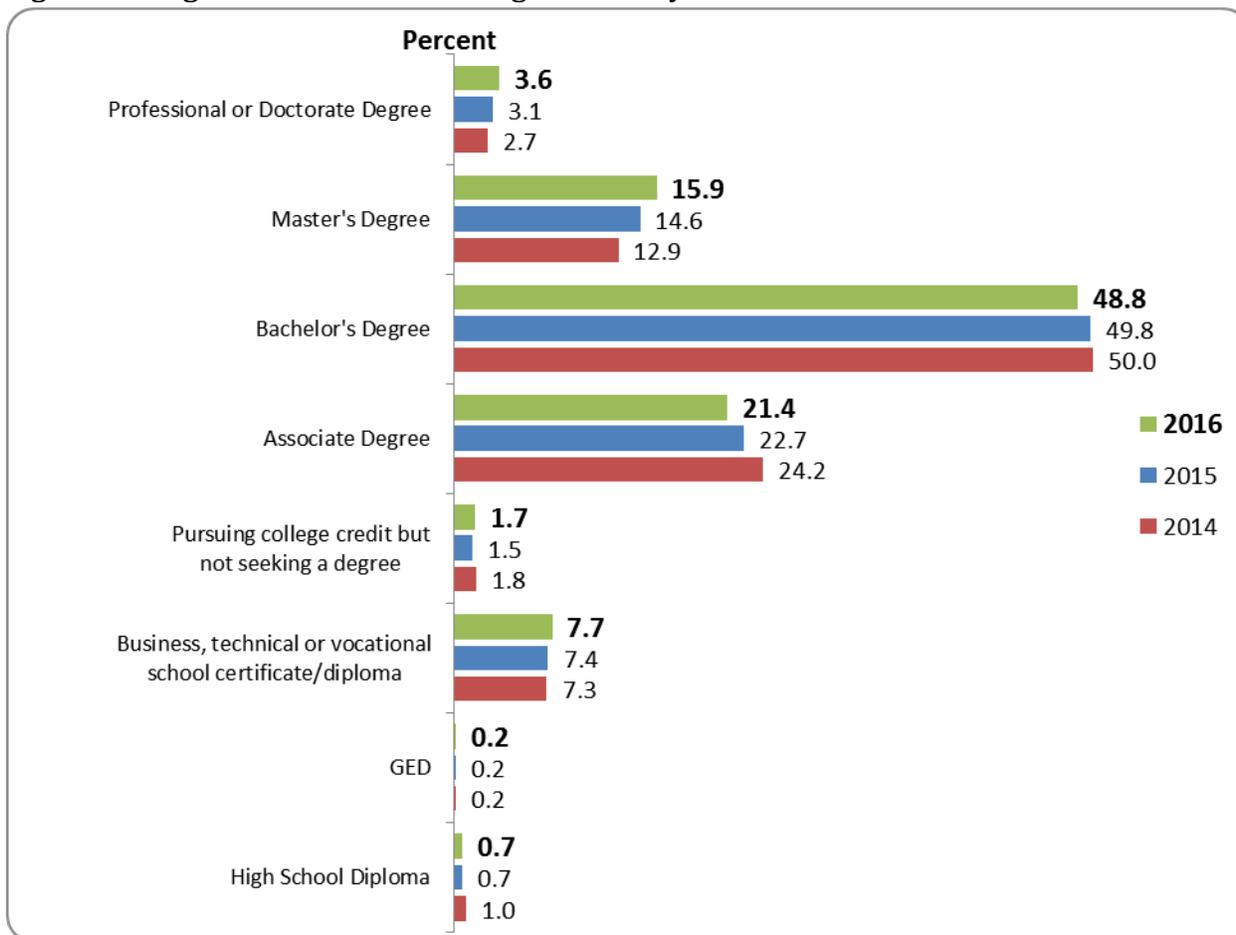
WWP is dedicated to promoting the economic empowerment of wounded warriors. The alumni survey includes questions to measure the economic and financial status of WWP alumni.

### EDUCATION

*CURRENT SCHOOL ENROLLMENT.* As noted earlier in this report, 69.8% of WWP alumni have less than a bachelor’s degree (73.5% in 2015). But about three in ten alumni—28.2 percent—are now enrolled in school and pursuing the following (Figure 52):

- A bachelor’s degree or higher – 68.2%
- An associate degree – 21.4%
- Business, technical, or vocational school training leading to a certificate or diploma – 7.7%

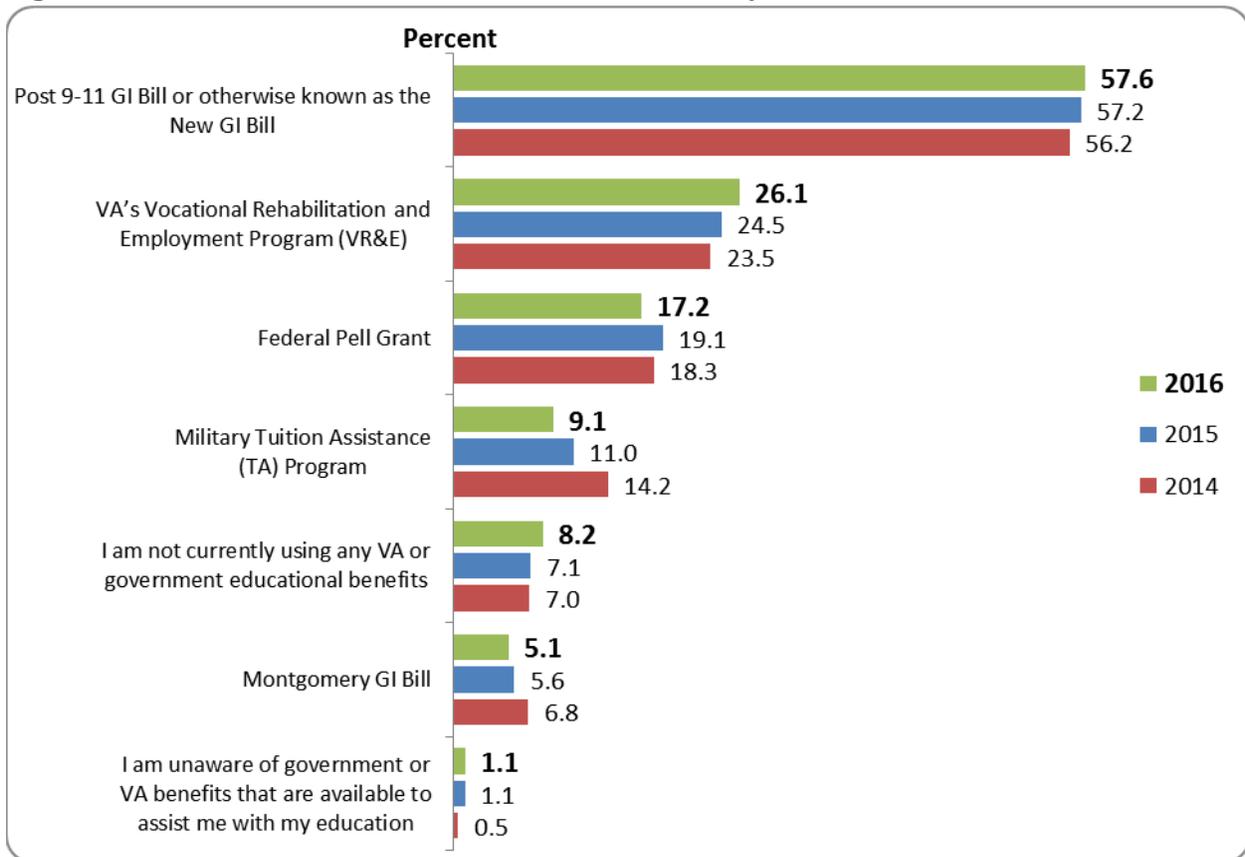
**Figure 52. Degree or Level of Schooling Pursued by School Enrollees**



Alumni currently pursuing more education are using various government benefits and programs to advance their education as shown in Figure 53:

- Post-9/11 GI Bill – 57.6%
- VA’s Vocational Rehabilitation and Employment Program (VR&E) – 26.1%
  - Of the alumni enrolled in the VR&E program, 53.5 percent are using “Employment Through Long Term Services – Training/Education” (down from 57.6% in 2015 and 83.0% in 2014 possibly because of restrictions on years of eligibility for receiving services).

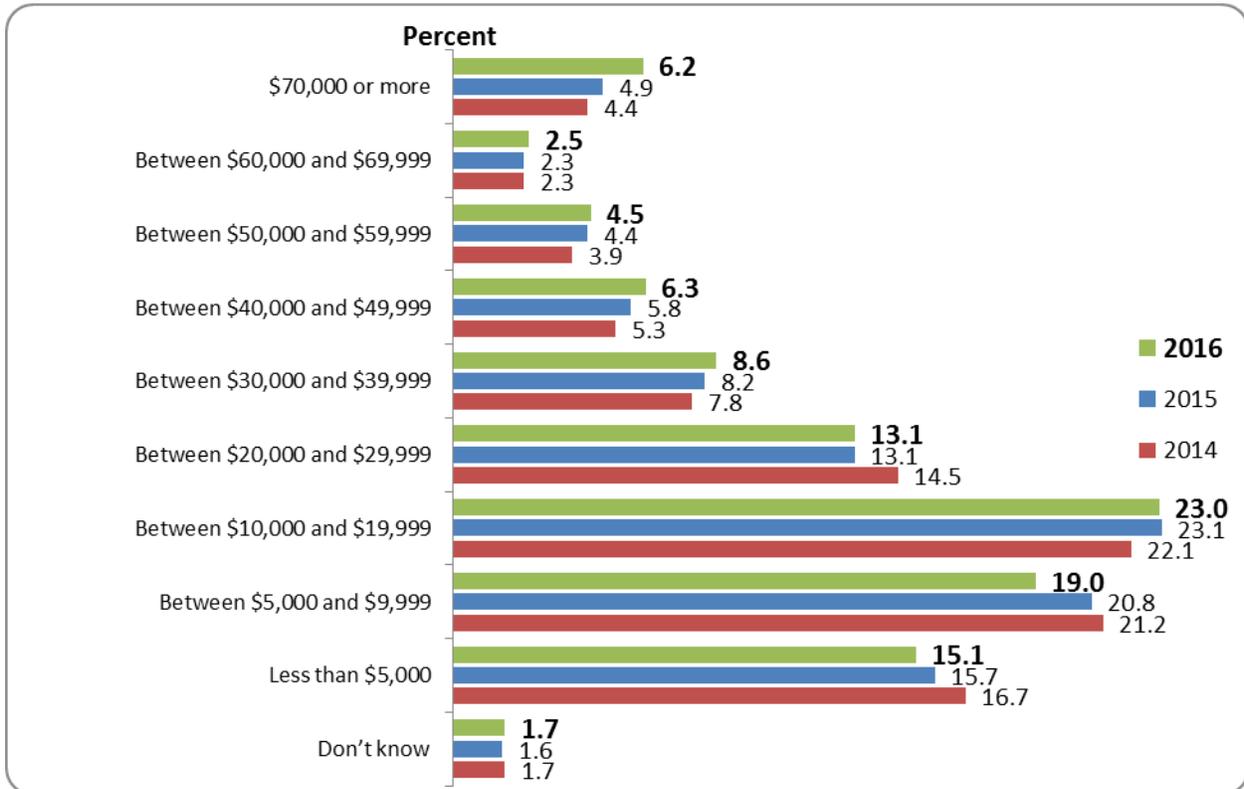
**Figure 53. VA or Government Education Benefits Used by School Enrollees**



*ALUMNI STUDENT LOAN DEBT.* About 29 percent of alumni currently have unpaid student loans. Among that group (Figure 54):

- 15.1 percent owe less than \$5,000
- 55.1 percent owe between \$5,000 and \$30,000
- 28.2 percent owe \$30,000 or more (25.7% in 2015)

**Figure 54. Alumni Student Loan Debt**



## MORE ON UNEMPLOYMENT AND EMPLOYMENT

The economy's recovery is reflected in a lowering of the unemployment rate among all civilians, but less improvement has occurred among veterans, particularly among the WWP alumni population. We reported some BLS employment-related data earlier in the Demographic Section of this report. We add more data here to highlight differences with the 2016 WWP survey population. The BLS findings (U.S. Bureau of Labor Statistics, March 2016) draw from 2015 annual averages for the monthly Current Population Survey and from the 2015 August special supplement on veterans:

### 2015 Annual Averages

- The unemployment rate for Gulf War-era II veterans was 5.8 (compared with the 2014 rate of 7.2 percent).

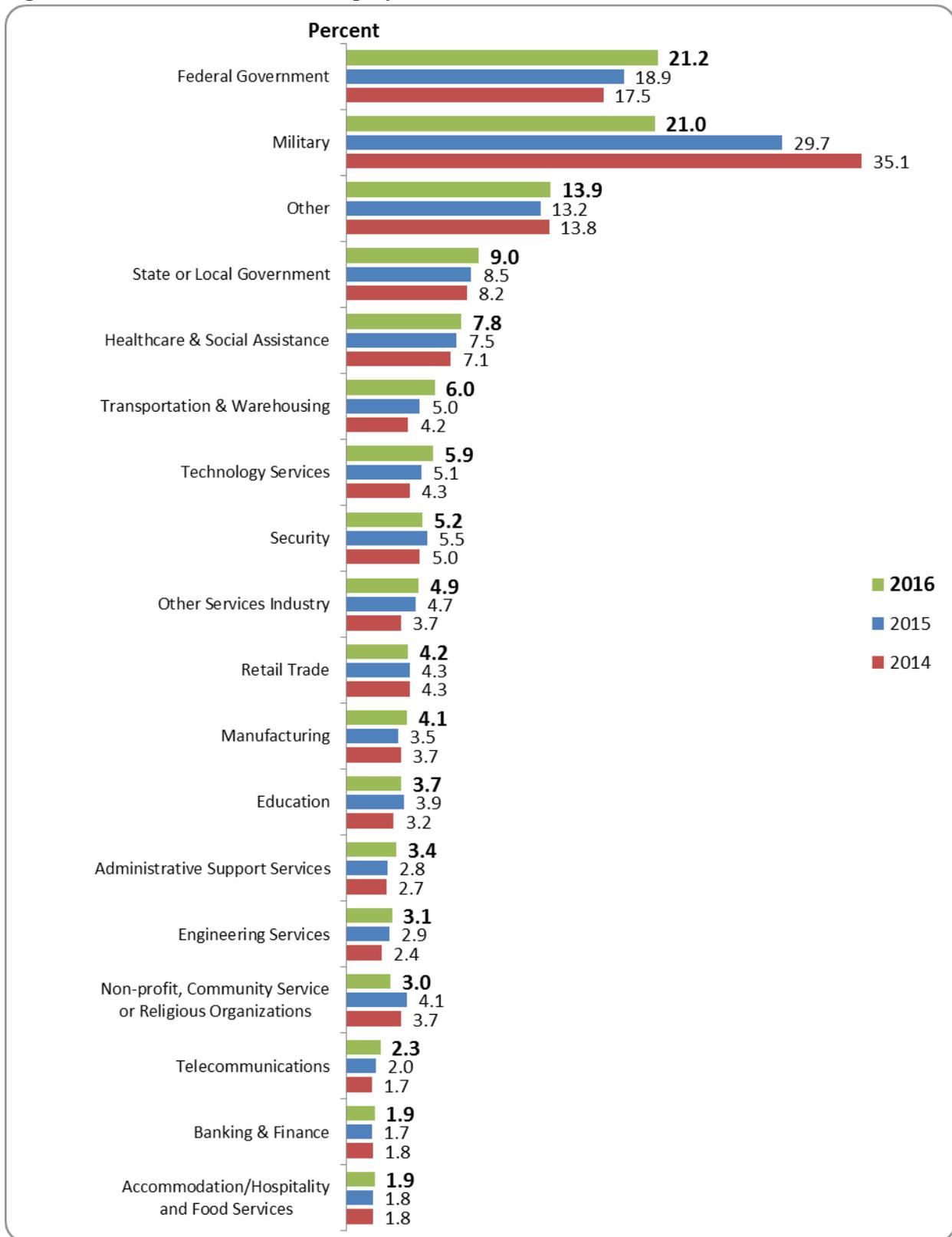
### August 2015 Special Supplement on Veterans

- In August 2015, approximately 46 percent of Gulf War-era II veterans reported they had served in Iraq, Afghanistan, or both. These veterans had an unemployment rate of 4.4 percent in August 2015 (similar to the rate for Gulf War-era II veterans serving elsewhere—5.5%).
- Among Gulf War-era II veterans in August 2015, those who were current or past members of the National Guard or Reserve had a lower unemployment rate (3.5%) than veterans who had never been members (6.2%).
- About one in three of Gulf War-era II veterans reported having a service-connected disability in August 2015. Their unemployment rate was 5.5 percent, which was similar to Gulf War-era II veterans with no disability (4.8%).

*UNEMPLOYED.* As noted earlier in this report, 13.2 percent of WWP alumni are unemployed. Slightly fewer than two-thirds of unemployed alumni (60.0%) looked for a job for 16 weeks or less. More than a fourth of unemployed WWP alumni (27.2%; 32.9% in 2015) meet the Bureau of Labor Statistics definition of long-term unemployed (persons who were jobless for 27 weeks or longer), compared with 25.1 percent of unemployed civilians (U.S. Bureau of Labor Statistics, June 2016).

*EMPLOYED AND SELF-EMPLOYED.* Among the 54.0 percent of alumni working either full time or part time, 5.6 percent are self-employed. Figure 55 shows the distribution of employed alumni by industry. As one might expect, the most common “industries” where alumni are employed are the federal government (21.2%) and the Military (21.0%; down from 29.7% in 2015). Approximately 30 percent work in the public sector (federal, state, and local government).

