Female Veterans: Socioeconomic Characteristics and Disability Patterns Among Social Security Beneficiaries

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In 2020, approximately 2 million women were veterans of military service. Female veterans constitute a growing proportion of Social Security beneficiaries. Using American Community Survey data for the period 2015–2019, we present a detailed study of the socioeconomic characteristics of female veterans, focusing on Social Security beneficiaries. We assess and compare the employment, earnings, income, and disability status of female veterans, female nonveterans, and male veterans. Female veterans were more likely than female nonveterans to have a college degree and, among those employed, to have higher median earnings. Female veterans younger than 62 were more likely than female nonveterans to be Social Security beneficiaries. Among all female beneficiaries, veterans were more likely than nonveterans to report having one or more functional limitations. More than half of female veteran beneficiaries aged 25–54 reported having a service-connected disability.

Introduction

Female veterans constitute a growing share of the Social Security beneficiary population. This growth results from the rising number of women who have served in the armed forces over the last several decades. There were 19.5 million veterans of active-duty military service in 2020 (Department of Veterans Affairs [VA] 2020b). Of this number, approximately 2 million—just over 10 percent—were women (VA 2020a). The VA projects that women will constitute 16.3 percent of veterans by 2042 (VA 2017).

As the female share of veterans increases, it becomes more important for policymakers to understand how they are served by the nation's social insurance programs. One needed step is to clarify the socioeconomic and demographic characteristics of female veterans who receive Social Security income.[1] However, few studies have focused on female veterans, and fewer still have looked at those who are Social Security beneficiaries (Tamborini, Purcell, and Olsen 2016). To address this research gap, we present a detailed study of female veterans' life circumstances, focusing on the socioeconomic characteristics and disability patterns of Social Security beneficiaries.

We examine female veterans aged 25 or older using a large, nationally representative dataset collected annually by the Census Bureau in its American Community Survey (ACS). We use ACS results for the 5-year period 2015–2019. The analysis assesses a range of characteristics including employment, earnings, income, and disability status, while examining differences in these characteristics across two comparison groups—female nonveteran beneficiaries and male veteran beneficiaries.

Selected Abbreviations	
ACS	American Community Survey
CPS	Current Population Survey
DI	Disability Insurance
FRA	full retirement age
SSA	Social Security Administration
VA	Department of Veterans Affairs

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Background

We position our analysis of female veteran beneficiaries within a broader body of research that has demonstrated important differences between veterans and nonveterans (London and Wilmoth 2016; Tamborini, Purcell, and Olsen 2016; Teachman 2004; Wilmoth and London 2011). Prior research described the demographic and economic characteristics of veterans who receive Social Security benefits (Olsen 2006; Olsen and O'Leary 2011) and examined trends in the socioeconomic characteristics of male veterans aged 55 or older (Tamborini, Purcell, and Olsen 2019) based on data from the Current Population Survey (CPS). This article focuses on recent cohorts of female veterans, using data for 2015–2019 from the ACS.

The literature on female veterans' socioeconomic and demographic characteristics is limited, and to our knowledge, no study has focused systematically on female veterans who receive Social Security income. To date, the relatively small share of female veterans in the overall population has made sufficient survey sample sizes difficult to obtain. In recent years, however, researchers have used large, nationally representative surveys such as the ACS (or pooled years of the CPS), which provide sufficient samples for analyzing smaller groups such as female veterans. In addition, several studies have employed unique audit surveys of prospective employers to gauge the effect of military experience on hiring patterns (for example, Kleykamp 2010).

Below, we summarize some of the main findings of the existing literature examining a range of aspects important to understanding the life circumstances of female veterans. Important characteristics include labor market outcomes, such as employment and earnings, and disability status.

Labor Market Outcomes

Labor market outcomes are an important indicator of female veterans' resources. Existing analyses mainly focus on female veterans overall, but they are informative for this study's focus on female veteran beneficiaries. Research on female veterans' employment patterns has shown mixed results. Some research shows little difference between veterans and nonveterans in women's employment (VA 2017; Gumber and Vespa 2020), but other research shows that female veterans are more likely than female nonveterans to be employed full time and work year-round, even when controlling for a variety of

demographic characteristics (Lofquist 2017; Prokos and Cabage 2017; Vespa 2020). Other research, such as Kleykamp (2010), using data from an audit study of employer responses to employment applications, has found that employers were more likely to hire female veterans than equally qualified female nonveterans, for both White and Black applicants.

Female veterans' earnings are also of interest. Recent research has found that women's earnings are higher among veterans than nonveterans (Lofquist 2017; Vespa 2020). Using data from the 2008–2010 ACS, Padavic and Prokos (2017) estimated that female veterans earned about 8 percent more than female nonveterans.

The literature addresses the extent to which the positive association between earnings and veteran status among women is attributable to their educational attainment, occupation, and/or industry of employment rather than to their veteran status in itself. Much of the association is driven by occupation. Gumber and Vespa (2020) found that female veterans who had served after September 11, 2001, had higher median annual earnings than nonveteran women, mainly because veteran women were more likely to work in male-dominated occupations that have higher earnings. Makridis and Hirsch (2021), analyzing data from the CPS for 2005–2018, found that mean earnings of female veterans and nonveterans were roughly equivalent once controls were introduced for demographic characteristics, industry, and occupation. Research also shows substantial within-group variation in veterans' earnings (Vick and Fontanella 2017; Renna and Weinstein 2019).

Disability Status

Disability and health limitations can be problematic for veterans. Medical researchers have conducted studies to examine a range of aspects related to female veterans' health (Runnals and others 2014; Sairsingh and others 2018). For this study, we look at research examining female veterans' disability statuses using nationally representative data. Recent work in this strand analyzes data collected from the ACS, including two sets of questions related to disability. One set asked survey respondents about functional disabilities and difficulties with self-care and independent living.[2] We refer to these as ACS-defined disabilities. A second set asked veterans specifically about VA-certified service-connected disabilities.[3] These disabilities refer to a health condition resulting from military service and are assigned a rating, in 10-percent increments

from 0 to 100 percent, based on the Veterans Affairs Schedule for Rating Disabilities (VASRD).

Recent evidence shows that for ACS-defined disabilities, there is a higher prevalence of health limitations among female veterans than for their nonveteran counterparts (Gumber and Vespa 2020). Widespread prevalence of service-connected disabilities also has been found among female veterans. Using the 2018 ACS, Vespa (2020) found that after accounting for period of service and demographic and social characteristics, female veterans were significantly more likely than male veterans to report a VA disability rating of 70 percent or higher.

Not all veterans with an ACS-defined disability also have a service-connected disability, nor do all those with a service-connected disability also have an ACS-defined disability. For instance, Holder (2016) analyzed 2014 ACS data and found that 28.8 percent of veterans reported having an ACS-defined disability and 19.6 percent reported having a service-connected disability. Prokos and Cabage (2017), using 2008–2010 ACS data, found that among female veterans aged 18–55, about 20 percent had a service-connected disability, but only 4.4 percent reported both a service-connected disability and an ACS-defined disability.[4]

Participation in the Social Security Disability Insurance (DI) program is also relevant to understanding veterans' lives. Although both the VA and the Social Security Administration (SSA) operate programs that provide income for qualifying individuals, the programs serve different purposes and use different definitions of disability. A veteran who qualifies for VA compensation for a service-connected disability might not qualify for DI benefits because the "VA maintains a disability compensation program, while SSA maintains an income replacement program" (Muller, Early, and Ronca 2014). Using administrative data from both the VA and SSA to examine allowance rates for DI benefits among veterans with a service-connected disability, Muller, Early, and Ronca found that after all appeals, cumulative DI allowance rates were 73.4 percent for veterans with VA ratings of 100 percent, compared with 58.7 percent for all DI applicants. Using 2008 data from the Survey of Income and Program Participation, Wilmoth, London, and Heflin (2015) found that 13.2 percent of veterans received VA compensation only and 6.7 percent received only DI benefits. Only 3.6 percent of veterans received both VA compensation and DI benefits.