**Figure 55. Industries in Which Employees Work**



**BLS, Current Population Survey (Annual Averages 2015; August 2015)**

**Gulf War era II veterans:** Served since September 2001

- Much more likely than nonveterans to work in the public sector:
  - 26.4 percent vs. 13.5 percent of nonveterans
- Employed veterans much more likely than employed nonveterans to work for the federal government:
  - 14.3 percent vs. 2.0 percent of nonveterans

**Gulf War era II veterans with a service-connected disability (August 2015):**

- 36.2 percent worked in federal, state, or local government, compared with 23.5 percent of veterans without service-connected disabilities
- 24.8 percent worked for the federal government, compared with 11.1 percent of veterans without service-connected disabilities

**Source:** Tables, 5, 8 (<http://www.bls.gov/news.release/pdf/vet.pdf>).

The 2016 WWP survey results on weeks worked in the past 12 months and weekly hours are similar to the 2015 and 2014 results (Table 8):

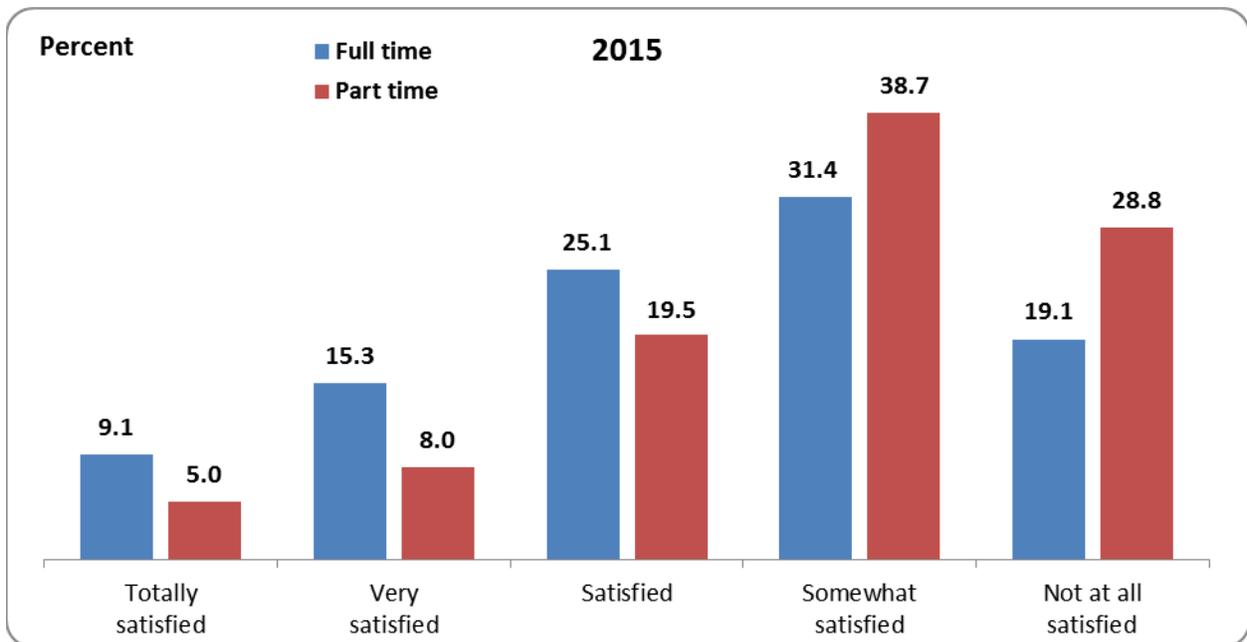
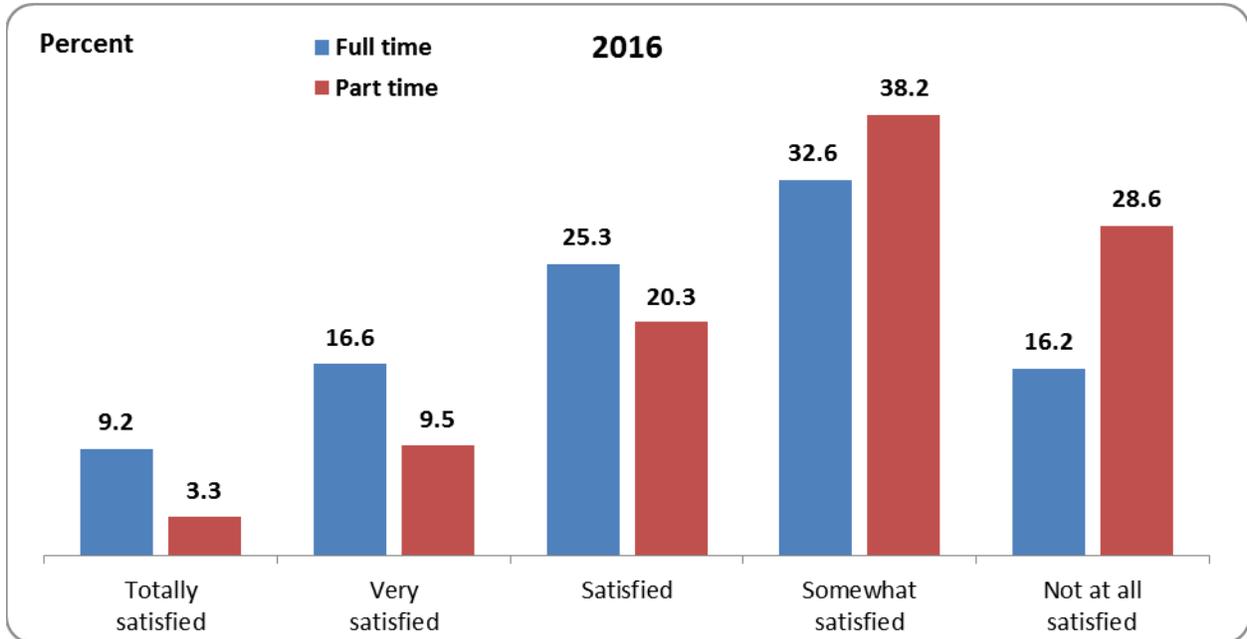
- 47.1 percent (compared with 49.7% in 2015) are employed full time, and 7.1 percent are employed part time.
- After a drop in 2015, median weekly wage for full-time employees went back up this year to the same wage as 2014.
- Both full- and part-time employees, respectively, reported a similar number of hours worked each week for 2015 and 2016.
- Part-time employees worked 15 fewer weeks, on average, in the past 12 months than the full-time employees did (29 vs. 44 weeks).

**Table 8. Summary Employment Information, by Full-Time and Part-Time Work Status**

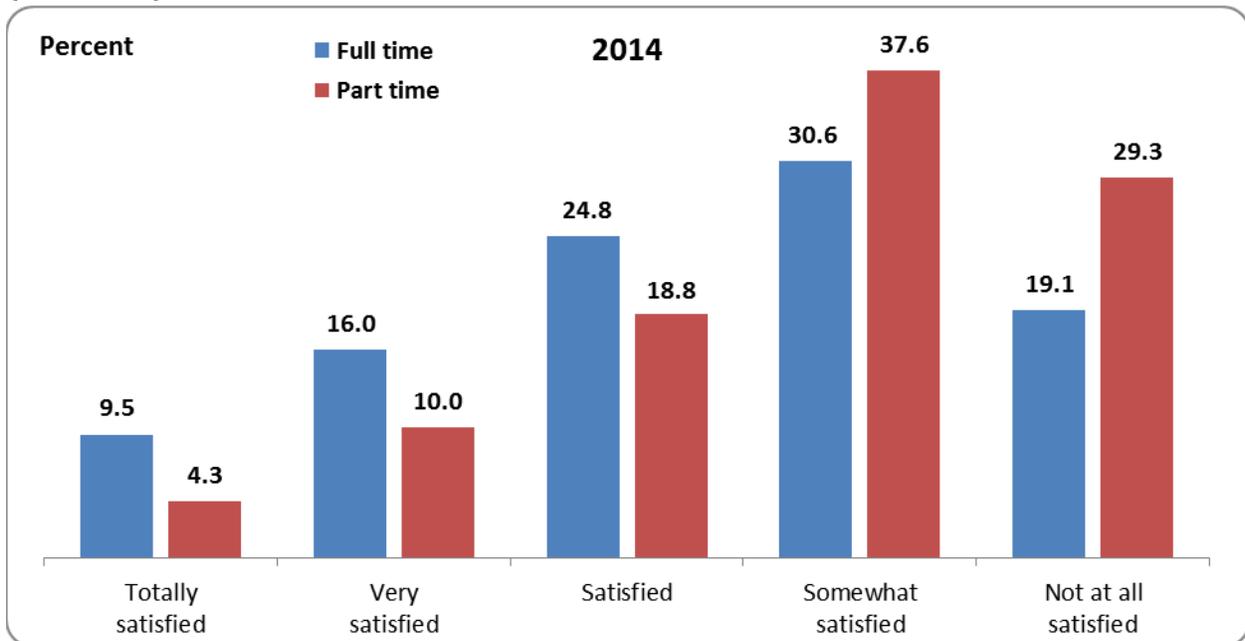
	Mean	Median
<b>Employed full time</b>		
During the past 12 months, how many weeks did you work?		
2016	44 weeks	
2015	43 weeks	
2014	43 weeks	
During the weeks you worked in the past 12 months, how many hours did you usually work each week?		
2016	42 hr/wk	
2015	42 hr/wk	
2014	42 hr/wk	
How much is your current weekly wage?		
2016		\$800/wk
2015		\$760/wk
2014		\$800/wk
<b>Employed part time</b>		
During the past 12 months, how many weeks did you work?		
2016	29 weeks	
2015	29 weeks	
2014	29 weeks	
During the weeks you worked in the past 12 months, how many hours did you usually work each week?		
2016	24 hr/wk	
2015	25 hr/wk	
2014	25 hr/wk	
How much is your current weekly wage?		
2016		\$200/wk
2015		\$200/wk
2014		\$200/wk

Satisfaction with employment is higher among full-time workers than part-time workers. About half of full-time employed alumni (51.2%) are *satisfied*, *very satisfied*, or *totally satisfied* with their employment, compared with 33.1 percent of part-time employed alumni (Figure 56).

**Figure 56. Level of Satisfaction With Employment, by Full-Time and Part-Time Status**



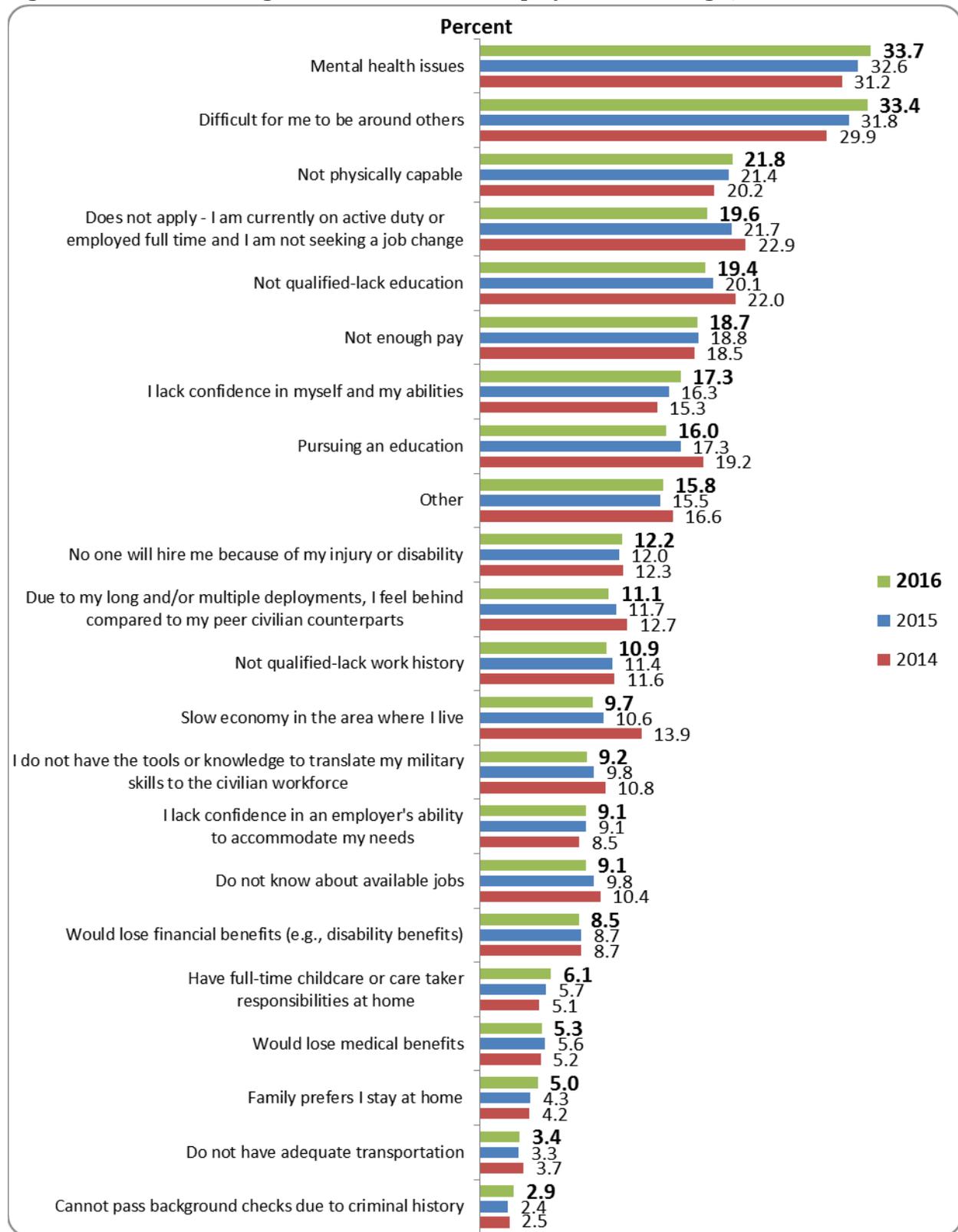
**Figure 56. Level of Satisfaction With Employment, by Full-Time and Part-Time Status (continued)**



*ALL ALUMNI.* All alumni were asked which of a list of factors make it more difficult for them to obtain employment or change jobs. About 80 percent (80.4%) of all alumni selected at least one factor. Top findings include the following:

- For about a third of alumni, “mental health issues” (33.7%) and “difficult for me to be around others” (33.4%; Figure 57) were each factors making it difficult to obtain or change jobs.
- For about 18 to 22 percent of alumni in 2016, the following factors contributed to difficulties in getting or changing jobs: “not physically capable,” “not qualified—lack education,” and “not enough pay.”

**Figure 57. Factors Making It Difficult to Obtain Employment or Change Jobs**



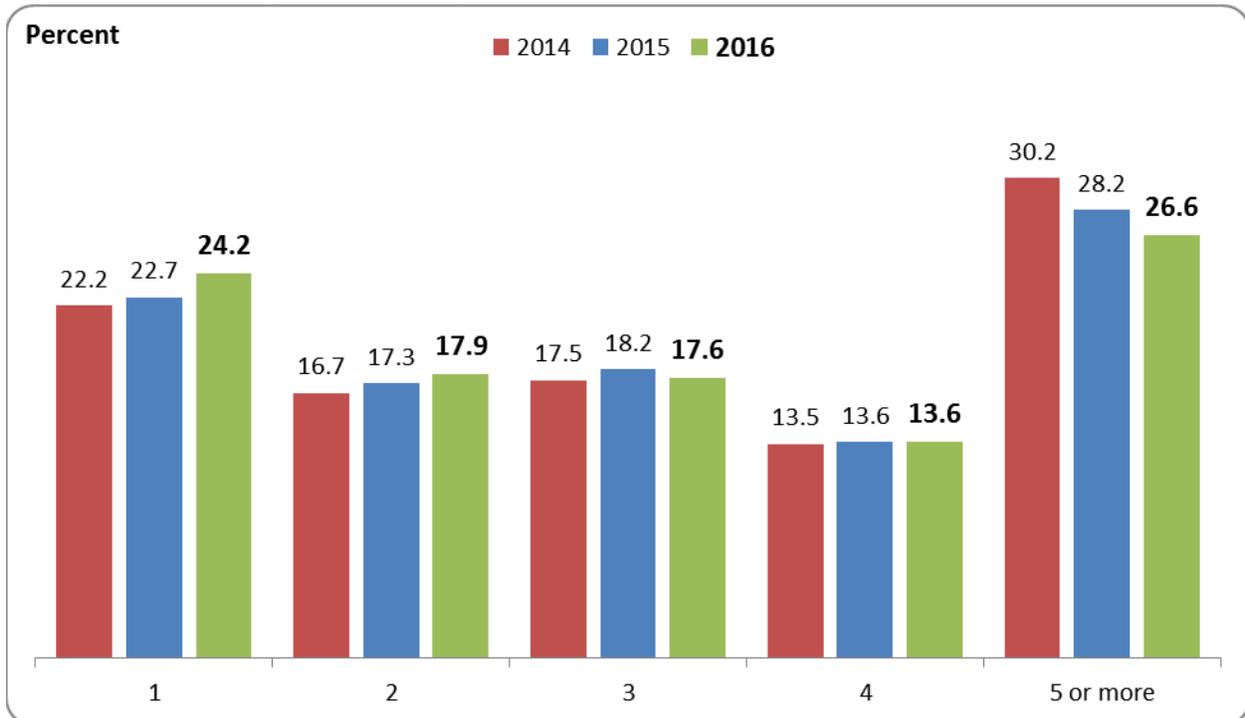
## Top Two Factors Making It Difficult to Obtain Jobs or Change Jobs, by Labor Force Status

The findings on difficulties in obtaining or changing jobs varied by labor force status. The factor “mental health issues” emerged as a new top factor in 2016 for alumni employed part time. The top two factors for the three remaining groups remained the same as 2015:

- Employed full time: “not enough pay” (21.6%) and “not qualified-lack education” (19.2%)
- Employed part time: “mental health issues” (32.1%) and “difficult for me to be around others” (32.0%)
- Unemployed: “difficult for me to be around others” (37.2%) and “mental health issues” (36.1%)
- Not in the labor force: “mental health issues” (60.1%) and “difficult for me to be around others” (56.6%)

Among all alumni who reported factors, the mean number of factors causing difficulty in obtaining or changing jobs was 3.5 (Figure 58). Of those alumni who reported at least one factor, about 4 in 10 alumni (40.2%) checked four or more factors that make it difficult to obtain employment or change jobs.

**Figure 58. Percentage of Alumni by Number of Factors Selected**



## INCOME

As in the earlier WWP annual alumni surveys, alumni were asked to report two types of income received in the past 12 months: (1) income they earned from work (includes wages, salary, bonuses, overtime, tips, commissions, profit from self-employed professional practice or trade, second jobs), military reserve pay, and rent from roomers or boarders; and (2) income received in the past 12 months from various benefit, cash assistance, and disability programs.

*INCOME FROM WORK.* Alumni reported the following amounts of earned income from work in the past 12 months:

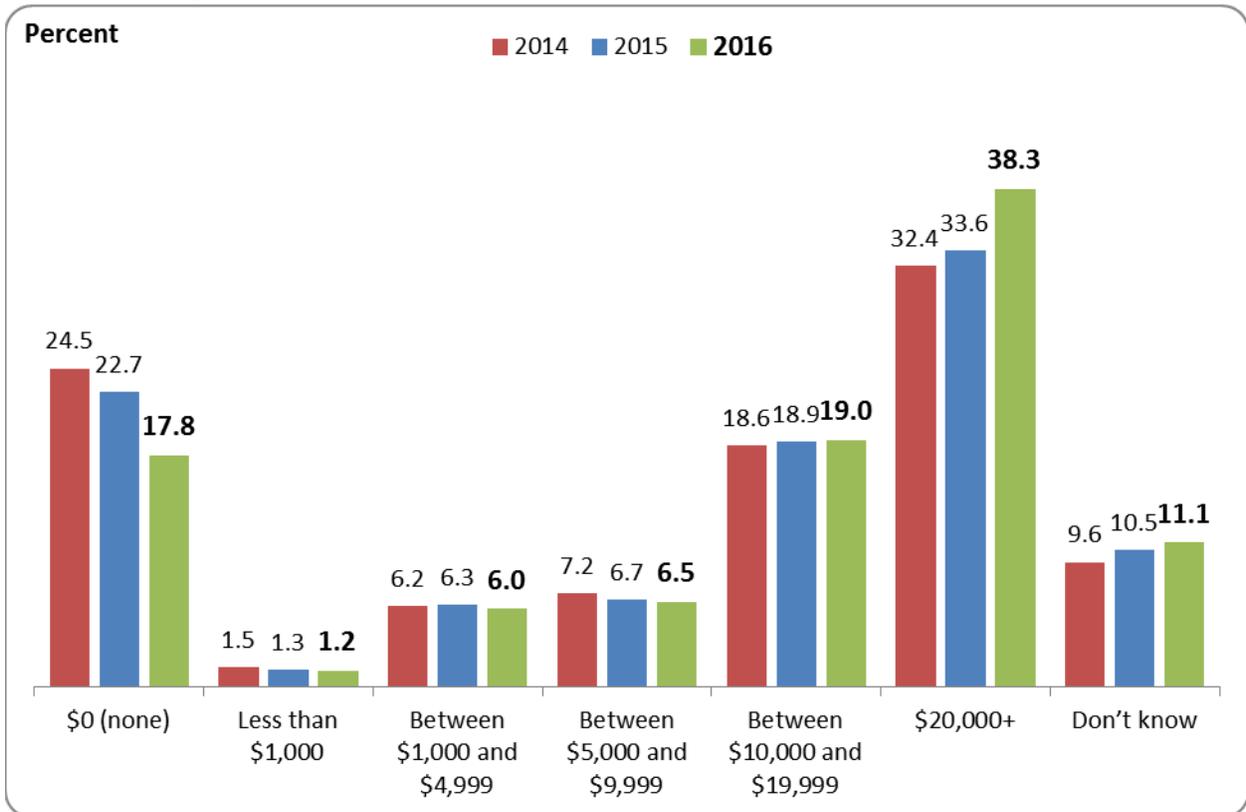
- Less than \$10,000 – 38.0% (35.7% in 2015)
- \$10,000 to \$24,999 – 11.9%
- \$25,000 to \$39,999 – 14.2%
- \$40,000 to \$59,999 – 15.4%
- \$60,000 or higher – 15.3%
- Don't know – 5.1%

Income data were analyzed separately for full- and part-time employees. Among alumni employed full time who reported their income for the past 12 months, just under half (47.0% in 2016, 48.8% in 2015, and 51.3% in 2014) earned less than \$45,000. Among alumni employed part-time, more than half earned less than \$15,000 (54.6% in 2016, 56.2% in 2015, and 55.5% in 2014).

*OTHER INCOME.* WWP alumni were asked to report on money received in the past 12 months from various military and VA benefit, cash assistance, and disability programs. WWP alumni are receiving more monetary assistance from governmental programs than in the past. Nearly 4 in 10 alumni (38.3%, up from 33.6% in 2015) received \$20,000 or more in income from those sources (Figure 59):

- \$20,000 to \$39,999 – 23.6%
- \$40,000 to \$59,999 – 10.1%
- \$60,000 or more – 4.7%

**Figure 59. Money Received in Past 12 Months from Various Benefit, Cash Assistance, and Disability Programs**



NOTE: Numbers may not add to 100 due to rounding.

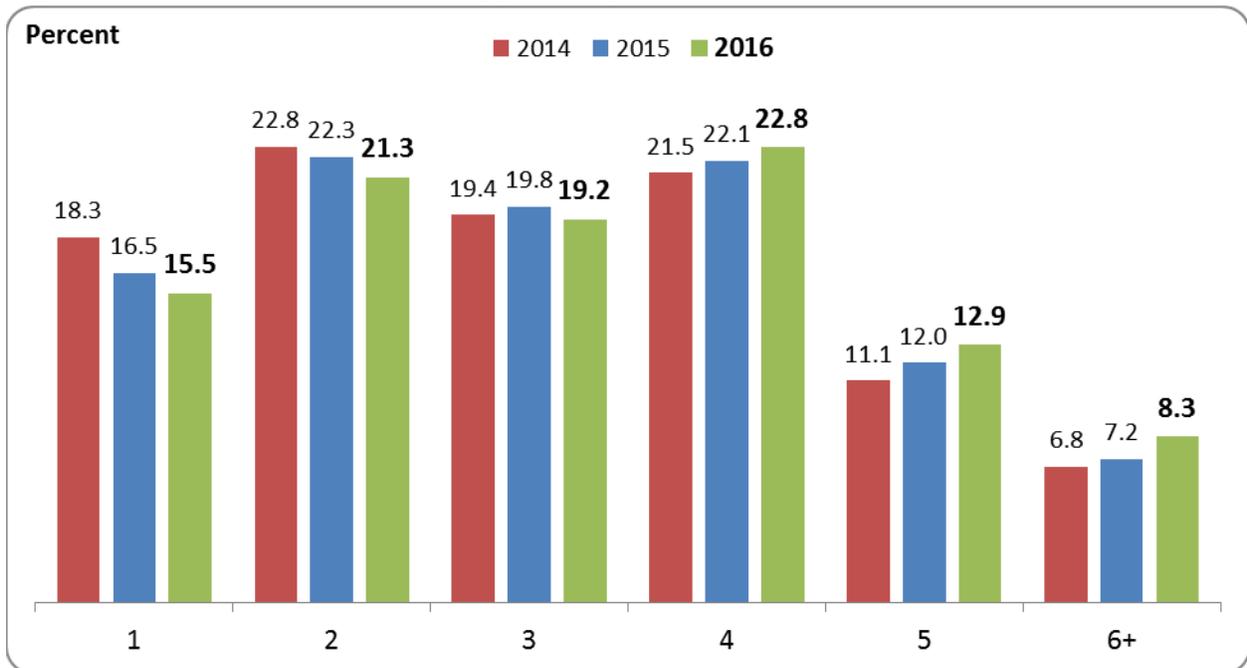
About 60 percent of WWP alumni (59.8%) are currently sharing household expenses with a spouse or partner. They reported the following amounts of spouse/partner income:

- \$0 – 13.8%
- \$1 to less than \$5,000 – 5.1%
- \$5,000 to less than \$25,000 – 27.3%
- \$25,000 to less than \$50,000 – 26.4%
- \$50,000 or more – 15.3%

These amounts are similar to those reported in 2015. About 12 percent did not know their spouse/partner’s income.

*HOUSEHOLD SIZE.* The number of people in the warrior’s household supported by household income is usually four or fewer (Figure 60). The percentage of such households with one or two persons is 36.8 percent.

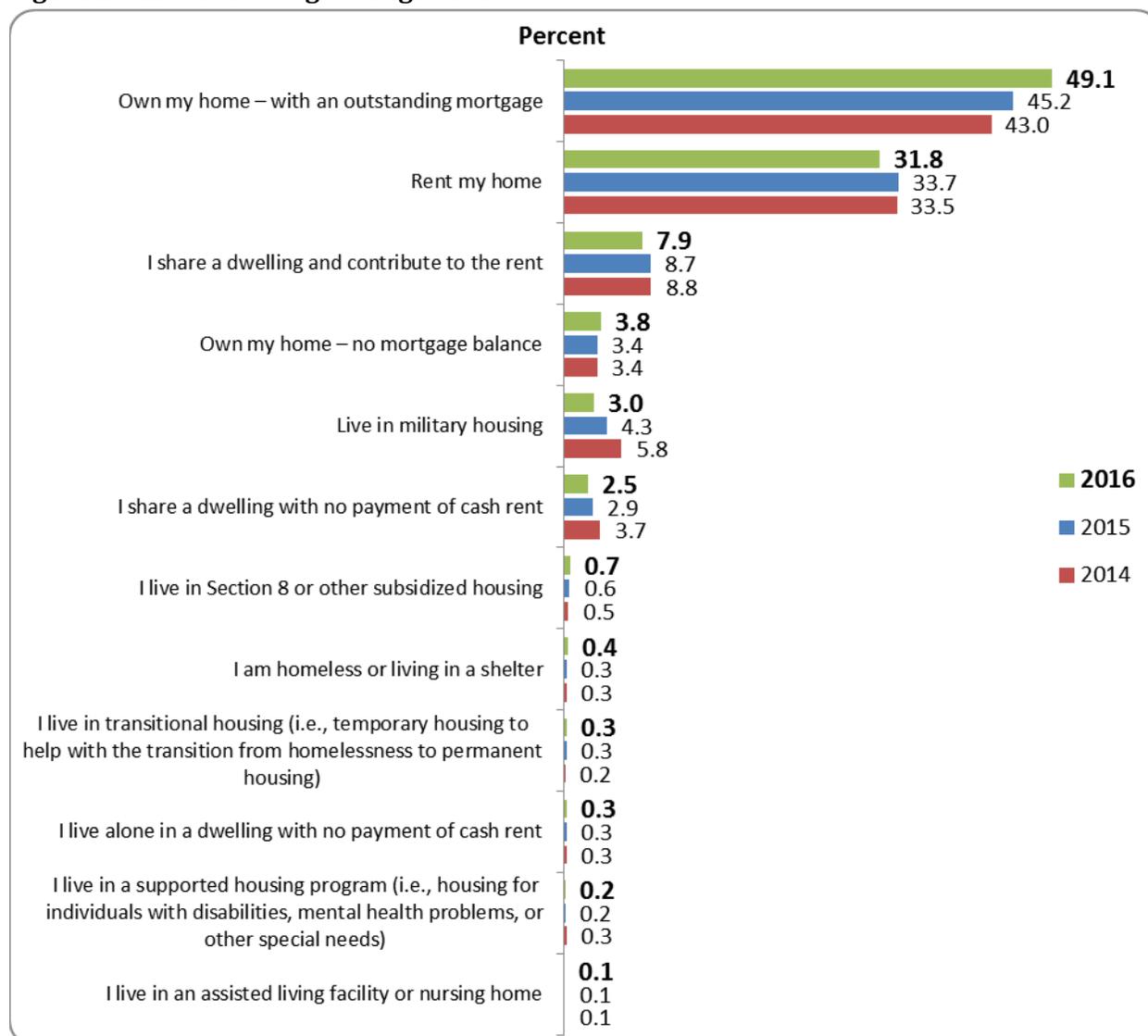
**Figure 60. Number in Household Supported by Household Income**



## CURRENT LIVING ARRANGEMENT

Most alumni continue to own or rent their homes (Figure 61), and home ownership has increased. The homeownership rate among alumni is 52.9 percent (up from 48.6% in 2015): 49.1 percent currently own their own homes with an outstanding mortgage, and 3.8 percent own their homes with no mortgage balance. Alumni home ownership with a mortgage varies by age group: 35 years and older—57.8 percent; less than 35 years old—37.2 percent. As of the first quarter of 2016, the homeownership rate among U.S. adults under 35 years old was 34.2 percent (Callis & Kreslin, 2016). Nearly one-third of alumni (31.8%) rent their homes.

**Figure 61. Current Living Arrangement**

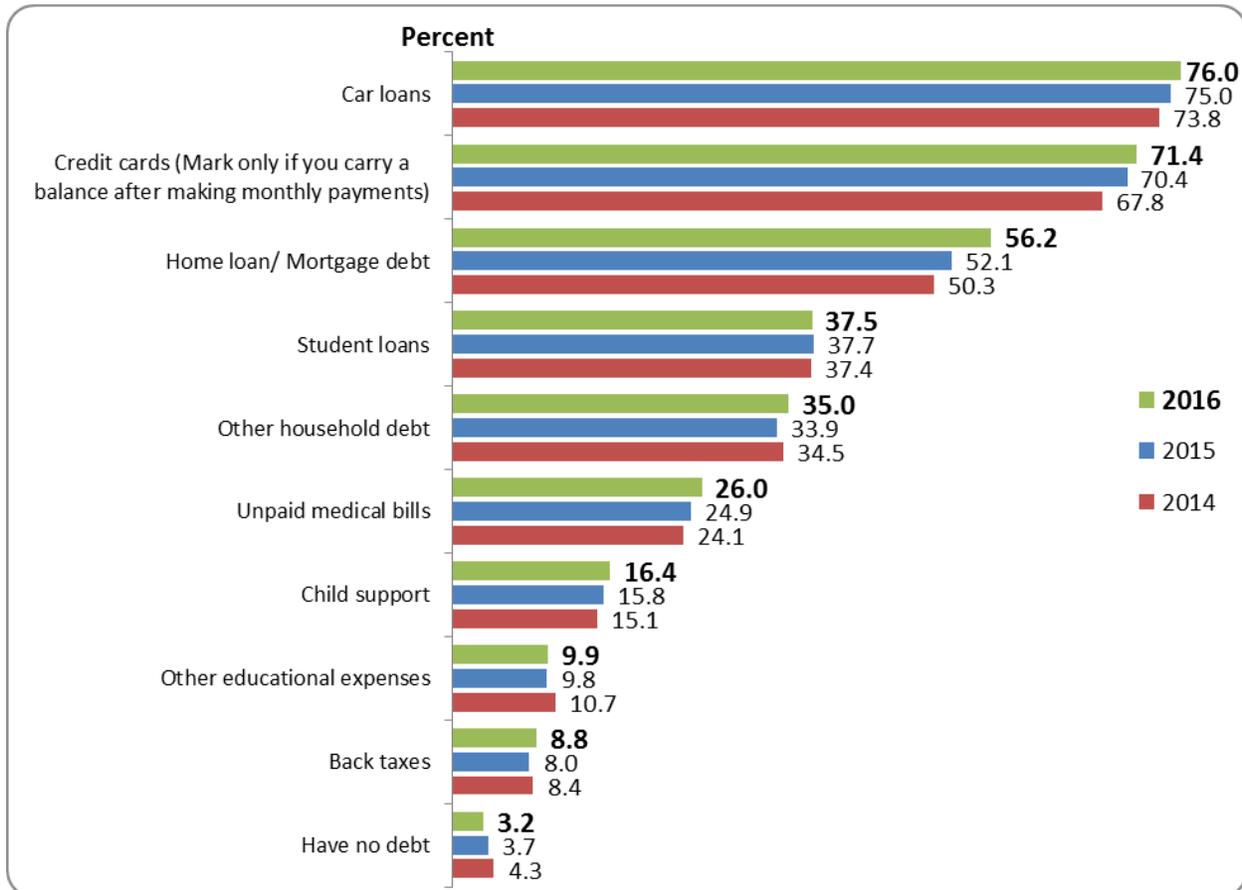


## DEBT

The survey asked alumni to report all forms of current debt and their total outstanding debt.

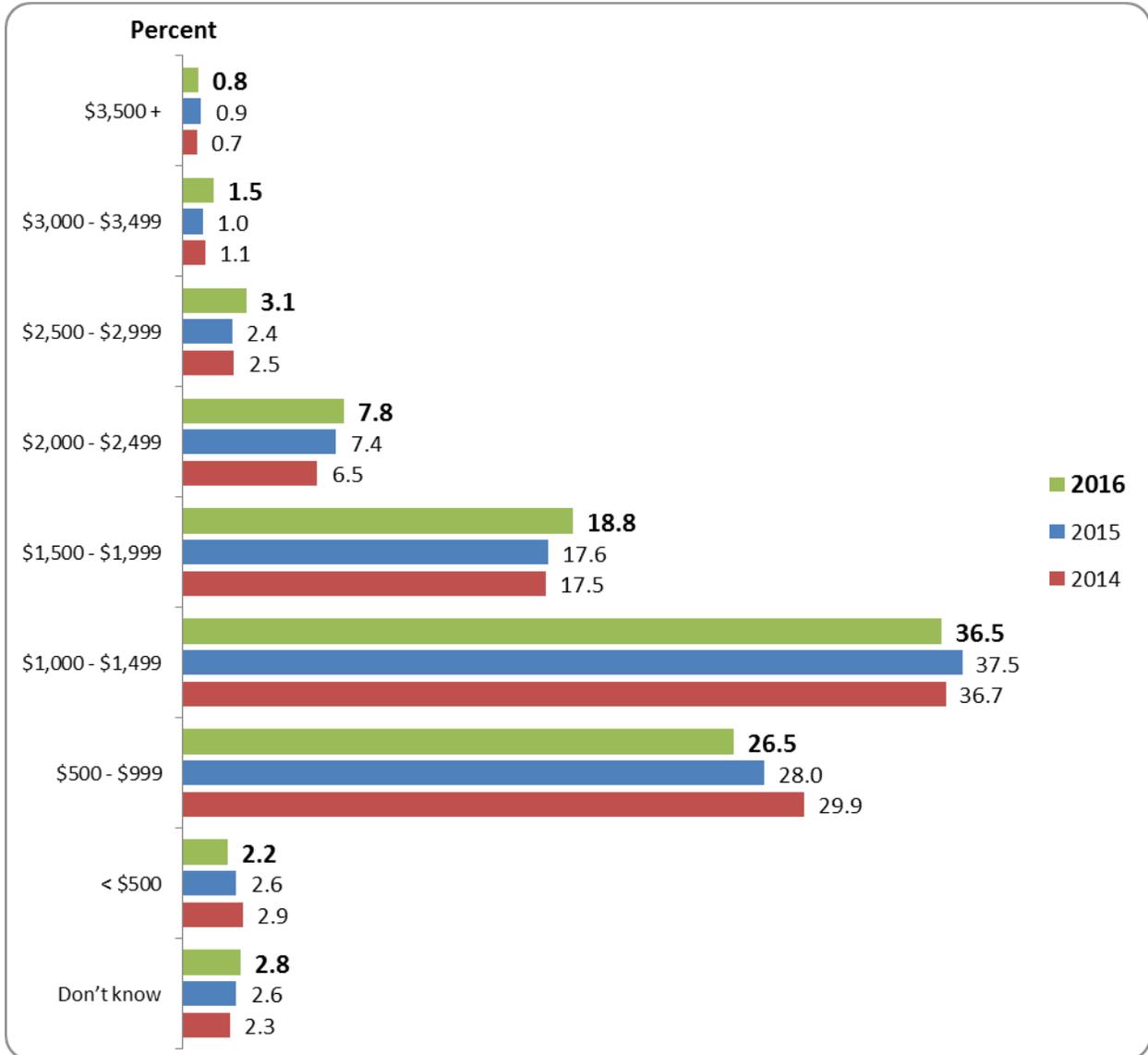
*FORMS OF DEBT.* As in 2015, car loans and credit card debt are the most common forms of debt in alumni households, followed by home loans/mortgage debt, student loan debt, and other household debt (Figure 62). A small percentage of alumni said they had no debt (3.2%).

**Figure 62. Current Forms of Debt**



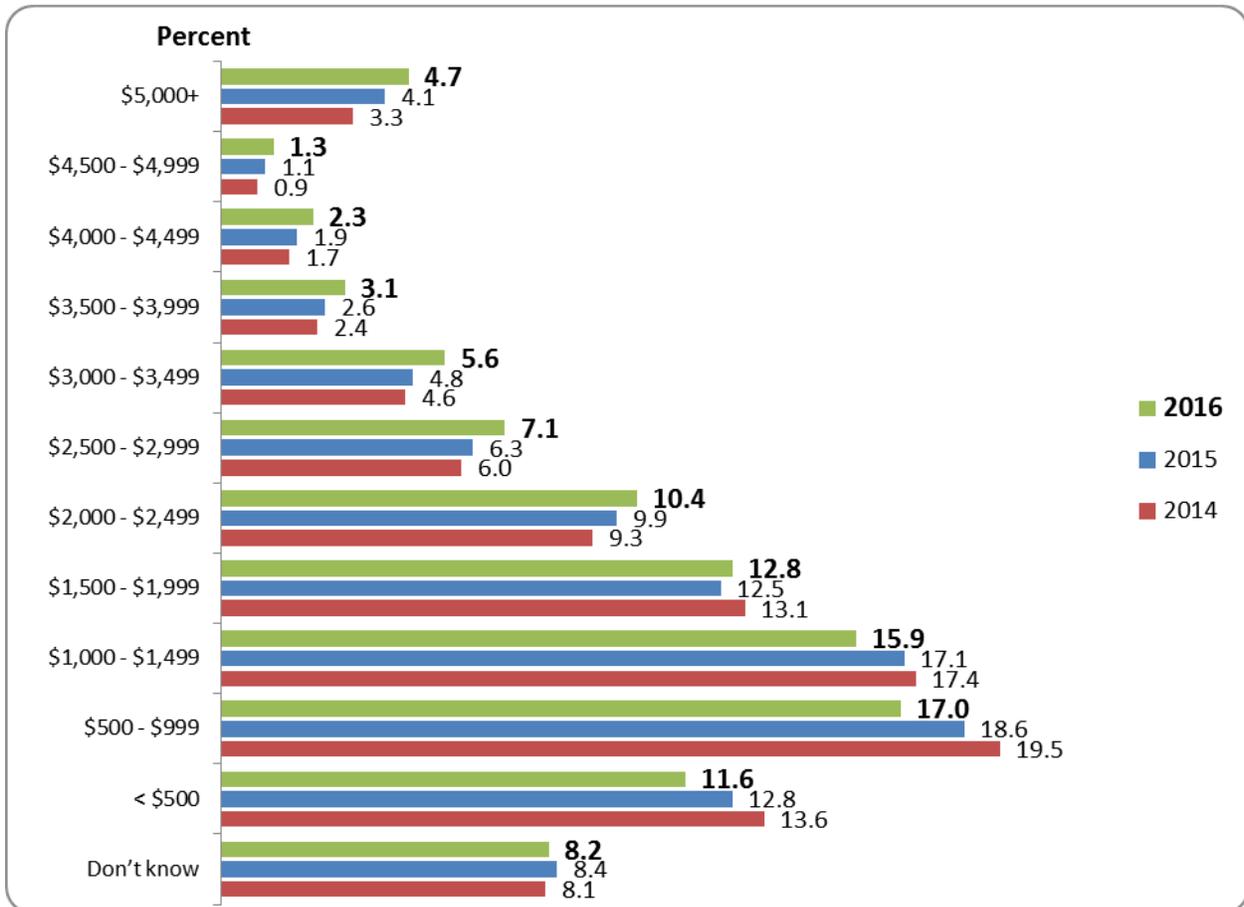
*TOTAL DEBT.* Figure 63 shows the monthly mortgage payments paid by alumni with mortgage debt. About 65 percent (65.2%) pay less than \$1,500 a month.

**Figure 63. Monthly Home Mortgage Payments**



Among alumni with debt, excluding mortgages on primary residences, just under a third (28.6%) pay less than \$1,000 per month on total household debt they owe, and another 39.1 percent make monthly payments ranging from \$1,000 to less than \$2,500 (Figure 64).

**Figure 64. Monthly Payments on Total Debt Owed, Excluding Mortgage Debt on Primary Residence**



*RATIO OF MONTHLY HOUSEHOLD DEBT PAYMENTS TO MONTHLY HOUSEHOLD INCOME.* A WWP indicator related to alumni economic empowerment focuses on the ratio of total monthly household debt payments to total monthly household income. We calculated debt-to-income ratios for two main groups of alumni.

**Group 1: Alumni who currently own their own homes with an outstanding mortgage**

We used the following formula to calculate the debt-to-income ratio for this group:

$$\{[(\text{Monthly home mortgage payment on primary residence} + \text{total monthly payments on other household debt owed}) / ((\text{Total income from work in the past 12 months} + \text{Total income from military and Veterans compensation and other cash assistance or disability programs in the last 12 months} + \text{Spouse or partner income in the past 12 months}) / 12] \times 100\}^*$$

\*For income values, we used the midpoint of gross income ranges as collected in the survey.

As indicated in the formula, this ratio was estimated only for alumni who own their homes with an outstanding mortgage who also provided responses about their income, or lack of income, from the sources specified in the formula (39.9% of all alumni).

We then estimated the percentage of alumni within this group whose debt-to-income ratio exceeds the general VA mortgage qualification ratio of 41 percent or less:

- Among all alumni with an outstanding mortgage who also provided responses about their household income, **64.2** percent (63.0% in 2015) have a debt-to-income ratio > 41 percent.
  - Among the subgroup of alumni with an outstanding mortgage who answered the question about spouse/partner income, **58.3** percent (57.4% in 2015) have a debt-to-income ratio > 41 percent.
  - Among the subgroup of alumni with an outstanding mortgage with no spouse/partner (or did not answer the question about spouse/partner income), **76.6** percent (74.8% in 2015) have a debt-to-income ratio > 41 percent.