Data and Methods

We examine the demographic and socioeconomic characteristics of female veterans receiving Social Security benefits, using data from the 2015–2019 iterations of the ACS, available as a database from the University of Minnesota's Integrated Public Use Microdata Series (IPUMS).[5] Administered by the Census Bureau, the ACS collects data on the demographic, economic, and housing characteristics of the resident U.S. population in an annual nationwide survey of more than 3 million household addresses. The ACS sample includes persons living in households and those living in group quarters such as nursing homes, college dormitories, and group homes. The population under study in this article includes only persons living in households; that is, it excludes people who live in group quarters or institutions.

We used the 5-year combined ACS sample for 2015–2019, rather than an individual survey year, to increase the sample size of female veteran beneficiaries. Our analysis sample comprises persons aged 25 or older in the survey year. Respondents are grouped as veterans or nonveterans using ACS questions that ask if they ever served on active duty in the military and when they served. To identify Social Security beneficiaries, we looked at whether they reported receiving their own Social Security benefit. Because the ACS does not ask respondents the reason for receiving Social Security benefits, we cannot differentiate between disability and retirement benefits. We can infer, however, that most beneficiaries younger than 62 would be DI beneficiaries, given their age.[6]

To account for age effects, we split the analysis sample into three age groups (25–54, 55–61, and 62 or older). Our final analytic sample of the Social Security beneficiary population consists of 21,285 female veteran beneficiaries aged 25 or older. For comparative purposes, we present analogous estimates for female nonveteran beneficiaries (n = 1,624,286) and male veteran beneficiaries (n = 525,811).

We use descriptive statistics to document the demographic and socioeconomic characteristics of female veterans who receive Social Security benefits. The analysis does not attempt to account for the differences in characteristics across study groups that might explain the outcomes. For example, we do not explore how female veterans' higher educational attainment can explain why they have higher median earnings than female nonveterans. Likewise, we do not address

the causal effect of military service on outcomes such as income or earnings.

We look at a number of key variables that highlight the life circumstances of female veteran beneficiaries. First, we present demographic and socioeconomic profiles of female veterans overall, female veteran beneficiaries, and the comparison groups. Key characteristics include educational attainment, race/ethnicity, marital status, and period of service.

We also examine differences in economic resources across the examined groups by measuring employment, individual earnings, family income, and poverty status. To account for economies of scale as family size increases, we use income equivalence scaling for family income measures.[7]

We look specifically at female veteran Social Security beneficiaries, determining their Social Security income at selected key percentiles and how much they rely on it for family income. We also assess the share of female veteran beneficiaries receiving 50 percent or more and 90 percent or more of their family income from Social Security. We compare these income measures to those for female nonveteran beneficiaries and male veteran beneficiaries.

We also document the disability patterns of veteran Social Security beneficiaries by exploring two measures. First, we examine ACS-defined disabilities by looking at self-assessed disability based on six ACS questions. These questions were designed to identify people who have any of the six following functional limitations that can interfere with their capacity for independent living and self-care:

- Hearing difficulty—deafness or serious difficulty hearing

- Vision difficulty—blindness or serious difficulty seeing, even when wearing glasses

- Cognitive difficulty—difficulty remembering, concentrating, or making decisions

- Ambulatory difficulty—serious difficulty walking or climbing stairs

- Self-care difficulty—difficulty bathing or dressing

- Independent living difficulty—difficulty doing errands alone, such as visiting a doctor's office

Second, we assess service-connected disability among veteran beneficiaries and the severity rating of any such disability. The ACS asks all veterans of active-duty service in the armed forces if they have a service-connected disability determined by the VA

or Department of Defense.[8] If they answer "yes," a follow-up question asks for the respondent's disability rating. Ratings are grouped into one of the five following categories:

- 0 percent

- 10 percent or 20 percent

- 30 percent or 40 percent

- 50 percent or 60 percent

- 70 percent or higher

As previously noted, some individuals who receive VA compensation or DI benefits—or even both—might not report a functional disability on the ACS. Likewise, many people who have a functional disability are able to work and do not have a service-connected disability, so they do not receive DI benefits or VA compensation. There is no single definition of disability that applies to all people in all situations. Even if it is defined as objectively as possible, disability is typically measured *relative* to a function (such as hearing or memory) or to an activity (such as employment or housekeeping), rather than as an absolute and quantifiable metric (Couch, Tamborini, and Reznik 2015).