The monthly debt payments for these alumni homeowners are likely burdensome for many of them. For those considering whether to sell their homes, it may be difficult for them to qualify for a new VA loan unless their new mortgage payments are significantly lower than what they are paying now.

## **Group 2: Alumni who currently do not own their own homes**

Many non-VA mortgage financing organizations separate the debt-to-income ratio into two parts—the front-end ratio and the back-end ratio, such as 28/36 or 33/45. The 28 represents the percentage of income that goes toward housing costs, and the 36 represents the percentage of income that goes toward paying all recurring debt payments, including front-end housing payments. The difference between the two ratios represents “non-housing-related” household debt payments, or other monthly household debt payments. Thus, for the first example, other monthly household debt payments should not exceed approximately 8 percent of monthly income if their front-end housing costs are 28 percent of income, and for the second example, other debt payments should not exceed approximately 12 percent of income if housing costs are about 33 percent. We used these two benchmarks of 8 percent and 12 percent to assess the debt-to-income ratio for alumni who do not currently own their home (with or without a mortgage) and who answered the income questions (35.9% of all alumni). The results for these ratios are presented below and are similar to the 2015 results:

- 91.2 percent of this group of alumni have a “nonhousing” debt-to-income ratio > 8 percent
- 84.1 percent of this group have a “nonhousing” debt-to-income ratio > 12 percent

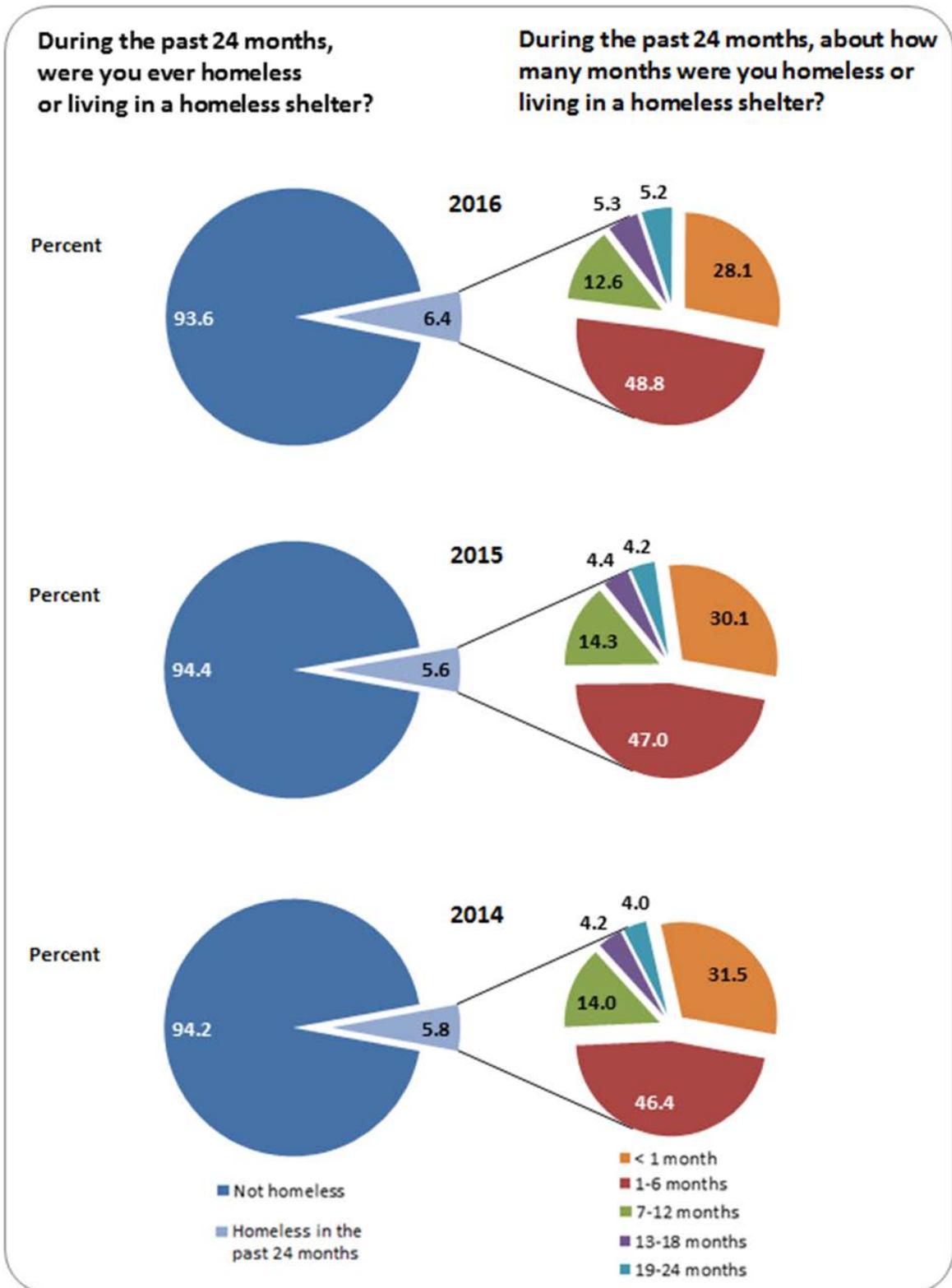
Alumni who would like to buy a home may find it difficult to qualify for a mortgage if their nonhousing debt-to-income ratios exceed 8 percent, especially if they have limited savings.

## HOMELESSNESS

Homelessness among post-9/11 veterans continues to be a concern. Just over 6 percent of alumni (6.4%; 5.6% in 2015) were homeless or living in a homeless shelter during the past 24 months (Figure 65). Among them, about 28 percent were homeless for less than 30 days, 48.1 percent were homeless for 1-6 months, 12.6 percent were homeless for 7-12 months, and 10.5 percent were homeless for 13-24 months.

The mean number of days among all alumni who were homeless was 152, or about 5 months (up from 146 days in 2015). For those homeless for less than 30 days, the mean number of homeless days was about 15; for those homeless for 1 to 24 months, the mean number of homeless days was 205, or between 6 and 7 months.

Figure 65. Alumni Experience With Homelessness During the Past 24 Months



Factors related to homelessness during the past 24 months among alumni include PTSD, TBI, and alcohol or drug problems:

- Are younger than 35 years old – 54.3% (compared with 42.5% of all alumni)
- Are male – 82.4% (compared with 85.3% of all alumni)
- Have a positive score on the Primary Care PTSD scale in the survey – 86.2% (compared with 72.4% of all alumni)
- Experienced TBI during their military service since September 11, 2001 (self-reported in the survey) – 46.4% (compared with 40.6% of all alumni)
- Have a positive score on the PDHA/PDHRA alcohol screen in the survey – 21.6% (compared with 14.6% of all alumni)
- Visited a professional, such as a doctor, a psychologist, or counselor in the last 3 months to get help with issues such as stress, emotional, alcohol, drug or family problems – 65.0% (compared with 53.3% of all alumni)

Also, among alumni who were homeless during the past 24 months, 20.9 percent received government housing assistance, such as rental assistance vouchers, transitional housing, supportive housing, or participation in a Housing First program.

In 2010, a federal strategic plan was implemented to prevent and end homelessness by 2015. In June 2015, the goal was amended to prevent and end homelessness among veterans in 2015 and finish ending chronic homelessness in 2017 (United States Interagency Council on Homelessness, 2015). The amendment also included the following information, showing that the characteristics of alumni experiencing homelessness are similar to homeless veterans as a whole:

- About 9 percent of homeless veterans are female
- About half of homeless veterans have mental illnesses; 70 percent experience issues with substance abuse; more than half have other health problems
- Veterans diagnosed with PTSD before separating from the military were 13 percent more likely to experience homelessness than other veterans

The *Data Report from the National Survey of Homeless Veterans in 100,000 Homes Campaign Communities* (2011) indicates that age, military service, and substance abuse are strong predictors of homelessness. Veterans (of all ages) are overrepresented among the homeless populations in the communities included in the survey and have experienced longer durations of homelessness than nonveterans.

The report included comparison data between veterans who had served in Iraq and Afghanistan and other veterans. Among Iraq/Afghanistan veterans:

- Twenty-seven percent reported traumatic brain injury, compared with 19 percent of other veterans
- Forty-six percent reported some form of mental health treatment, compared with 41 percent of other veterans

## **NEW!** Financial Management

In the 2016 survey, 15 questions were added comprising the Financial Management Behavior Scale (FMBS) (Dew, 2011). The scale was developed to measure overall financial management behavior and involves four subscales: Savings and investment; cash management; credit management; and insurance. Scores range from one to five, where a higher score shows better financial management behavior. The following are the average scores for alumni:

- Overall score = 3.1
- Savings and investment subscale score = 2.4
- Cash management subscale score = 3.5
- Credit management subscale score = 3.1
- Insurance subscale score = 3.6

These scores are somewhat lower than the scores from the 2009 Familial Response to Financial Instability Study, a nationally representative sample of adults:

- Overall score: 3.48
- Savings and investment subscale score: 2.66
- Cash management subscale score: 3.73
- Credit management subscale score: 3.73
- Insurance subscale score: 3.81

However, results are not directly comparable because the demographics are different. Participants in this study were 45% married (compared with 66.5% WWP alumni); and 43% employed full time (compared with 46.9% of WWP alumni). This study's population was also older, with an average age of 46.5 (compared with 38 for WWP alumni).

Also in 2016, more specific questions from previous WWP alumni surveys about bank accounts, savings plans, and emergency funds were removed from the survey.

The FMBS does include one question on emergency funds – 27.3% of alumni started or maintained their emergency fund, *often* or *always*, which is comparable to the 29.9% of alumni who answered yes to having an emergency fund in 2015.

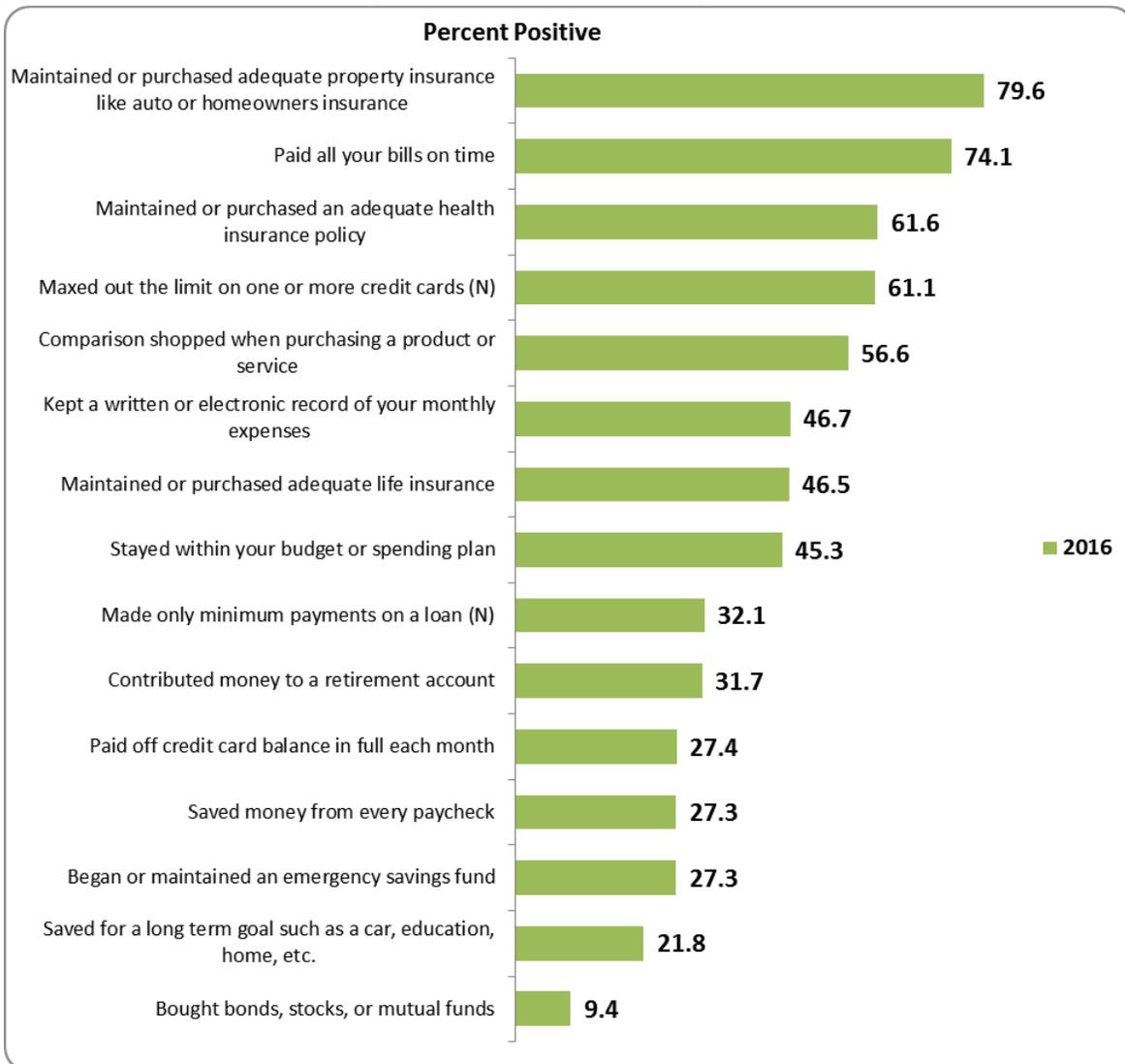
Additionally, the FMBS asks how often alumni contribute money to a retirement plan. About 32 percent of alumni have contributed to a retirement plan either *often* or *always*. In the 2015 survey, alumni were asked what kinds of savings plans they participated in – 34.5% participated in a 401(k), 403(b), or other retirement plan, an IRA, or both.

Top findings from individual items in the FMBS include:

- 28.2 percent never maintained or purchased an adequate health insurance policy in the past year
- About half (50.2%) never or seldom saved money from every paycheck in the past six months
- 34.2 percent never paid off a credit card balance in full each month (in the past six months)
- Since 74.1 percent paid all their bills on time over the past six months, that means more than one in four did not

Additionally, Figure 66 presents percent positive responses to each of the 15 items – that is, the percentage responding *Always* or *Often* to positively worded items or *Seldom* or *Never* to negatively worded items (N).

**Figure 66. Percent Positive Responses to Financial Management Behaviors**



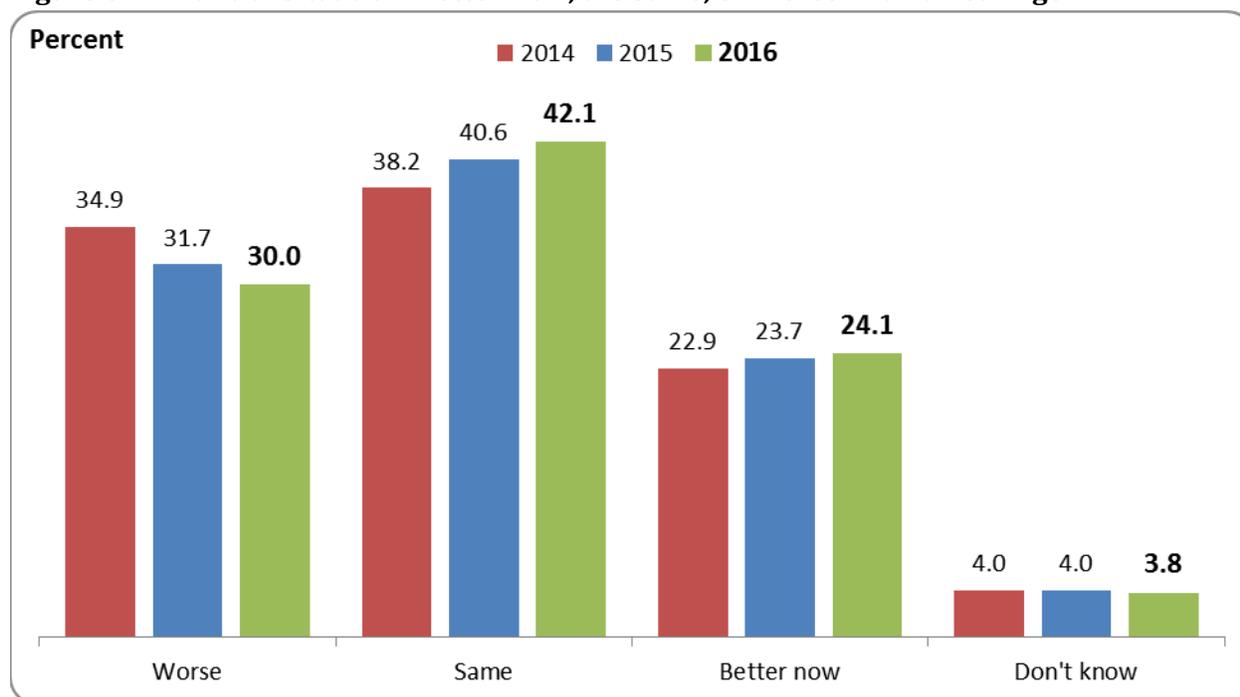
**NOTES:** An (N) after the statement indicates that the item is negatively worded. Percent positive for negatively worded statements is the percentage who answered *Never* or *Seldom*.

## OVERALL ASSESSMENT OF FINANCIAL SITUATION

Alumni were asked whether they would say their financial status (and that of family living with them) is better now, the same, or worse than a year ago (Figure 67):

- Financial status is better now – 24.1%
- Financial status is worse – 30.0%

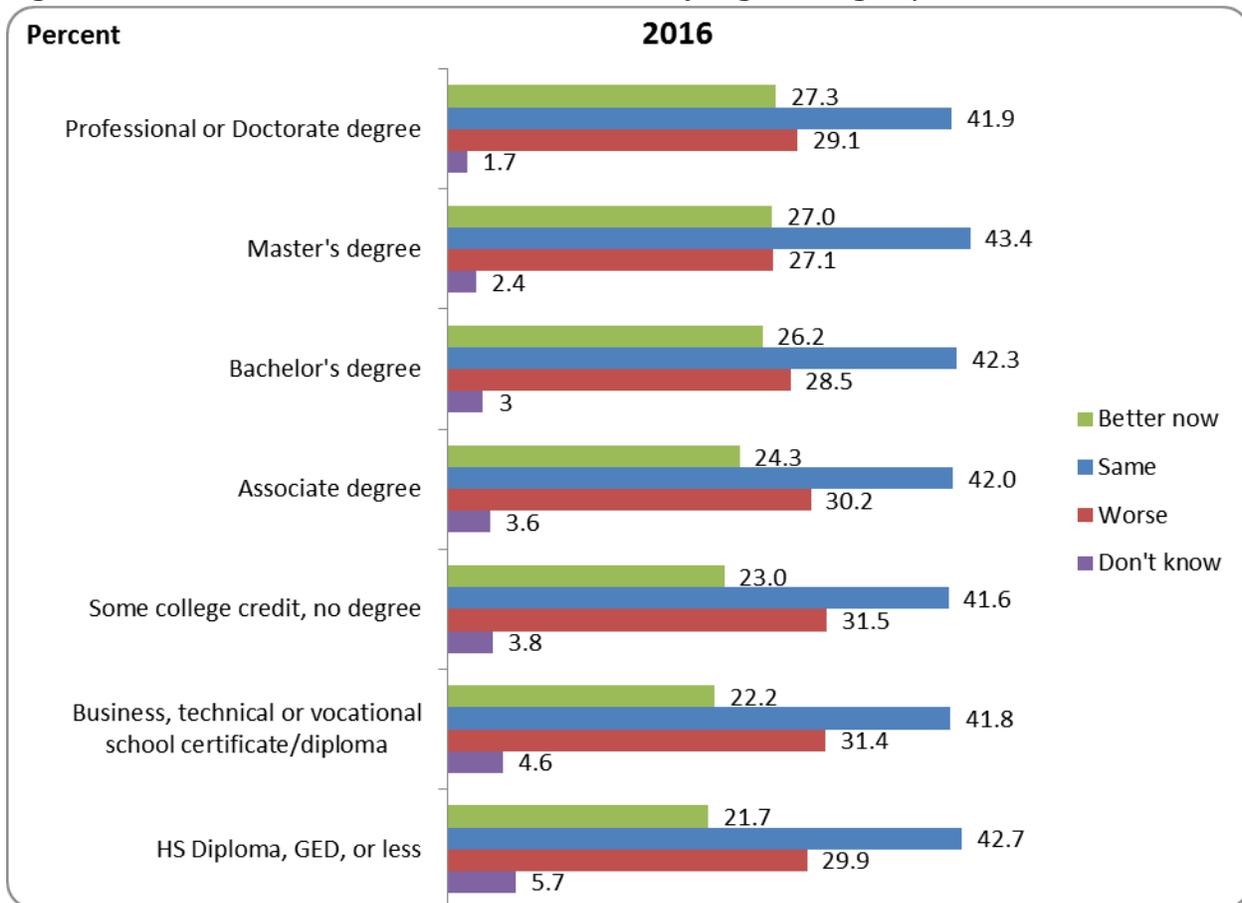
**Figure 67. Financial Situation: Better Now, the Same, or Worse Than a Year Ago?**



*OVERALL ASSESSMENT OF FINANCIAL STATUS BY HIGHEST DEGREE OF EDUCATIONAL ATTAINMENT.* Figure 68 shows the results for current financial status relative to a year ago by highest degree or educational attainment. Major findings include:

- In all education categories, at least 20 percent of alumni said their financial status is better off than a year ago (ranges from 21.7% to 27.3%)
  - The percentage of alumni with business, technical, or vocational school training who said their financial status is better off than a year ago dropped this year (22.2% compared with 25.3% in 2015)
  - Percentages for alumni with professional or doctorate degrees continue to fluctuate greatly because of their small number in the survey population
- Percentages among the various education groups who reported they are now financially worse off than a year ago range from 27.1 percent to 31.5 percent

**Figure 68. Overall Assessment of Financial Status by Highest Degree/Level of Education**

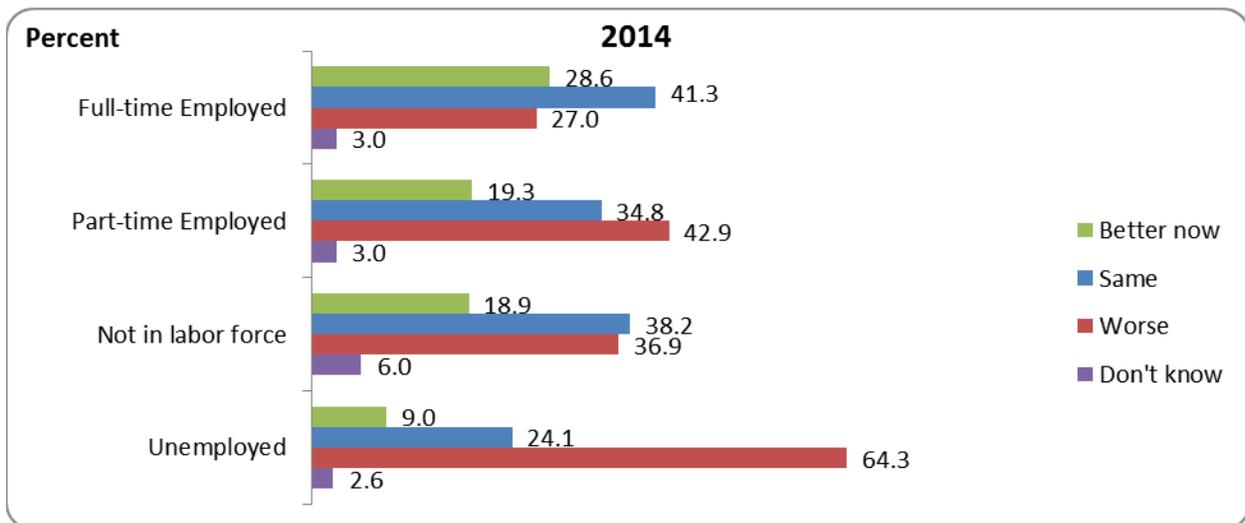
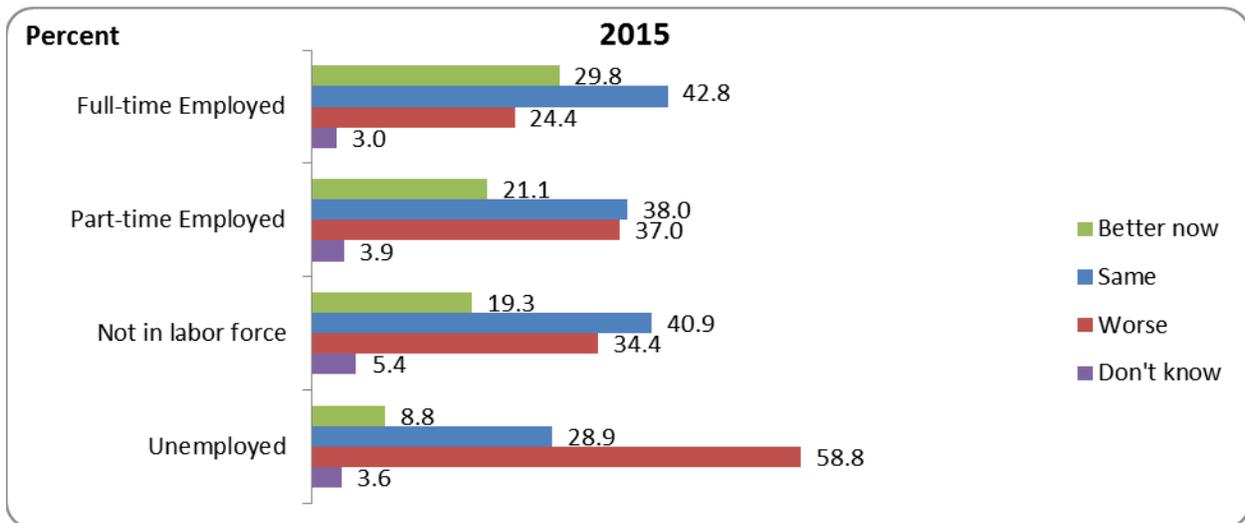
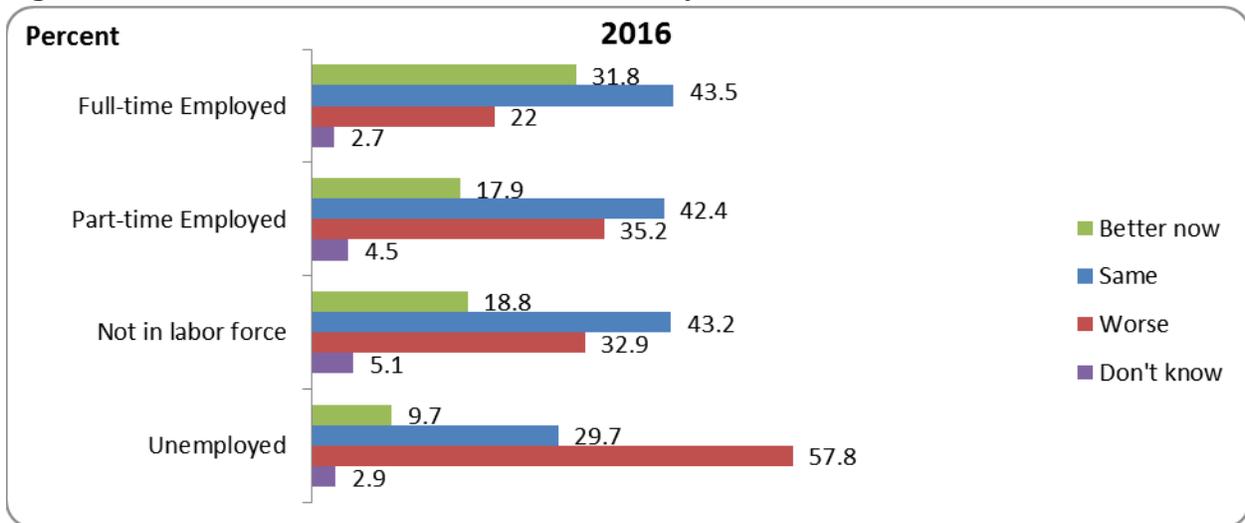


*OVERALL ASSESSMENT OF FINANCIAL STATUS BY LABOR FORCE STATUS* When the overall financial assessment data were analyzed by labor force status, the main findings were changes for the part-time employed group (Figure 69). However, they represent a relatively small proportion of alumni (only 7.1% in 2016); thus, estimates over time are somewhat unstable:

- Among alumni employed part time, 17.9 percent feel they are better financially since a year ago, compared with 21.1 percent in 2015 and 19.3 percent in 2014
- Also, the percentage of alumni employed part time who feel they are worse off financially than a year ago is 35.2 percent, down from 37.0 percent in 2015 and, 42.9 percent in 2014

More than half of alumni who are unemployed (57.8%) and about 33 percent of alumni who are not in the labor force (32.9%) continue to feel they are worse off financially than a year ago.

**Figure 69. Overall Assessment of Financial Status by Labor Force Status**



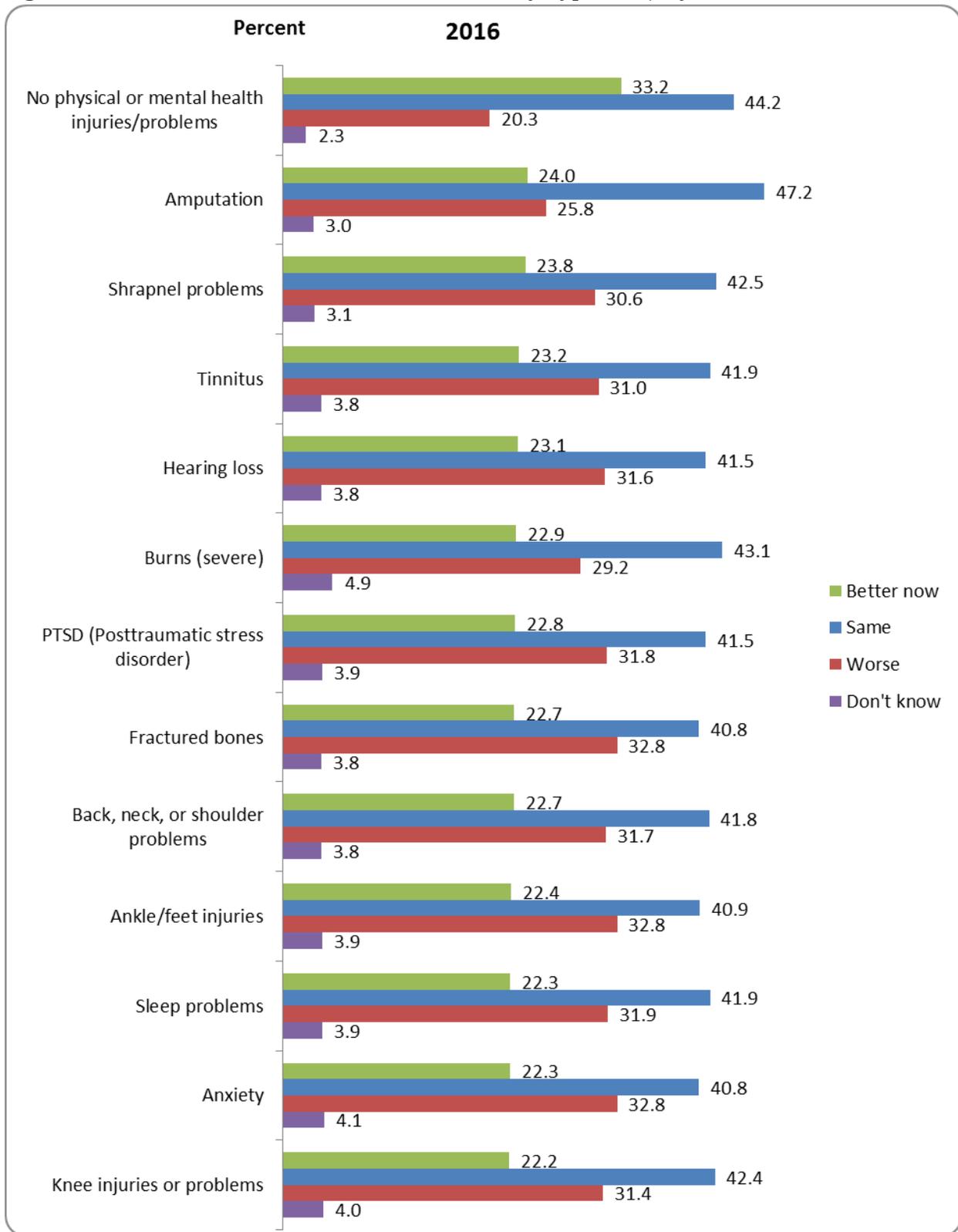
*ASSESSMENT OF FINANCIAL STATUS BY TYPE OF INJURY OR HEALTH PROBLEM* The 2016 results for analyzing overall financial assessment data by type of injury or health problem are presented in Figure 70. Because alumni could check more than one type of injury or health problem, many alumni are represented in more than one injury type or health problem.

Within the majority of injuries/health problems, the percentage of alumni saying their financial status is worse than a year ago decreased slightly from 2015. However, with the exception of burns (29.2%) and amputation (25.8%), these percentages are still above 30 percent (ranging from 30.6% to 40.2%).

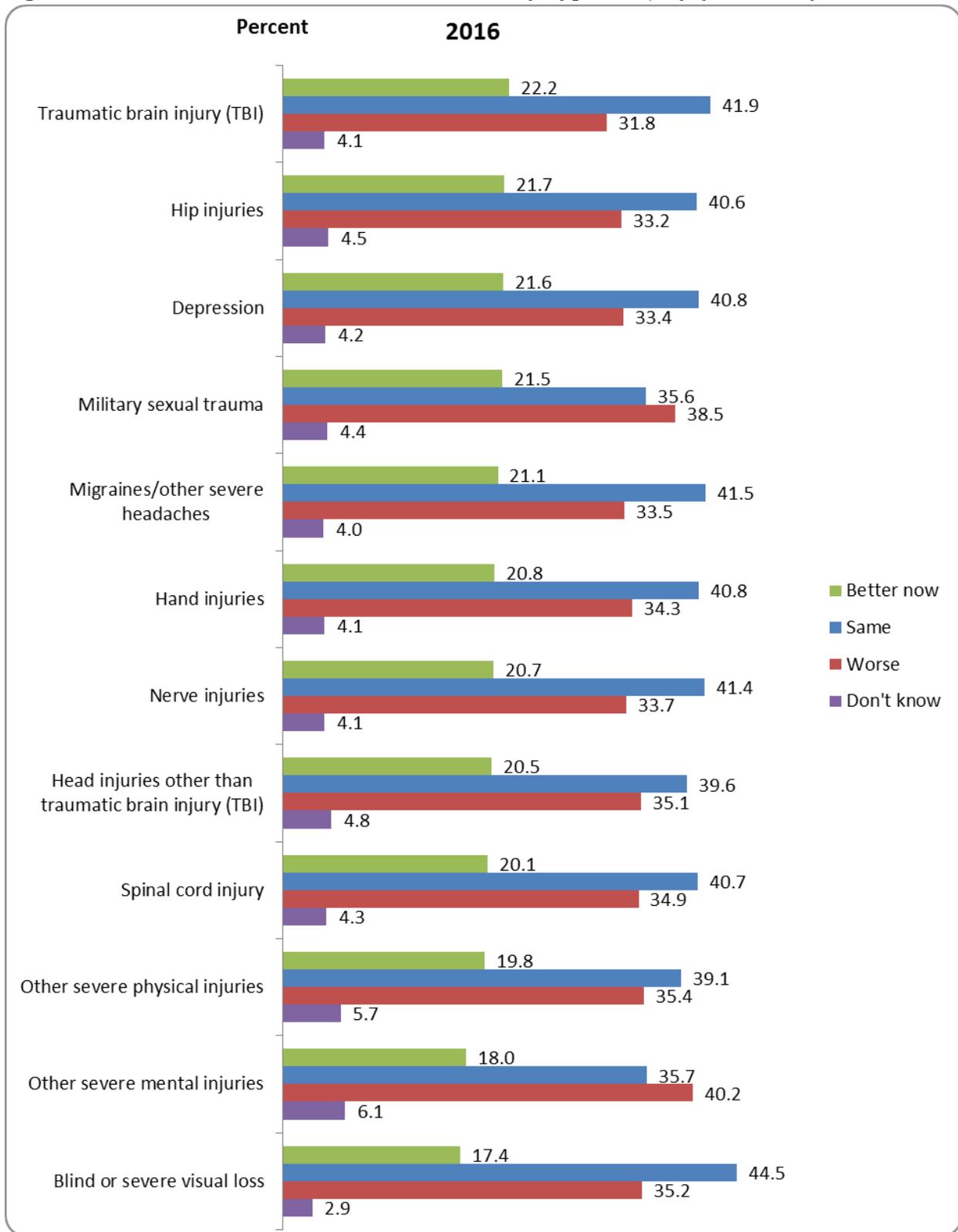
Only a few types of injuries/health problems showed an increase in percentage of alumni saying their financial status is worse than a year ago from 2015 – the most drastic change was for those who reported the health problem *blind or severe visual loss* (35.2%, up from 31.0% in 2015).

For all injuries/health problems, the percentage of alumni whose financial statuses is better than a year ago was less than 25 percent.

**Figure 70. Overall Assessment of Financial Status by Type of Injury**



**Figure 70. Overall Assessment of Financial Status by Type of Injury (continued)**



*OVERALL ASSESSMENT OF FINANCIAL STATUS BY VA DISABILITY RATING* Overall assessment of financial status was also crossed by VA disability rating (Table 9). The 2016 findings indicate:

- For all disability groups, the percent of alumni whose financial status was worse off either declined or remained about the same from 2015. In the 10, 20, and 30 percent disability groups, the percentage declined about 6 to 7 percentage points.
- For all disability groups except for the group with a VA disability claim pending or on appeal, the most commonly reported status was the same now as a year ago.

**Table 9. Overall assessment of financial status by VA disability rating**

VA disability rating	Current financial status relative to a year ago			
	Same (%)	Worse (%)	Better now (%)	Don't know (%)
VA claim pending or on appeal				
2016	37.7	<b>39.3</b>	17.7	5.3
2015	37.6	<b>39.5</b>	17.5	5.4
2014	36.8	<b>39.0</b>	19.2	5.0
0%				
2016	<b>46.2</b>	26.5	26.6	0.6
2015	<b>38.1</b>	28.1	27.7	6.1
2014	<b>38.4</b>	36.6	23.8	1.2
10%				
2016	<b>39.7</b>	25.0	32.0	3.3
2015	<b>37.6</b>	32.2	28.6	1.7
2014	<b>36.9</b>	<b>36.9</b>	24.8	1.4
20%				
2016	<b>43.9</b>	23.5	31.0	1.6
2015	<b>40.2</b>	29.6	26.4	3.8
2014	33.6	<b>37.1</b>	26.3	3.0
30%				
2016	<b>37.8</b>	29.4	29.7	3.1
2015	<b>35.5</b>	35.2	27.5	1.7
2014	<b>36.6</b>	35.6	25.5	2.3
40%				
2016	<b>40.4</b>	30.2	26.7	2.7
2015	<b>38.7</b>	32.0	25.8	3.6
2014	<b>37.6</b>	35.7	24.0	2.7
50%				
2016	<b>38.7</b>	29.3	30.2	1.8
2015	<b>40.3</b>	30.8	26.4	2.5
2014	<b>37.5</b>	35.9	23.1	3.6
60%				
2016	<b>40.2</b>	30.5	27.0	2.3
2015	<b>40.4</b>	32.0	24.3	3.2
2014	36.5	<b>38.1</b>	23.6	1.9

**Table 9. Overall assessment of financial status by VA disability rating (continued)**

VA disability rating	Current financial status relative to a year ago			
	Sam (%)	Worse (%)	Better now (%)	Don't know (%)
70%				
2016	<b>41.2</b>	30.2	25.2	3.4
2015	<b>40.2</b>	32.6	23.3	3.9
2014	<b>39.3</b>	35.9	21.0	3.8
80%				
2016	<b>40.5</b>	32.4	23.4	3.7
2015	<b>38.8</b>	35.4	22.6	3.2
2014	34.7	<b>38.9</b>	21.6	4.8
90%				
2016	<b>41.4</b>	34.0	20.7	3.8
2015	<b>39.5</b>	36.2	20.3	4.0
2014	36.7	<b>40.1</b>	19.5	3.6
100%				
2016	<b>44.3</b>	28.3	22.3	5.1
2015	<b>42.7</b>	28.2	23.8	5.3
2014	<b>40.8</b>	29.1	23.9	6.2
I do not have a disability rating				
2016	<b>48.3</b>	23.4	25.7	2.6
2015	<b>44.8</b>	23.7	27.8	3.6
2014	<b>42.4</b>	27.8	27.3	2.4

**NOTE:** Percentages in boldface type are the highest percentage responses within the specified disability rating.

## 2016 MAJOR THEMES IN SURVEY COMMENTS

The following question appeared at the end of the survey:

*If you have time, please feel free to tell us your opinion of the most challenging aspect of transitioning back into civilian life and how the Wounded Warrior Project or other Veterans service organizations can help in alleviating this challenge.*

In 2011 we analyzed all responses to this question. In 2012, because of the much larger survey population and number of completed surveys, we selected a random sample of 1,000 comments from a total of 2,249 comments to analyze. We have continued to analyze 1,000 in each subsequent year. In 2014, there were a total 9,498 comments; and in 2015, 8,667 comments qualifying for analysis. In 2016, 10,693 Alumni responded to this question. Although the sample was selected randomly, we cannot confirm that it was representative of all comments, nonetheless, the comments are still helpful in augmenting the quantitative findings already presented.