All estimates presented below are weighted using the ACS sample weights. After weighting, the sample represents 358,000 female veteran Social Security beneficiaries, 27.8 million female nonveteran beneficiaries, and 8.5 million male veteran beneficiaries. All dollar amounts have been indexed to 2019 values using the Consumer Price Index. Note that survey data are subject to sampling and nonsampling error. Sampling error occurs if the sample selection and sample weighting do not accurately represent the population. Nonsampling errors are errors in the collection and processing of survey data.[9]

Results

In the following tables, we derive average annual estimates for the 5-year period 2015–2019 based on ACS data. Each table compares female veterans with female nonveterans and male veterans. Each of those three groups is in turn subdivided into three age groups: 25–54, 55–61, and 62 or older.

All Female Veterans

Table 1 shows selected socioeconomic and demographic characteristics for female veterans and the comparison groups. Below, we summarize the results for each socioeconomic and demographic category.

Table 1.

Characteristics of female veterans and nonveterans and male veterans, by age, average annual estimates for 2015–2019

Characteristic	Female veterans			Female nonveterans			Male veterans		
	25–54	55–61	62 or older	25–54	55–61	62 or older	25–54	55–61	62 or older
Number (thousands)	879	274	396	62,789	15,097	32,991	4,642	1,899	9,458
Percent	56.8	17.7	25.6	56.6	13.6	29.8	29.0	11.9	59.1
Education (%)									
Did not finish high school	1.9	2.4	5.1	9.5	10.7	15.1	2.2	5.0	8.1
High school graduate	12.8	18.6	25.0	21.8	28.4	33.2	24.6	31.9	30.4
Some college	44.7	43.6	36.5	30.8	31.7	27.1	45.3	39.3	32.4
College graduate	40.5	35.3	33.4	37.9	29.2	24.6	27.9	23.9	29.2
Race/ethnicity (%)									
White (non-Hispanic)	59.0	68.7	78.4	58.1	69.1	75.0	69.2	71.9	84.9
Black (non-Hispanic)	22.1	20.3	12.0	13.2	11.9	9.9	14.1	16.7	7.8
Hispanic (any race)	11.3	5.8	5.1	18.6	11.7	8.8	11.0	7.0	4.3
Asian	3.0	1.8	1.9	7.2	5.3	4.8	2.4	1.6	1.4
Other [a]	4.6	3.5	2.5	2.9	2.0	1.5	3.5	2.8	1.6
Marital status (%)									
Married	53.9	52.2	45.8	56.0	61.3	48.6	60.9	64.0	69.3
Divorced or separated	26.4	31.0	23.9	14.8	22.4	17.5	19.7	23.6	14.0
Widowed	1.4	6.0	21.3	1.2	6.3	28.2	0.8	2.7	12.4
Never married	18.2	10.8	9.0	28.0	10.0	5.7	18.6	9.7	4.4
Employment status (%)									
Employed	73.3	61.8	21.1	73.8	63.3	20.2	83.4	68.5	19.5
Unemployed	3.8	2.4	1.0	3.6	2.2	0.6	3.7	3.0	0.7
Not in the labor force	23.0	35.8	77.8	22.6	34.5	79.1	12.9	28.5	79.8
Median earnings of employed persons (2019 $)	40,000	42,000	35,000	35,000	37,000	28,000	53,000	55,000	37,800
Median scaled family income [b] (2019 $)	45,000	50,700	38,749	40,305	47,285	35,400	48,500	49,600	41,050
Income below poverty line (%)	9.3	8.8	8.7	13.3	11.0	10.6	6.3	9.7	5.6
Most recent active duty [c] (%)									
September 2001 or later	55.3	11.4	3.1	. . .	. . .	. . .	51.7	10.9	0.9
August 1990–August 2001	32.0	20.1	8.3	. . .	. . .	. . .	32.2	16.0	3.3
May 1975–July 1990	12.7	62.7	21.7	. . .	. . .	. . .	16.0	62.5	8.6
August 1964–April 1975	. . .	5.9	38.6	. . .	. . .	. . .	. . .	10.6	53.1
February 1955–July 1964	. . .	. . .	13.2	. . .	. . .	. . .	. . .	. . .	16.6
June 1950–January 1955	. . .	. . .	8.5	. . .	. . .	. . .	. . .	. . .	11.5
Before June 1950	. . .	. . .	6.6	. . .	. . .	. . .	. . .	. . .	6.0
Number of observations, unweighted	40,611	15,618	23,959	2,860,757	836,029	1,939,300	215,386	104,606	588,362