Overall, respondent overall comments continue to get more specific. Some mention being in transition for a number of years now, and this seems to lead to more self-assessment and discernment, and a healthier and more positive approach to dealing with the lasting impacts of having been deployed. They offer thoughtful and constructive suggestions about what they need and what other alumni need. They voice their desire to be of help and service to others.

As an introduction to the major themes, we list notable differences in the 2016 survey comments that reflect different topics or changing topic emphasis from those observed in the surveys of previous years. These may be single comments, but seem notable. They do reflect new topics raised by alumni, topics commented upon in a different way, or things to be attentive to going forward. We have also included comments related to themes that appear most frequently and/or seem most troublesome to Alumni.

Open bullets represent selected quotes that provide examples of comments on a given topic. These are not copy edited and appear as written on the surveys. We did delete some words to shorten the comments or to remove information that could possibly be used to identify the respondent. Those changes are represented by ellipses (. . .) or by words in brackets indicating the type of information we removed.

## NEW AND/OR NOTABLE TOPICS

- Challenges for older veterans
  - Older veterans that have served close to 20 years in the military are facing age discrimination because educational institutions and employers are having a perception that older veterans are broken old relics and aren't easily trainable with new skills sets that can contribute to a new career field that the veterans are seeking. It's easier for the employer to hire young, naive, programmable individuals that can be more easily influenced by that employer than hiring veterans which are trained a certain way and have a contradictory manner of operating within a workplace.
  
- Challenges for women, and for those with wounds that are not visible
  - I am a female combat veteran and am often overlooked, not included and left out of resources and generally resources for female veterans is often few and far between. Since my injuries are not "visible" it is generally the thought by most people that I am not disabled or as injured as someone who has the visible scars, wounds. There is a constant need for me to prove my injuries exist and that they are a huge problem that I often have to deal with myself. Most organizations are geared towards male veterans and those with visible severe injuries. It would be nice to see some services, activities, etc specifically for combat wounded female veterans.
  
- WWP – Availability in US Territories
  - WWP is great information for veterans and help. I live in [US Territory]. If difficult travel to US for your all activities. I want go your activities.
  - Please make an attempt to visit your WWP veterans here on [US Territory] and offer some of them the programs available in the mainland. Thank you.
  - I'm from [US Territory], so my concern is that [US Territory] has no programs or support besides the regular doctors and small groups that we come up with, because I outsourced I got a chance to go on a males and couples odyssey and a soldier ride but it was all done to n [State], I was hoping that WWP should out source to other islands like [US Territories]etc. [US Territory]has been such a big supporter of all our service members and veterans. We are just always treated like a third class citizens, so with what we have here is just so limited so we have to go out to...the mainland to get treated.

- More specific information on how WWP helps respondents
  - Programs/Events
    - Health and Wellness Expos and events
    - Scuba course
    - Warriors to Work Program
    - Track Program
    - Presence in Regional Medical Centers
    - Presence at WTUs
    - Soldier Ride
    - Project Odyssey
    - Peer Support
    - Hiring Fairs
  - Types of Individual assistance
    - Counseling
    - Help in developing a resume
    - Assistance upon the death of a child
    - Assistance in re-location for a job
    - Family support
    - Christmas presents for children
    - Help with disability claims
    - Preparation and attire for a job interview
    - Getting us out without having to pay or self commute is such a relief for me
  - Positive Impacts
    - When I got out of the service I was told to expect this and that by the CO and like officers. I was told college would be taken care of and that id' be able to utilize the VA. However that was not the case. I've only ever been helped by the WWP, and that goes a long way. I practically owe you my life for helpin me maintain in life. I know the journey is far from over but the WWP has done more for me than I can imagine. I make sure I give proper delectation on not being dependent but there are sometimes when I ache and need someone and the WWP is there, through it all.
    - [WWP staff name]took the time to research/read my WWP profile and based on my medical condition; he sent opportunities befitting the situation. I was able to work from home not for convenience but because my situation would have been agitated otherwise. [WWP staff names] and many others from the WWP at [specific Regional Medical Center] took the time to make a difference. You better believe I'm appreciative of the WWP. Within the ranks of the WWP, there are those who truly seek to fulfill the vision and mission with undaunted integrity as well as sincerity. May the Lord deal with you accommodatingly as you've dealt with others.
    - My point is that WWP has a solid grasp on engaging veterans at various points in their recovery journey. When I was ready for an [WWP Program] trip, I went. When I needed extra time to work on my recovery through[specific type of] therapy, WWP provided that. And now, I'm able to accomplish different things based on where I'm at in my recovery. I

accept that there are a lot of things I wasn't ready to do when I first came home now, but ten or even five years ago, that was a tough thing to recognize. I hope that veterans coming home in the future can be nurtured and told time and again that transitioning is going to take time, and to be kind and patient with themselves. I am beyond grateful (I need a stronger word) for the opportunities that WWP has provided me to get back on my feet, and find myself.

- ...those phone calls from WWP to us make a big difference between been forgotten and been supported.
- ...helped me feel like I am somebody and my service meant something. I feel validated by WWP.
- It is refreshing to be around other guys and gals who "get it" without any explanation. WWP provides a bridge that joins us and helps facilitate our healing.
- WWP accepted me for the person I had become after returning from Iraq. No judgement, just acceptance. Being apart of WWP has allowed me to see that I was not alone with my injuries and that WWP would be beside me in my recovery.
- the wounded warrior program is being very helpful to in my transition and more important helping deal physical and mental problems throw various events.
- Finding a job that fit with my disabilities... provided... a hiring Fair, self help and integrative care that help me get along in life.
- ...The social aspect of WWP is huge for me.
- Transition Unit they came in did some activities for us, and our families and helped cope with the big change we were about to encounter in our lives.
- helping me feel good about myself and helping me accept my disability instead of trying to beat it, realizing that this is part of me now and that my life has changed.
- Talking with other veterans does help and since I've been in WWP they've helped me get out more. Expose myself to the outside more than often now.
- WWP has put me in touch with others that have the same feelings and experiences I do.
- WWP is amazing at connecting warriors with those resources and connecting warriors with each other to help develop that support system.

## OVERARCHING THEME: DIFFICULTY ADAPTING TO LIFE AT HOME

- General and Complex Adapting Challenges
  - The first few months of the transition are the hardest. You lose pay so your savings are depleted. Losing your sense of self and worth after having the goal to complete a 20 year career. followed by the realization that you can not do things you once could leave lots of feelings of worthlessness. Going from active duty with help at home to the full time care giver of a household while your partner works... when needing assistance yourself... that's been the most difficult and overwhelming challenge. I

can not keep up. I do not know where to go for help. Or where to ask... I'm just lost in the system.

- Some of my biggest issues are always having to work to support myself and family and not having enough time to take care of myself and the things that I'd like to get done. Not being able to afford to take time off from work and loose pay to get my body and mind fixed. Not having resources available during nights and weekends when I have off. Not having the time during work to try to sit on a phone and wait to speak with the VA and try to get things done. When I was unemployed was the only time I had to take care of VA issues (but not having the income for gas to make appointments). If I have time, it's because I have no money, and if I have money, then I have no time because I'm making money.
- Not having the structure and know where you stand on what you do on a daily basis.
- The hardest part is adjusting to the feelings and emotions of others outside of the military. In my case I was closer to those I served with and was able to trust them more than my family.
- ...You just go to work as usual, no sense of accomplishment-its' like you are just there for the money. I have been out for over 10 yrs now and I'm still trying to get use to civilian life. I think having a family and friends cook-out for the community would be a start. Meeting other people in the community would bring close net civilian/military a like.

➤ Missing Military/Camaraderie

- Coming to grips with the realization that people in the civilian could care less about you. Unlike the military where you build strong bonds with people that you know have your back. Helping others to understand that they are living a new life now and they need to set new goals and visions for their life. Getting connected to a group of like minded veterans to have military style conversations with.
- It is challenging starting over especially when you had your fellow comrades next to you day in and day out that you could depend on for morale and physical support. In the civilian life outside of the military it is every person for themselves which makes it more difficult. Overall, the hardest aspect has been getting the treatment needed for my physical disabilities as I had to start all over with the treatment etc.
- The most challenging thing for me is the lack of brotherhood.
- Going from a team of people that work together for a purpose and have each others' back, to civilians who can skate through their jobs and never worry about who it impacts. Hard to lose touch with friends. Hard to go from being trusted with so much, and being allowed to do so much within my field, to getting out and not being able to even do a small portion of what I used to do.
- The most challenging aspect is getting use to civilian life. In the military, we get things done with a purpose. We don't feel the comradery being civilian.
- The loss of brotherhood, the sense of being needed and important and the realization you will never get that back again.

- Problems Adapting to Civilian Workplace
  - I have found that military life has a strong impact on how an individual conducts themselves. These subtle differences have stood out to others in my civilian work enough to have had it mentioned to me several times. Although this can be a positive in some career fields, it can also be a conflict in some civilian fields where “military bearing” isn’t as much of a desired trait and can cause conflict with co-workers who do not understand that background.
  - The workforce is different in the civilian world meaning the goal to excel is not always apparent and managing “unmilitaried” individuals is difficult. We were trained to complete the mission as fast and to the best of our abilities as required and move on to the rest. Civilians are lazy and unappreciative for the things around them.
  - Being out of the military it has been very hard to find employment where I feel like I can be myself and not have to worry about saying something that people will look at me funny. The WWP has given me many opportunities to hangout with my fellow Veterans.  
It was hard for me to adjust to the lack of organization of civilian life, and the lack of discipline that is in the work place.
  
- Need for Public Awareness Around Issues of Those in Military and Returning Vets
  - There has, I’m sure always been a disconnect between many who have never served and those who do or have served in the past. I’ve found that many in the civilian sector just “Don’t get it” when it comes to those serve. Our society seems to value EVERYTHING and EVERYBODY over services members; athletes, actors and even politicians and pets. It is refreshing to be around other guys and gals who “get it” without any explanation. WWP and other veteran organizations help to provide a bridge that joins us and helps facilitate our healing. Thank you.
  - Even after 12 years I still feel as if civilians have no clue what military personnel go through.
  - I don’t know how others could help, but there is a general sense that civilians do NOT understand where a combat veteran is coming from. They don’t understand the hardships that come with getting out of bed in the morning and coping with even the easiest scenario.
  - Acceptance and understanding from employers who refuse to give a veteran the opportunity and chance to perform. Government and Public official using us veterans as a platform to improve their image and pockets without helping.

- Stigma/Stereotyping of Veterans and Service Members
  - The transition is hard because veterans have a negative stigma, despite my experiences using employment services I seem to be trapped below the poverty line permanently and can never seem to get a job over \$15 an hour.
  - It doesn't matter if you are a veteran in the civilian world. They'll discriminate against disabilities and age.
  - I've having difficulties finding a good job, even with all my education. I think some people discriminate against veterans, and in my case, with minorities.

## SPECIFIC (MENTAL HEALTH AND MEDICAL) DIAGNOSES

- PTSD/TBI
  - Due to a severe Traumatic Brain Injury, affecting multiple mental and physical aspects of me, I am totally dependent on My family and caregivers for daily living.
  - I feel there is a pressure to keep the affects of war hidden when returning from deployment. Also. I've noticed in my own life that the symptoms of PTSD didn't arrive until a few years after ETS. I feel there should be better follow up (even years) after deployment and ETS.
  - I have a hard time with my ptsd going out of my house and feeling safe and my tbi caused my memory to make it difficult to go to school.
  
- Physical Health Issues
  - he hardest thing for me is my sleep apnea and not getting remember sleep, causing me to sleep 12-20 hrs a day while never feeling rested or ready or able to get my life on track, then I look past that and I know even if that was completely under control the rest of my physical and mental disabilities would still limit my daily activity to a severely depressing state. I am in serious pain most days and feel I am not getting the right amount of pain meds to keep me in a comfortable or close to comfortable state. I have so many things wrong with me I rarely get a percentage of it to my doctors attention with memory problems and the hurry up pace that it feels like I'm under!

## MENTAL HEALTH/EMOTIONS/ATTITUDE

- Emotional/Mental Health – Multiple issues
  - To whom this may concern, Some of the challenging aspects that I have faced, upon transitioning back from the military are: (1) Being slow to anger: I find myself becoming more easily angered then I ever have before. I was making some much needed improvements until more stress of life was stacked upon the existing stress that I recently learned to cope with. (2) Sexual Activity: Because of the stress of having to provide for my family, getting the proper healthcare, being a better husband/rebuilding my marriage, I have had in the past some difficulty maintaining sexual desires or having any at all. (3) Maintaining a job: In the past, I have not been able to perform at my top capabilities. I've had an extremely hard time maintaining a job because of my mental health whether it was getting motivated to go in or having suicidal thoughts while at work. (4) Marital Status: The ability to be able to

maintain a healthy and happy marriage has been difficult because I didn't know who I was at all and have had to find out on my own, the hard way, the things I have to do in order to make it work. Because of my marital issues, it is strongly thought, that my spouse now suffers from secondary PTSD from my actions and behaviors. Needless to say, the list can continuously go on but I did want to highlight some key factors that have heavily impacted my life and my surroundings.

- Finding people I can trust, who will not judge me and are empathetic. Learning how to be a husband, father and friend again. Dealing with depression, anger, and just trying to be normal has been extremely difficult for not only me but as well as my family.
  - Life just Sucks and is a struggle daily.
- Feelings of Loneliness/Depression/Hopelessness/Stress/Anxiety
- Feeling alone has been the biggest challenge.
  - I don't have a job and jobs that I have had I have had to leave due to medical issues and now that I am well I have a great deal of education and no job. There are times when I want to end it all.
  - I feel now more than ever, that my life is just a "waiting room for death" and there is very little significance to be had when compared to what I achieved in the Navy.
  - I just feel like everything has left me and others like me behind.
- Apathy/Lack of Purpose/Lack of Motivation
- Finding purpose.
  - Finding and fulfilling one's purpose in life is challenging under normal circumstances. It can become even more difficult when someone is also dealing with the issues of being in combat.
  - The hardest part for me was having a sense of purpose again and I didn't know where I belong.
  - One of the biggest issues I've encountered is having a sense of belonging or purpose.
  - Sometimes I feel like things I did in the ARMY were wrong and not justified.
- Military Members/Families Not Feeling Cared For/Taken Care Of/Respected (refers to society in general as well as to service providers—especially military and VA)
- Many people feel as though they need to have "been there, done that" to simply be a friend to a combat veteran in need. This situation seems to be unique to the veteran population. In reality we only need someone to be a friend, a listening ear, no experience is necessary.
  - ...Also I feel that people really don't take care of veterans the way they should. And PTSD only gets worse over time and most people cannot relate.
  - The fact that other people who are non-military don't understand what we feel and have no clue how to talk to us or react to us. I don't feel they respect us sometimes and that they live in a world that is fantasy and have little idea of just how dangerous and different the world is outside of our borders.

- when people don't understand you or take the time to get to know you but write you off as a disturbed Soldier.
- The VA doctors or whoever has to see me doesn't listen to what I have to say anyway. I feel that people at the VA make me feel really uncomfortable and disrespected. I know that I am not a Caucasian or Black veteran but I still served as an infantryman under the same awesome American flag.
- I feel like nobody understands me or what I have experienced.
- I don't know how others could help, but there is a general sense that civilians do NOT understand where a combat veteran is coming from. They don't understand the hardships that come with getting out of bed in the morning and coping with even the easiest scenario.
- ...People who can never and will never understand who you are or why you are the way you are, no matter how hard they try.

## TRANSITION PROCESS, GENERAL

- Transition process in general
  - Overall complexity.
  - As a National Guards person needing to transition back into the civilian life. The amount of time allotted for us is too short of a transition time. WWP and other services need to lobby for a longer transition time period for Guard and Reserves.
- Difficulty Finding/Keeping Job
  - Finding worthwhile employment at a good rate of pay working with a honorable group of people.
  - ...Finding meaningful jobs that can provide a purpose and adequate income. I've got the education, but experience in the civilian world is lacking.
  - I don't have a job and jobs that I have had I have had to leave due to medical issues and now that I am well I have a great deal of education and no job.
  - Seems like in job markets that most companies prefer not to hire disabled veterans, because they do not want to have to put up with us.
  - I have not been able to find a job in 2 yrs
  - Most challenging aspect in my life is... Also being hired for a career I qualify for and not being hired for unknown reasons.
  - Finding a job was the hardest thing everyone made it seem like I would find a job easily and that was not the case at all.
  - Finding meaningful work that is worth giving up SSI for has been and still is a struggle for me.
  - Having a job that will allow you to go to doctors' appointments.
  - It is hard to find a job that you can transfer your skill you have learned and developed from being in the military. I don't understand it, most companies want a college degree vs someone that has put their life in on the line everyday, being in stressful environments, and can adapt to any thing that is thrown at them.
  - Finding a decent paying job because you are over educated and not enough experience.

- Gaining suitable employment based on the injuries sustained. What work can I do now and what is out there I am qualified for.
  - The hardest time transitioning back was trying to find a job everywhere says they hire vets, however I have found that to be mostly false. I couldn't get a job at a hiring McDonald's or Wal-Mart as a last ditch effort to provide for my family I soon found myself homeless. Originaly I had a job lined up before I got out of the army imoved my family across the whole country only to find out that the position they where hiring me for was no longer available.
  - ... I have worked, but I always end up losing or leaving my job because I can't deal with social situations effectively and I end up losing temper or emotionally breaking down.
  - ...I am unemployed and unable to find and keep work due to my disabilities. I have done everything that is required of me to pursue the american dream and only found that it is actually a nightmare all of it.
  - The many resources purported to help the veteran find a job is over-blown and mostly lip service. There are many programs that help with schooling but job placement is the real key. I've applied for at least 20 jobs a month in the last 3 months and found nothing but low level 25-30k a year jobs. I spent 21 yrs in the military so I'm not working for peanuts. I have spent the last 6 months in schools to bolster my resume. Still no luck. I have had to go back to the government and do what I was doing in the military. Not what I wanted but I have to take care of my family with a decent job. Classes and resume writing courses are fine but job placement needs to be a focus of the WWP, vocational rehab, care coalition, etc... all of whom could not advance my goals of finding a real job.
  - Maintaining a job: In the past, I have not been able to perform at my top capabilities. I've had an extremely hard time maintaining a job because of my mental health whether it was getting motivated to go in or having suicidal thoughts while at work.
- Difficulty Translating Military Training/Experience to Civilian World
- Finding a job that fits my training and experience is the most challenging aspect of transitioning. Job fairs work for people with low or no civilian job skills and companies that want to hire military veterans, but are not the best venue for professionals with specific job skills.
  - ... Transitioning taught me that no matter how much you have proved yourself, taught yourself, or improved yourself in the military, none of that counts! And proving your training or skills is tough, nearly impossible.
  - The hardest part about going back to work is transferring my military skills to civilian. I think that is the biggest problem most vets have. But more importantly I have found that I have needed training on how to interact with civilians; especially while in a leadership position. I think training on how to utilize and learn leadership aspects and tactics that are acceptable in a civilian workplace would be a great way to start some new trainings.

- Finding meaningful jobs that can provide a purpose and adequate income. I've got the education, but experience in the civilian world is lacking. If WWP helped with credentialing, or had access to legitimately military friendly employers it would help.
  - ... I am having a bad time finding out about what I should have already known for crossing over my military training and military occupation to a civilian role. I at times feel completely different and useless and find out I just don't have enough skills to be productive in the current work force.
  - It was difficult trying to relate my infantry skills into a job. Every employer knows what they're getting by hiring a truck driver or an MP, but no one wants or needs an infantry team leader. I feel like my military career was a waste. I feel like my years of service are a liability, so I don't even include most of my military service on my resume. My military career put me at a disadvantage compared to my high school and college classmates. I've considered suicide because I've felt like a failure for not being able to find work.
  - The most challenging part was finding the resources that could help me translate my military skills to the civilian world.
- Difficulty Finding a Local Support System (especially in states with no military base)  
*[NOTE: This year all comments referred to WWP events/activities.]*
- There are not many activities closer to my area.
  - There isn't enough events/activities in my area. I have asked for things like female t-shirt or hat and never received it.
  - The events I get by email are too far away from where I live.
  - It would also be beneficial if there was some type of social networking for Wounded Warriors in my area. I have not received any information of local WWP events.
  - I find it hard to get to some of the events offered (due to... require a long distance travel...)
- Difficulty Getting/Asking for help
- The most difficult challenge for me has been learning to communicate with and as a civilian again. After 22 years, asking for help is not something I am able to do, easily.
  - Requesting one on one (face to face) transitional assistance to go over retirement paperwork, medical discharge paperwork, final 2-1/DD214 records, and go over with the veteran any possible programs, compensations, or benefits that he/she can rate.
  - Education or help in obtaining government positions. This may exist but I've not found an avenue that actually help in the process.

- Difficulty With Transition When Disabled/Injured
  - Overall complexity.
  - Helping me get my disability rating. Have yet to do it because i have no idea what to do.
  - ... still have a hard time with doing. Finding a job that suits my needs to my injuries.
  
- Problems With Finances
  - Unemployment does not make house payments.
  - ... Now that I have a job I still have all the bills I had during my time serving which became a huge financial burden for me and my family...I thought I was going to be able to make it with the compensation I was to receive however because I took a separation payment I now have to pay that all back before collecting my comp...if I would have known this prior to receiving the separation pay, I would have not have taken it... now I have fallen behind on payments and it's very hard to get back on track because of such a great drop in pay.
  - Being dropped from everything the moment I retired and trying to get medical care while trying to support my family while waiting for VA compensation to kick in. We survived by my wife being frugal and maxing out credit cards living in a tiny apartment just so we could eat and pay copays for TriCare so I could stay in therapy.
  - ...So I was homeless for 2months barely able to feed us. Spent all my savings on hotels and groceries while trying to find a job and no luck. So I had a plan and I had saved money but it all went away cause no one really cares about vets like their commercials say.

## TRANSITION PROCESS, MILITARY/VA

- Difficulty Getting Information (on/accessing programs, benefits, services/other help)
  - Tbi resources in active duty.
  - In the [service branch], they spend months, even years training you to be the ultimate killing machine. When your contract ends, they give you a 2 week transitioning course on how to make a resume (TAPS). I think there's an imbalance there... oh and everyone hates the "Death by PowerPoint".

## SOURCES OF HELP

- Help [other than WWP]
  - ...I've found strength in volunteering to help out my fellow vets by founding a local program of Project Healing Waters. I build and maintain my self-confidence by using my diving skills and holding a leadership position on volunteer dive rescue and recovery teams. In order to help vets overcome disabilities and trauma they need to make the transition from being participants to being volunteers. Works well for me. By helping others, I help myself.

- There is value in using experienced professionals, including those employed by veterans service organizations, to assist in alleviating the challenges identified in transitioning back to civilian life. Those professionals are often very skilled in such assistance because that is the purpose of their employment.
  - ...Luckily the local church was available and they helped until I was more capable.
  - ...I was able to push through with the help of my wife and some of the VA resources I have available to me.
  - I have come to realize a few years ago after my ETS that my brothers and sisters in arms are the only ones that will keep me going. Fighting PTSD and other trauma isn't easy, but maintaining a battle buddy makes it easier.
  - Connection with brothers and sisters.
  - Being around others who have the same experiences and me, has helped me during hard times.
- Department of Veterans Affairs (red tape, lack of information on benefits, denial of benefits)
- While waiting on benefits or fighting for benefits, veterans often feel worthless and useless. This is mainly because they can no longer work and provide for their families. Their families become homeless and lack enough to eat. My family and I are currently homeless and barely enough to eat. We also do not have enough money for insurance.
  - The first few months of the transition are the hardest. You lose pay so your savings are depleted. Losing your sense of self and worth after having the goal to complete a 20 year career. followed by the realization that you cannot do things you once could leave lots of feelings of worthlessness. Going from active duty with help at home to the full time care giver of a household while your partner works... when needing assistance yourself... that's been the most difficult and overwhelming challenge. I cannot keep up. I do not know where to go for help. Or where to ask... I'm just lost in the system.
  - ... Though I am eligible for the "Choice" program and applier/referred; I have not received the required referrals for carpal tunnel, mental health and OT for my shoulder. My primary at the VA dropped my and I had to go to the Emergency Rm for treatment with is over 50 miles from my home. I am eligible for transportation base on the requirements, yet, no one will help me get into the program. I was told that I would receive notification that I had another primary; that was 8 months ago.
  - I have many problems and I need to get help with them but the VA here in [City, State]is so busy that it's hard to get a referral to see an outside Doctor or provider.
  - The other issue is that the VA in my area keeps re-scheduling my appointments and they also do not take my pain concerns seriously. Everyone says take Advil or Tylenol and drink water. That's all I ever get from the VA.
  - ...I was also told that my ptsd wasn't related to killing someone that it didn't count. This is why vets have a hard time and commit suicide! You can't see all wounds!...
  - I had no clue when it came to healthcare/VA care/life insurance, and even now it's confusing.

- Many veterans end up homeless because we don't know about the VA homeless program when we first get out.
  - I have no energy and constantly tired and the VA has ignored it for many years and keep saying that it's normal. but it's not.
  - Overall, the hardest aspect has been getting the treatment needed for my physical disabilities as I had to start all over with the treatment etc.
- Military/VA Disability Process (difficult to access, slow, questions about fairness)
- Helping me get my disability rating. Have yet to do it because i have no idea what to do
  - It was very disappointing having to wait to receive treatment for both physical and mental issues when I transitioned out of the army. To add on to that, I had to wait for almost 2 months to receive my VA compensation. It was really depressing, not knowing if I could provide for my family.
  - Dealing with my claim for disability has not been easy. I have contacted Wounded Warrior on two occasions and both times was never really offered any help or assistance.
  - the main issue that I am dealing with right and that I have been dealing with since I have separated from Active Duty in September of 2014 is that I cannot get in touch with anyone at the VA to get a disability screening appointment setup. When I initially separated from the military it was a very quick process because I was just returning from a deployment. With that said, I was unable to get many of the necessary things taken care of that should be done before separation. The biggest hurdle right now is not having anyone to secure an appointment with as I may be losing out on monthly disability from the VA.
  - I have had 4 VA psychiatrists all diagnosed me with PTSD but yet I cannot get a PTSD rating or even an increase in my adjustment disorder.

## CONCLUSIONS

Despite a large increase in the number of WWP alumni over the past several years, the demographic profile and most of the annual survey responses have remained noticeably consistent. However, there are some notable differences in this year's survey estimates and recommendations detailed in this section. One difference in this year's survey was the timing of WWP CEO's departure and negative publicity in the news during the administration of the survey. In this closing section of the report, selected characteristics of respondents to the 2016 WWP Survey are highlighted, and challenges to health, economic empowerment, and a successful adjustment to civilian life are briefly discussed. The survey data clearly indicate a need for the types of programs and advocates for on behalf of wounded warriors.

### HEALTH AND WELL-BEING

*Self-assessment of health-related quality of life.* The survey relied on the VR-36 for the first time this year. This tool was designed to assess the health-related quality of life of veterans. Findings from this instrument indicate that the mental and physical health problems of WWP alumni substantially impact their quality of life. The Physical Component Scale (PCS) score—a composite measure of the impact of physical health on quality of life—for WWP alumni was 38.7. This is substantially lower than the U.S. population average of 50 but similar to other veterans with one or more medical comorbidities. The Mental Component Scale (MCS) score—a composite measure of the impact of mental and emotional health on quality of life—for WWP alumni was 34.7. This is also notably lower than the U.S. population average of 50 but similar to veterans with more than two mental comorbidities. This MCS finding is consistent with the large percentage of WWP alumni who report suffering from both PTSD and depression (61.7%).

Survey data indicate that the emotional and psychological problems of alumni are more frequently debilitating than the physical one. Thus, the magnitude of the opportunity that WWP has to help wounded warriors successfully overcome the psychological aspects of their situation cannot be overstated. The following alumni quote poignantly expresses both the diminishment and the opportunity facing this population:

*I feel now more than ever, that my life is just a “waiting room for death” and there is very little significance to be had when compared to what I achieved in the Navy.*

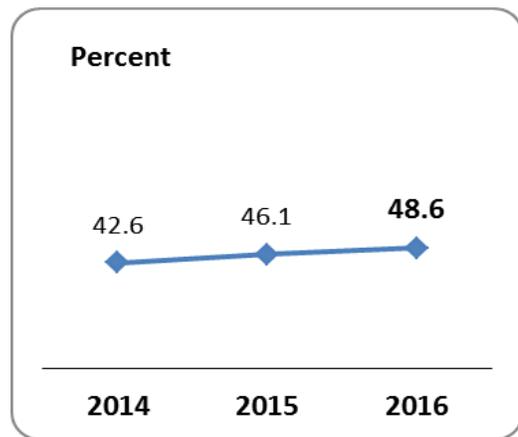
*Specific health-related problems.* Only 17.9 percent of alumni regularly get enough sleep to feel rested upon waking in the morning. This is consistent with other research findings that past and current service members, particularly those who have been deployed, experience diminished sleep quality and quantity. Sleep problems may be secondary to mental health conditions such as PTSD and depression, but they may also contribute to them, as lack of quality sleep has been linked with many adverse long-term health consequences.

There is a growing awareness that sleep problems may also be related to obesity. For example, obese military members and veterans in the Millennium Cohort were more likely to report sleep apnea (Rush et al., 2016). WWP survey data indicate that nearly half (48.6%) of alumni

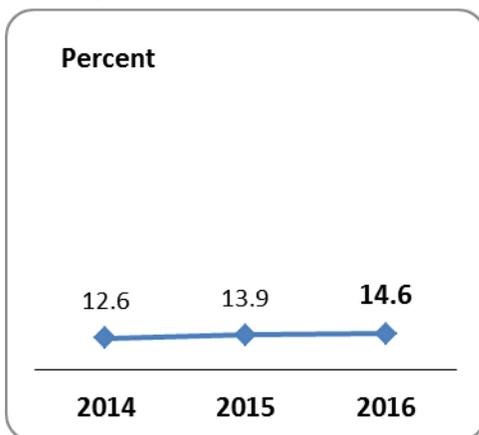
have body mass index (BMI) scores that are above the cut-off for obesity, 30.0. Figure C1 presents the concerning trend over the last three years. Obesity has been linked with an array of adverse health outcomes, so efforts to turn the current trend may have wide ranging health benefits for alumni.

Inadequate exercise may be contributing to the rates of obesity among WWP alumni. Though three-quarters of alumni think it is moderately important or very important to maintain a healthy diet and good nutrition, only 2 in 5 do moderate-intensity physical activity or exercise three or more days a week. Of course, physical and mental injury may severely limit the ability of some alumni to participate in these activities. Nonetheless, adequate physical activity is an area to watch given excessive weight gain among alumni.

**Figure C1. Alumni with BMI in Obese Range**



**Figure C2. Alumni with Postive PDHA/PDHRA Alcohol Screen**



Alcoholism is also linked with a variety of adverse health outcomes including heart disease, stroke, liver disease, and cancer. Research indicates that alcoholics also experience problems falling asleep and decreased total sleep time (Brower, 2003). Nearly fifteen (14.6) percent of WWP alumni had a positive alcohol screen for misuse based on responses to two alcohol questions from the Post-Deployment Health Assessment/Post-Deployment Health Reassessment (PDHA/PDHRA). Figure C2 highlights the findings over the last three years. Though some may use alcohol to combat sleep problems, alcohol may, in fact, be exacerbating these problems while diminishing health.

*Use of health care services and reasons for difficulty in accessing mental health care.* Among alumni, 53.3 percent had visited a professional to get help with issues such as stress, emotional, alcohol, drug, or family problems. More than one-third of alumni (34.8%), however, had difficulty getting mental health care, put off getting such care, or did not get the care they needed.

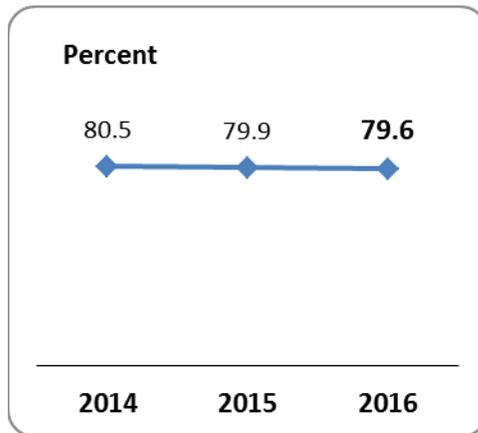
Over one-third of alumni (36.4%) indicated that conflicts between their personal schedules and hours of operation of the VA sites were the reason they had difficulty getting mental health care. This was the most frequently cited reason, but it was closely followed by discomfort with existing resources within the DoD or VA (35.2%) and the feeling that treatment might bring up painful or traumatic memories that the alumni wanted to avoid (33.7%).

There was almost a 10 percentage point increase from the 2015 estimate in the percentage of alumni mentioning a lack of resources in their geographic area as a reason for difficulties in

getting mental health care (26.0%, compared to 16.1% in 2015). This is another area to watch as advocacy may be needed if resources are not adequately distributed to meet needs of alumni.

## SOCIAL SUPPORT AND PERSONAL RESILIENCY

**Figure C3. Alumni indicating a trustworthy person would help**



The majority of survey respondents perceive their current relationships with family and friends to be strong. Most alumni (82.0%) feel there are people they can depend on to help them when needed, and most (79.6%) said there is a trustworthy person they can turn to for advice about problems. This finding has been stable over the last three years (Figure C3). At the same time, more than half (52.3%) feel they don't have close personal relationships with other people. The following alumni quote highlights the struggles with relationships some warriors face:

*The most challenging aspect has been the feeling that I simply do not belong in civilian life. I have a very*

*difficult time relating with civilians, including my family, but especially coworkers. Even the simple things, such as what I used to do in my day-to-day military job, are very difficult to translate.*

Many warriors continue to rely on their veteran peers for support during stressful times in their lives. More than half (51.7%) said talking with another OEF/OIF/New Dawn veteran was a resource that they used for coping with stress and concerns while just over a fourth (26.9%) said they talk with non-military family members or friends for coping with these matters. As the following quotes make clear, WWP's efforts to help alumni connect with other veterans remain important in promoting emotional well-being:

*Talking with other veterans does help and since I've been in WWP they've helped me get out more-- expose myself to the outside more than often now.*

*WWP is amazing at connecting warriors with those resources and connecting warriors with each other to help develop that support system.*

**Resiliency.** A strong sense of personal resiliency is another factor that will help alumni to successfully transition to civilian life. New questions used to assess resiliency were added to the 2016 survey in order to enrich the measure of resilience. The augmented scale indicates that alumni resiliency is low, particularly among those with PTSD. Alumni who tested positive for PTSD has a mean Resilience Scale score of 22.0 while those who did not test positive for PTSD had a score of 28.9. WWP efforts to build resiliency by promoting physical health and encouraging the recognition of positive elements within difficult personal situations may benefit alumni tremendously. Robust use of internet-based communication tools with commensurate training for use by alumni might provide a venue for humorous moments in the transition to civilian life; encouragement of physical activity; and comments that highlight both

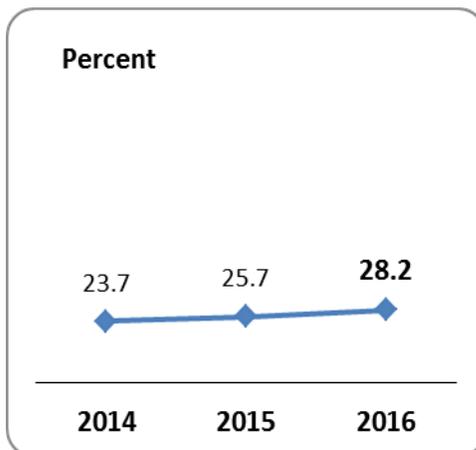
the positive and negative aspects of personal situations. These could be geared toward building resiliency among alumni.

## ECONOMIC EMPOWERMENT

**Employment/Unemployment:** Unemployment rates among all alumni have been hovering around 13 percent for the last two years, while unemployment rates for Gulf War I era Veterans, and the US population in general, have been declining in recent years (BLS, March 2016). For non-active duty alumni, the unemployment rate is slightly higher (15.6%) that for alumni overall. This is largely because of health problems – both physical and mental – that alumni face after leaving the military. The following comment from speaks to this issue:

*...I am unemployed and unable to find and keep work due to my disabilities. I have done everything that is required of me to pursue the American dream and only found that it is actually a nightmare all of it...*

**Figure C4: Student loans over \$30,000**



**Education and Student Loans:** Nearly 3 in 10 (28.2%) alumni are enrolled in school and among those, most (68.2%) are pursuing a bachelor’s degree or higher. The percentage of alumni who have obtained a bachelor’s degree or higher has increased over the years, from 24.5 percent in 2014 to 30.2 percent in 2016. While the increasing education levels among alumni are encouraging, alumni struggle with student debt. Figure C4 shows the percentage of student debt-carrying alumni whose current student loans are over \$30,000. Alumni expressed concern about the rising student debt among their fellow veterans:

*Warriors to work really helped put my skills on paper that I previously had trouble doing. Resume techniques and assistance with education a big plus. Many veterans are still being faced with rising student loan debt due to pay for everything required to go to school.*

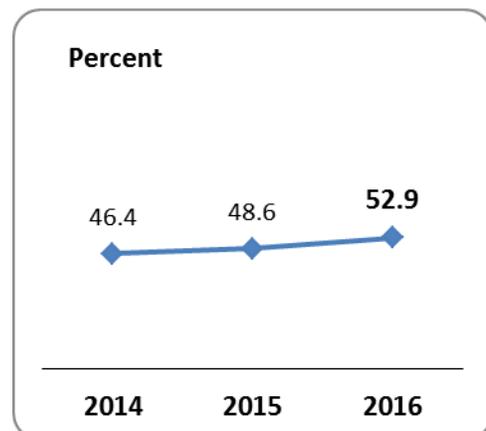
**Living Situation and Homelessness:** Alumni comments indicate that many would prefer to own their own homes but finding credit is a challenge:

*I don’t want to rent a house any more. I want to get a house to settle down with my family, but getting the credit to do so is extremely challenging.*

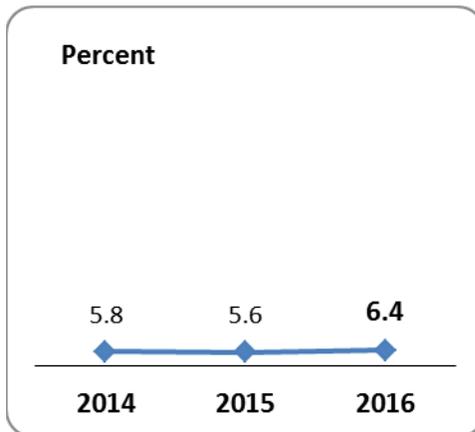
*... It is much harder than I thought it would ever be. Unemployment does not make house payments.*

While homeownership rates are still much lower among alumni than the national rate of 63.5 (Callis & Kreslin, 2016), an increasing percentage of alumni do

**Figure C5: Alumni Who Own Their Own Home**



**Figure C6: Alumni Homeless in Past 24 months**



own their own home (Figure C5). However, one warrior made the following observation about programs that might help those struggling in this area:

*There are no things that I know of in the Wounded Warrior Project that advocates for soldiers trying to have their first stable home! That would be a big stress reliever,.. Less stress can make it easier on the body as a whole,.. While it is encouraging to see the rising percentage of alumni who own their homes, the percentage of alumni who were homeless in the past 24 months has not decreased (Figure C6). Many alumni commented on their recent struggles with homelessness:*

*While waiting on benefits or fighting for benefits, veterans often feel worthless and useless. This is mainly because they can no longer work and provide for their families. Their families become homeless and lack enough to eat. My family and I are currently homeless and barely enough to eat. We also do not have enough money for insurance.*

**Other Debt:** Student loans and mortgage debt are just two of the forms of debt that alumni are facing. Nearly all Alumni have some sort of debt (only 3.2 percent do not have any debt), and the most common forms are car loans and credit card debt. With Alumni struggling to find employment and paying for medical bills, it is not surprising that this debt is a concern. One individual comments on this exact issue:

*...being dropped from everything the moment I retired and trying to get medical care while trying to support my family while waiting for VA compensation to kick in. We survived by my [Spouse] being frugal and maxing out credit cards living in a tiny apartment just so we could eat and pay copays for TriCare so I could stay in therapy.*

About a third of alumni (34.5%) pay \$2,000 or more monthly for debt, not including monthly mortgage payments. Alumni have commented on their ongoing issues with bills and being able to keep up financially:

*I have not been able to find a job in 2 yrs. I tried doing schooling but the stress of everything plus not having enough money to take care of bills and everything else is screwing that up as well.*

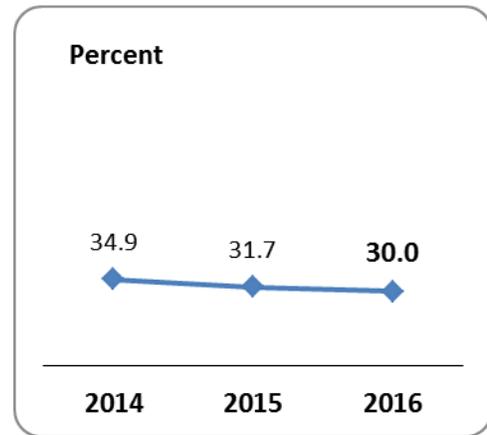
**Financial Management:** A new scale was added to the 2016 alumni survey called the Financial Management Behavior Scale (FMBS). This scale measures overall financial behavior with subscales on savings and investment, cash management, credit management and insurance. Alumni had lower average scores for each subscale, when compared to a nationally representative sample. However, that study's population was older by about eight years and had a higher average income; thus, it is not surprising that WWP scores were lower.