SOURCE: Authors' calculations using ACS.

NOTES: Estimates are weighted using ACS sample weights.

Rounded components of percentage distributions do not necessarily sum to 100.0.

. . . = not applicable.

a. Consists primarily of respondents identifying as multiracial or American Indian/Alaska Native.

b. Calculated by dividing total family income by the square root of the number of persons in the family.

c. Includes periods of active-duty service in the National Guard and Reserve forces.

Age. The age structure of a population has substantive consequences for outcomes including income. Among both veteran and nonveteran women, almost 57 percent were aged 25–54 but the age distribution differed slightly among older women. Specifically, slightly more female veterans were aged 55–61, while slightly more female nonveterans were aged 62 or older.

By contrast, female veterans' age distribution was substantively different from male veterans', with women much more likely than men to be in the younger age groups. This pattern reflects the growth in the share of women in the armed forces among younger cohorts. For instance, only 29.0 percent of male veterans in the sample were aged 25–54 years old and 59.1 percent were aged 62 or older. Among female veterans, 56.8 percent were aged 25–54 and only 25.6 percent were aged 62 or older. Olsen and O'Leary (2011) noted that the increasing numbers of women serving in the military may be related to recruitment efforts targeted toward women, in addition to changes in labor market opportunities.

Education. Female veterans' educational attainment is comparatively high across all three age groups. Most notably, female veterans were more likely to have graduated from college. In the period 2015–2019, 40.5 percent of female veterans aged 25–54 had a college degree, compared with 37.9 percent of female nonveterans and 27.9 percent of male veterans. Because the armed forces generally require recruits to have earned a high school diploma or its equivalent, high school noncompletion rates were substantially lower for male and female veterans than for nonveterans.

Race/ethnicity. Table 1 indicates that the racial/ethnic composition of female veterans and nonveterans differed in substantive ways. A higher share of female veterans self-identified as non-Hispanic Black, particularly among women aged 25–54. By contrast, fewer veterans self-identified as Hispanic or Asian. Female veterans were more likely to self-identify as non-Hispanic Black and less likely to report non-Hispanic White ethnicity than male veterans in the same age range. Among veterans aged 25–54, 22.1 percent of women identified as non-Hispanic Black, compared with 14.1 percent of men. Roughly similar proportions of both male and female veterans were of Hispanic origin.

Marital status. The marital status of female veterans differed from female nonveterans in significant ways. Female veterans were less likely to be married and more likely to be divorced or separated.

Among women aged 25–54, veterans were less likely than nonveterans to have never married. Compared with male veterans, fewer female veterans were married, and more were divorced or separated.

Employment status. Employment rates among women differed little by veteran status. Among women aged 25–54, 73.3 percent of veterans and 73.8 percent of nonveterans were employed, while 61.8 percent of veterans and 63.3 percent of nonveterans aged 55–61 were employed. Compared with male veterans, female veterans and nonveterans younger than 62 were less likely to be employed and more likely not to be in the labor force, probably because women take time off from paid employment to care for children or other dependents more often than men do. Female veterans and nonveterans aged 62 or older were slightly more likely than male veterans in that age group to be employed.

Earnings and income. In all three age groups, employed female veterans had substantially higher median annual earnings than their nonveteran counterparts.[10] For instance, female veterans aged 25–54 had median annual earnings of $40,000, compared with $35,000 for female nonveterans of the same ages. Employed male veterans aged 25–54 had median annual earnings of $53,000.

Median family income (adjusted for family size) followed a similar pattern. Female veterans aged 25–54 had a median scaled family income about 10 percent higher than nonveterans of the same age ($45,000 and $40,305, respectively).[11] Veteran men aged 25–54 had a median scaled family income of $48,500.

Poverty status. Female veterans were less likely than female nonveterans to have family incomes below the federal poverty threshold. Among women aged 25–54, 9.3 percent of veterans and 13.3 percent of nonveterans were in poverty. The poverty rate was about 9 percent among female veterans aged 55–61 and those aged 62 or older, while among female nonveterans in both age groups, it was about 11 percent. Compared with male veterans of the same ages, the poverty rates among female veterans younger than 55, and those aged 62 or older, were about 3 percentage points higher; but among veterans aged 55–61, the poverty rate was slightly lower for women.

Most recent military service. Compared with male veterans, female veterans aged 25–54 were more likely to have served most recently after September 2001. Those aged 55–61 were more likely

to have served most recently after August 1990, and those aged 62 or older were more likely to have served most recently after May 1975.

Female Veterans Who Are Social Security Beneficiaries

Table 2 repeats Table 1 for female veterans, female nonveterans, and male veterans who are Social Security beneficiaries.

Age. In the period 2015–2019, an estimated annual average of 358,000 female veterans aged 25 or older received Social Security benefits, of whom 83.5 percent were aged 62 or older. Of an estimated annual average of 27.8 million female nonveteran beneficiaries, 90.2 percent were aged 62 or older. Of an estimated annual average of 8.5 million male veteran beneficiaries, 95.9 percent were aged 62 or older.

The ACS does not ask respondents why they received Social Security benefits, but administrative data from SSA show that, in general, most beneficiaries younger than 62 receive benefits because of a disability. In December 2020, 6.3 million adults aged 18–61 received Social Security benefits, and 5.9 million of those beneficiaries— 93.3 percent— were disabled workers. Among the 3.3 million adult female beneficiaries younger than 62, 88.4 percent were disabled workers, and of 3.0 million adult male beneficiaries younger than 62, 98.8 percent were disabled workers (SSA 2021, Table 5.A16).

Education. Female veteran beneficiaries had the highest educational attainment of the beneficiary groups examined; for example, they were more likely than female nonveteran beneficiaries to have earned a 4-year college degree. Female veteran beneficiaries also had higher percentages of college graduates than male veteran beneficiaries for the two age groups younger than 62. The college graduation rates were similar among female and male veteran beneficiaries aged 62 or older.

Race/ethnicity. A striking difference between the beneficiary groups is their racial/ethnic compositions. Female veteran beneficiaries younger than 62 were more likely to self-identify as non-Hispanic Black and less likely to self-identity as Hispanic and non-Hispanic White than female nonveteran beneficiaries. Compared with male veteran beneficiaries, female veteran beneficiaries in all three age groups were less likely to identify themselves as non-Hispanic White and more likely to report being non-Hispanic Black.

Marital status. Female veteran beneficiaries aged 25–54 were more likely to be married than their nonveteran counterparts, but they also were more likely to be divorced or separated. Among female beneficiaries aged 55–61 and those aged 62 or older, the proportions of currently married veteran and non-veteran beneficiaries were roughly similar, but veteran beneficiaries were more likely to be divorced than nonveteran beneficiaries. Compared with male veteran beneficiaries, female veteran beneficiaries in all three age groups were substantially less likely to be married and were more likely to be either divorced or widowed.

Employment status. Social Security benefits insure workers and dependents against the loss of earnings because of disability, retirement, or death. Because most beneficiaries have retired, have a disability, or are dependent children, the employment rates shown in Table 2 are substantially lower than the employment rates shown in Table 1, which includes nonbeneficiaries. In all three age groups in all three beneficiary groups, employment rates were lower than 20 percent.