Results from individual items from the FMBS show that 34.2 percent of alumni never paid off credit card balances in full in the past six months, and nearly 40 percent maxed out the limit on

one or more credit cards in the past six months. This is consistent with findings discussed under Other Debt: alumni are using credit cards to keep up with bills that they cannot pay which, in turn, causes the alumni to struggle with credit card debt. They are doing what they can to provide for their families, even if it means making poor financial management decisions.

**Financial Status:** The percentage of alumni who say that their financial status is worse than it was a year ago has been consistently declining (Figure C7). A greater percentage of alumni now say that their financial status is the same as it was last year. Full-time employed alumni are the only labor status group with any noticeable increase of financial status being better now than a year ago (28.6% in 2014, 31.8% in 2016). This is not surprising, as the median weekly income for full-time employed alumni increased in 2016 from 2015 (\$780/week to \$800/week). Still, financial stability is an issue for alumni regardless of employment status:

**Figure C7: Financial Status Worse than a year ago**



*Being financially stable would help and owning my own home would help. I would like to have a stable job that pays well enough to enjoy life! I feel hopeless-- that the American dream is a lie. That I will die a broke loser no matter how hard I try.*

Alumni are discouraged by their financial status and are looking for solutions. Many have given up on support from the VA and are leaning on WWP for help.

## Closing Comments

Alumni are grateful for the services and support that WWP provides. Though recent news reports surrounding spending and the departure of some senior WWP staff have disturbed them, they remain steadfast in their support of the organization and continue to look to WWP as a primary source of help for wounded service members. These closing remarks highlight areas in which WWP may want to consider furthering its efforts based on data collected through the 2016 WWP survey.

The data clearly indicate that the health-related quality of life of WWP alumni has been diminished by injuries sustained in service. Emotional and psychological problems continue to be particularly debilitating. Yet, 8 in 10 alumni have people that they trust to help. Because more than half of alumni look to other veterans who have similar experiences to help them deal with problems, WWP's ability to facilitate real-time connections among alumni is vital to its mission of fostering successful, well-adjusted wounded warriors. Robust use of modern social networks with commensurate training on use may help in this regard. In the words of one warrior:

*...why can't WWP make a military Facebook [page] for wounded soldiers to help each other more real time... It will be a better peer to peer and help each other when we have buddy who's suicidal or when[we] have those moments ourselves,... I was a [position] in the [Service Branch] and I always tried to make things better not complain,.. The WWP is trying and in my eyes has done a lot of great things,.. But there is always room for improvement,..*

As mentioned, such platforms may also facilitate efforts to build resiliency among alumni so that wounded service members are better equipped to deal with the lengthy process of transitioning to civilian life.

WWP also has the opportunity to continue transforming wounded warriors' lives by promoting physical and emotional health. Survey results indicate that inadequate sleep and excessive weight gain are two primary areas of concern. Many alumni struggle with one or both issues and both offer a wide array of physical and psychological benefits. WWP may want to consider increasing efforts that promote adequate sleep and weight management.

Financial struggles are also clearly evident among alumni. Teaching alumni about cash management and setting budgets could help with more difficult financial management issues such as savings and credit. For a growing percentage of alumni, student loan debt is being added to significant credit card debt. Realizing the dream of home ownership is proving difficult for many and, yet, can be critical to stability. Continued educational efforts that focus on the keys to successfully owning your own home may benefit alumni, alleviating the stresses associated with an uncertain housing environment.

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# Appendix

## Survey Methods and Administration Details

## APPENDIX: SURVEY METHODS AND ADMINISTRATION DETAILS

### SURVEY POPULATION

WWP delivered a database containing alumni names, email addresses, and telephone numbers to Westat. Westat removed duplicate alumni listings, names of alumni who had requested that they not receive email from WWP, and fake email addresses. The resulting survey population included 79,161 wounded warriors registered as Wounded Warrior Project (WWP) alumni.

### QUESTIONNAIRE

The survey was designed to address the following broad topics:

- Overall Alumni Background Information
- Physical and Mental Well-Being
- Economic Empowerment

The final version of the 2016 survey included 135 closed-ended questions, many of them multi-item questions. Not all questions were administered to all alumni, however, as a result of automatic skips for questions that did not apply because of answers to previous questions. In addition, the survey included one open-ended question: “If you have time, please feel free to tell us your opinion of the most challenging aspect of transitioning back into civilian life and how the Wounded Warrior Project or other Veterans service organizations can help in alleviating this challenge.”

The web instrument was pretested across Windows platforms; multiple browsers (Internet Explorer, Firefox, Safari, Opera, and Chrome); iOS, Surface, and Android mobile devices; and popular screen resolution settings.

### DATA COLLECTION

*SURVEY MODE.* The survey was administered electronically via the web.

*FIELD PERIOD.* Data collection began on March 8, 2016, and continued through April 26, 2016—7 weeks.

*SURVEY COMMUNICATIONS.* Westat emailed a prenotice message, a survey invitation, and seven email reminder messages and sent one postal mail reminder during data collection (see Table A1). The prenotice and survey invitation emails were signed by Steve Nardizzi, chief executive officer of WWP. The remaining reminder emails and postal communications were signed by WWP.

**Table A1. List of Survey Communications Sent to WWP Alumni**

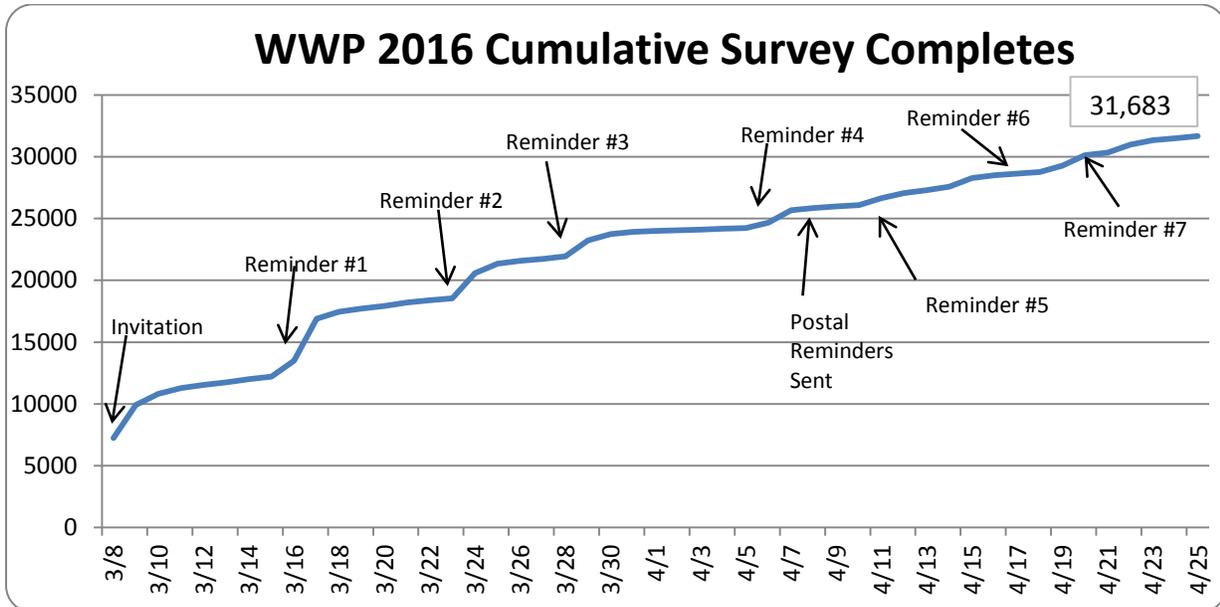
Communications	Delivery method	Date sent
Prenotice	Email	March 3, 2016
Survey invitation	Email	March 8, 2016
Thank you/reminder	Email	March 16, 2016
Thank you/reminder	Email	March 24, 2016
Thank you/reminder	Email	March 29, 2016
Thank you/reminder	Email	April 6, 2016
Thank you/reminder letter	USPS mail	April 8, 2016
Thank you/reminder	Email	April 14, 2016
Thank you/reminder	Email	April 19, 2016
Thank you/reminder (last weekend to complete)	Email	April 22, 2016

The prenotice email informed wounded warriors about the upcoming survey, explained the purpose of the survey, introduced Westat as the survey administrator, and encouraged participation in the survey. It also stated that caregivers could assist in completing the survey, assured alumni that all responses would be treated as confidential, and provided contact information for WWP and for the Westat WWP Survey Support Center. The email also informed alumni that when they submitted their completed surveys, they could provide a mailing address to receive a WWP Maglite flashlight.

The survey invitation contained a link to the survey web site as well as a unique user ID for accessing the survey. During the field period, Westat emailed seven thank you/reminders about the survey to all nonrespondents. Westat sent the reminder letters by first-class mail to 53,371 nonrespondents with complete postal addresses (postal addresses were included in the database provided by WWP). WWP provided a digital file with WWP letterhead for the postal reminder letter. Each letter was personalized to include the name of the warrior and included instructions on how to access the web survey.

Figure A1 includes information on when completed surveys were submitted by respondents. The data indicate the effect of the various thank you reminders on the response rate.

**Figure A1. Cumulative 2016 WWP Survey Completes Throughout Data Collection**



**SURVEY HELP CENTER.** During the field period, Westat maintained a toll-free telephone number and a project email box that WWP alumni and their caregivers could use to request technical assistance in accessing the survey or to ask general questions about the survey.

**Emails.** Help Center staff received more than 1,250 emails. Most alumni who wrote in asked to be removed from future WWP mailings. Others asked WWP for assistance with receiving various services. The help center staff forwarded those requests to WWP. Some alumni provided address updates.

Other comments that staff addressed were that the survey was too long and some questions were too personal; others asked when they could expect to receive their WWP Maglite flashlight.

In response to other emails, staff provided the survey URL to 22 alumni, classified 117 alumni as refusals and removed them from the survey mailing list, and updated 17 email addresses, 3 names, and 1 telephone number.

Ninety-three respondents, notably greater than in previous years, reported technical difficulties with their surveys. Help Center staff resolved most of these technical problems by sending the respondent their individual survey web site link with the embedded password. The other problems appeared to be that they received a message that the survey timed out when logging in, was related to firewalls that blocked emails with a military extension, or were due to respondents not having access to the internet.

**Toll-Free Hotline.** The hotline number rang directly at the Survey Help Center and was answered by a staff member during weekday business hours (9:00 a.m. to 5:00 p.m., EDT). Voicemail was available to anyone calling after business hours or on weekends, and messages were answered within 1 business day.

During the field period, 67 phone calls or voice messages were received. Topics of the calls included connectivity issues (resolved), uncertainty about how to answer a question, questions about availability of WWP resources, requests for the survey URL, updates on addresses, complaints about WWP services, requests for information on how to donate money to WWP, and refusals to take the survey,. The Help Center assisted all callers and, when appropriate, provided them with contact information for the WWP Resource Center.

**Distressed Comments.** The Survey Help Center also delivered respondent comments to the open-ended question at the end of the survey that identified any key words associated with possible severe behavioral health distress (e.g., comments about harming themselves or others) to the client. The Help Center compiled cumulative reports with possible distressed comments to WWP for review and followup. WWP staff contacted alumni to make sure they were safe and to recommend services or programs.

*CASE DISPOSITION.* At the end of data collection, Westat cleaned the data and assigned final disposition codes to each warrior in the sample, indicating eligibility or ineligibility for the survey, completes, partial completes, refusals, and nonresponse (Table A2). The final data set does not include any data from surveys designated as partial completes.

*RESPONSE RATE.* The response rate for the survey was 40.0 percent in 2016, compared with 39.4 percent in 2015 and 49.0 percent in 2014, 51.9 percent in 2013, 42.5 percent in 2012, 39.4 percent in 2011, and 32.4 percent in 2010. The 2016 rate was calculated as follows:

$$\begin{aligned}\text{Response rate} &= [\text{Number of completes}/(\text{Number of eligible respondents} + \text{number of eligible nonrespondents})] * 100. \\ &= [31,683/(31,683 + 4,861 + 117 + 42,484)] * 100 \\ &= [31,683/79,145] * 100 \\ &= 40.0 \text{ percent}\end{aligned}$$

**Table A2. Final Disposition Codes**

Number	Disposition value	Disposition code	Definition of disposition code
<b>Eligible Respondents</b>			
31,683	C	Complete	Completed web survey – Answered at least 17 of 20 core demographic questions as well as 22 of 47 core nondemographic items. Core questions were those that all respondents had a chance to answer (i.e., they were not prevented from answering them because of programmed skips).
<b>Eligible Nonrespondents</b>			
4,861	P	Partial Complete	Partially completed web survey – Did not answer at least 17 of the core demographic questions and 22 of the 47 core nondemographic items.
117	R	Refusal	Emailed or called and said “Do not email me again” and did not submit a survey.
42,484	N	No response	No survey submitted or started; includes 3 emails returned because of invalid addresses.
<b>Ineligible Sample Members</b>			
16	I	Ineligible	Was not eligible: Included 3 deceased alumni and 13 other ineligible test records in the sample.

*WEIGHTING THE DATA.* When everyone in the population is asked to participate in a survey, unweighted estimates will represent the entire population only if everyone responds or if there is no relationship between response propensity and the values of the survey data. If there is a relationship between the response pattern and the survey data, however, then unweighted estimates may not represent the entire population. For example, if the response rate for WWP alumni who are currently on active duty is much lower than that for WWP alumni who have separated or have retired from the military, then unweighted estimates will underrepresent individuals on active duty and over represent individuals who are not on active duty. Moreover, survey variables that have a relationship with active duty status—for example, income or employment status—can be similarly affected. In this case, weighted estimates in which the weight for respondents on active duty are greater than those for respondents not on active duty would produce estimates that are more representative of the entire population.

When calculating weights, statisticians need to have information about both respondents and nonrespondents to determine if the characteristics of respondents are different from those of nonrespondents. This information is used to divide the population into subpopulations—called nonresponse adjustment cells—and the response rate is then calculated in each subpopulation. The information used to create nonresponse adjustment cells should have the following characteristics:

- Response rates should be different in different nonresponse adjustment cells. (If there are only small differences in response rates among the created nonresponse adjustment cells, weighted estimates will not be very different from unweighted estimates.)
- Variables used to create nonresponse adjustment cells should have a relationship with one or more survey variables. (For survey variables that have no relationship with

variables used to define the nonresponse adjustment cells, the differences between weighted and unweighted estimates will be very small.)

Because the nonresponse adjustment cells must be defined with information available for both respondents and nonrespondents, we examined the response rates at the different levels of the variables on the list of all the alumni who were asked to participate in the 2016 WWP Alumni survey. For respondents, we also examined the relationship between these variables and the corresponding survey variables.

For the 2016 survey, we decided to create nonresponse adjustment cells similar to the way we created the nonresponse adjustment cells for the 2015, 2014, and 2013 surveys—that is, we used the following three variables to create nonresponse adjustment cells:

1. FRAME\_STATUS (active duty status). Three levels: active duty, not on active duty, and missing.
2. FRAME\_REGION (WWP region). Five levels: Midwest, Northeast, South, West, and missing.
3. FRAME\_AGE\_CAT (age category). Five categories: 18-24, 25-30, 31-35, greater than 35, and missing age.

Table A3 contains response rates disaggregated by the levels of each of these variables.

**Table A3. 2016 Response Rates Disaggregated by Information Available for Both Respondents and Nonrespondents**

Variable	Level	# Individuals in population	# Respondents	Response rate (%)
FRAME_STATUS	Active duty	12,894	4,466	34.6
	Not on active duty	59,462	25,446	42.8
	Missing	6,805	1,771	26.0
FRAME_REGION	Midwest	9,361	4,153	44.4
	Northeast	8,008	3,272	40.9
	South	37,377	15,557	41.6
	West	17,451	7,026	40.3
	Missing	6,964	1,675	24.1
FRAME_AGE_CAT	18-24	2,502	509	20.3
	35-30	17,051	5,396	31.6
	31-35	21,325	8,297	38.9
	> 35	34,062	16,366	48.0
	Missing age	4,221	1,115	26.4

For the 2016 survey, we calculated a set of weights to be used with the data obtained from all the respondents to the 2016 survey. The resulting weighted estimates represent the 2016 population. These types of weights are called cross-sectional weights. This same process was used with the 2015, 2014, and 2013 data.

We initially created  $3 \times 5 \times 5 = 75$  nonresponse adjustment cells. Adjustment cells containing fewer than 30 respondents were collapsed with cells having similar response rates. The final number of nonresponse adjustment cells was 27.

The first step in calculating weights is to determine base weights, which are the reciprocals of the sampling probabilities. Because all the individuals in the alumni population were invited to participate, all of the base weights were equal to 1.0. The base weights were then adjusted for nonresponse. For a nonrespondent, the adjusted weight is equal to zero. For a respondent, the adjusted weight is equal to the reciprocal of the response rate in the respondent's adjustment cells.

Table A4 includes the characteristics of the base weights and adjusted weights for respondents and nonrespondents. Note that the sum of the adjusted weights for respondents equals the sum of the base weights for all individuals in the population, which is equal to the number of individuals in the population.

**Table A4. Characteristics of 2016 Base Weights and 2016 Adjusted Weights**

Characteristic	2016 Base weights		2016 Adjusted weights	
	Respondents	Nonrespondents	Respondents	Nonrespondents
Minimum	1.0	1.0	1.8	0.0
Maximum	1.0	1.0	7.6	0.0
Mean	1.0	1.0	2.5	0.0
Median	1.0	1.0	2.4	0.0
Sum	31,683	47,478	79,161	0
		79,161		79,161

## HIGHLIGHTS FROM GOOGLE ANALYTICS

The following measures from Google Analytics provide information on the geographic location of visitors to the web survey and the web browsers they used.

### Visits to Web Survey From Top 8 Known Countries

#### 2016

- United States (54,608 visits)
- Puerto Rico (338 visits)
- Germany (253 visits)
- Guam (86 visits)
- South Korea (76 visits)
- Japan (49 visits)
- United Kingdom (47 visits)
- Italy (43 visits)

#### 2015

- United States (41,134 visits)
- Puerto Rico (231 visits)
- Germany (220 visits)
- Guam (52 visits)
- Japan (51 visits)
- South Korea (50 visits)
- Italy (31 visits)
- United Kingdom (25 visits)

#### 2014

- United States (35,567 visits)
- Germany (230 visits)
- Puerto Rico (123 visits)
- Japan (35 visits)
- Afghanistan (28 visits)
- South Korea (27 visits)
- Guam (23 visits)
- Italy (17 visits)
- 

### Top 10 Visits by Cities

#### 2016

- Atlanta (1,578 visits)
- Houston (1,495 visits)
- New York (1,321 visits)
- Los Angeles (1,148 visits)
- San Antonio (1,053 visits)
- Dallas (971 visits)
- Washington (962 visits)
- Chicago (849 visits)
- Jacksonville (735 visits)
- Colorado Springs (661 visits)

#### 2015

- Houston (1,103 visits)
- San Antonio (854 visits)
- New York (776 visits)
- Atlanta (688 visits)
- Chicago (658 visits)
- Los Angeles (619 visits)
- Dallas (615 visits)
- Washington (611 visits)
- Phoenix (555 visits)
- Colorado Springs (513 visits)

#### 2014

- San Antonio (785 visits)
- New York (731 visits)
- Austin (586 visits)
- Atlanta (502 visits)
- Colorado Springs (490 visits)
- Houston (468 visits)
- Chicago (462 visits)
- Los Angeles (427 visits)
- Jacksonville (418 visits)
- Fayetteville (332 visits)

### Top Browsers Used by Visitors

#### 2016

- Chrome (70.2%)
- Safari (36.0%)
- Internet Explorer (10.5%)
- Firefox (4.3%)
- Edge (2.9%)

#### 2015

- Chrome (37.6%)
- Safari (33.1%)
- Internet Explorer (18.2%)
- Firefox (5.5%)
- Android Browser (3.0%)

#### 2014

- Safari (33.6%)
- Chrome (27.7%)
- Internet Explorer (20.8%)
- Android Browser (10.1%)
- Firefox (6.4%)

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