Female veteran beneficiaries younger than 62 were slightly less likely to be employed than their nonveteran counterparts. Among those aged 62 or older, the employment rates of female veteran and nonveteran beneficiaries were nearly the same. Employment rates differed relatively little between female and male veteran beneficiaries. All beneficiaries in all three age groups were much more likely not to be in the labor force than they were to be either employed or unemployed.

Earnings and income. SSA pays DI benefits to insured workers who are unable to work or who have a terminal medical condition. In general, beneficiaries whose earnings over a period of several months exceed specified amounts are no longer eligible to receive DI benefits. Similarly, federal law requires Social Security retired-worker benefits to be reduced if a beneficiary who is younger than the full retirement age (FRA) has annual earnings above specified amounts.[12] Because of these limitations, the median earnings of Social Security beneficiaries shown in Table 2 are substantially lower than those shown in Table 1.

In all three age groups, the median earnings of female veteran beneficiaries exceeded the median earnings of female nonveteran beneficiaries. Female veteran beneficiaries aged 25–54 who worked had median earnings of $18,000, compared with $14,300 for female nonveteran beneficiaries. Among beneficiaries aged 62 or older, female veterans had modestly

Table 2.
Characteristics of Social Security beneficiaries: Female veterans and nonveterans and male veterans, by age, average annual estimates for 2015–2019

Characteristic	Female veterans			Female nonveterans			Male veterans		
	25–54	55–61	62 or older	25–54	55–61	62 or older	25–54	55–61	62 or older
Number (thousands)	30	29	299	1,533	1,189	25,055	156	194	8,115
Percent	8.4	8.1	83.5	5.5	4.3	90.2	1.8	2.3	95.9
Education (%)									
Did not finish high school	3.3	3.5	5.2	18.3	17.6	14.9	4.5	8.6	8.3
High school graduate	19.1	24.0	27.1	35.3	35.6	35.6	32.4	38.8	30.9
Some college	52.5	51.5	37.1	33.1	33.8	27.6	48.4	41.2	32.0
College graduate	25.0	21.0	30.6	13.3	13.0	21.9	14.7	11.4	28.8
Race/ethnicity (%)									
White (non-Hispanic)	57.1	62.1	80.5	62.0	66.1	77.8	67.1	67.3	86.1
Black (non-Hispanic)	29.0	27.2	10.9	19.7	18.8	9.5	18.2	21.0	7.2
Hispanic (any race)	7.2	5.0	4.6	12.3	10.2	7.6	9.5	7.2	4.0
Asian	1.7	1.4	1.6	2.2	1.8	3.6	1.3	0.8	1.2
Other [a]	4.9	4.2	2.5	3.7	3.1	1.5	4.0	3.7	1.5
Marital status (%)									
Married	39.9	38.5	44.8	31.0	37.5	46.7	50.1	49.3	69.5
Divorced or separated	36.1	34.6	22.5	25.6	30.8	16.8	28.8	32.2	13.4
Widowed	6.5	11.7	24.4	7.8	16.8	31.7	3.1	5.3	13.1
Never married	17.6	15.3	8.3	35.7	14.9	4.9	18.0	13.2	3.9
Employment status (%)									
Employed	14.5	7.5	12.5	18.5	9.9	12.6	11.8	7.5	14.7
Unemployed	1.7	1.6	0.9	3.2	1.2	0.5	2.7	1.4	0.6
Not in the labor force	83.8	90.9	86.6	78.3	88.9	86.9	85.5	91.2	84.7
Median earnings of employed persons (2019 $)	18,000	16,000	18,500	14,300	13,000	16,500	27,000	18,000	25,000
Median scaled family income [b] (2019 $)	33,163	30,830	36,699	19,658	22,000	33,500	30,335	26,000	40,305
Income below poverty line (%)	16.7	16.7	7.3	29.9	24.8	9.2	16.2	17.9	4.4
Most recent active duty [c] (%)									
September 2001 or later	36.6	9.1	2.6	. . .	. . .	. . .	39.9	6.1	0.6
August 1990–August 2001	37.9	18.6	7.0	. . .	. . .	. . .	32.4	12.2	2.7
May 1975–July 1990	25.5	62.1	17.2	. . .	. . .	. . .	27.7	63.8	7.0
August 1964–April 1975	. . .	10.2	39.9	. . .	. . .	. . .	. . .	17.9	52.5
February 1955–July 1964	. . .	. . .	15.7	. . .	. . .	. . .	. . .	. . .	18.3
June 1950–January 1955	. . .	. . .	9.9	. . .	. . .	. . .	. . .	. . .	12.4
Before June 1950	. . .	. . .	7.9	. . .	. . .	. . .	. . .	. . .	6.5
Number of observations, unweighted	1,431	1,601	18,253	69,505	62,611	1,492,170	7,285	10,450	508,076

SOURCE: Authors' calculations using ACS.

NOTES: Estimates are weighted using ACS sample weights.

Rounded components of percentage distributions do not necessarily sum to 100.0.

. . . = not applicable.

a. Consists primarily of respondents identifying as multiracial or American Indian/Alaska Native.

b. Calculated by dividing total family income by the square root of the number of persons in the family.

c. Includes periods of active-duty service in the National Guard and Reserve forces.

higher median annual earnings ($18,500) than female nonveterans ($16,500). Male veteran beneficiaries had higher median earnings than female veteran beneficiaries in all three age groups.

Estimates of scaled family income, which adjusts for family size and economies of scale, followed a different pattern. Among Social Security beneficiaries younger than 62, female veterans had higher family income than either nonveteran women or veteran men. Among beneficiaries aged 62 or older, male veterans had the highest scaled median family income. Non-veteran women had the lowest scaled median family income in all three age groups.

Poverty status. There are important differences in poverty status across the three beneficiary groups. Female veteran beneficiaries were less likely than female nonveteran beneficiaries to have family income below the federal poverty threshold. For example, among nonveteran beneficiaries, 29.9 percent of those aged 25–54 and 24.8 percent of those aged 55–61 were in poverty, compared with 16.7 percent of female veteran beneficiaries in both age groups. Among female beneficiaries aged 62 or older, 7.3 percent of veterans and 9.2 percent of nonveterans had family

income below the poverty threshold. By contrast, the poverty rates of male and female veteran beneficiaries younger than 62 differed relatively little. Male veteran beneficiaries aged 62 or older had a lower poverty rate than both veteran and nonveteran female beneficiaries.

Most recent military service. Compared with men, female veteran beneficiaries aged 25–54 were less likely to have served most recently after 2001, and were more likely to have served most recently during 1990–2001. Female veteran beneficiaries aged 62 or older were more likely than men to have served most recently after May 1975 (26.8 percent versus 10.3 percent)—a period of service roughly coinciding with the beginning of the all-volunteer military in 1973.

Reliance on Social Security Benefits

Table 3 shows Social Security benefits at the 75th, 50th, and 25th percentiles for veteran and nonveteran women and veteran men by age.

Because Social Security was not designed to provide benefits that replace a worker's entire earnings, the median benefit amounts displayed in Table 3 are substantially lower than the median earnings shown in Table 1. For example, the median annual Social

Table 3.
Measures of Social Security income of female veteran and nonveteran beneficiaries and male veteran beneficiaries, by age: Average annual estimates for 2015–2019

Measures	Female veterans			Female nonveterans			Male veterans		
	25–54	55–61	62 or older	25–54	55–61	62 or older	25–54	55–61	62 or older
Number (thousands)	30	29	299	1,533	1,189	25,055	156	194	8,115
Annual individual Social Security income [a] (2019 $)									
75th percentile	15,900	16,500	17,800	12,800	14,800	16,600	16,900	19,100	21,600
Median	12,000	12,500	12,900	9,400	10,800	12,000	12,600	14,000	17,000
25th percentile	8,400	8,800	8,700	6,000	7,300	8,400	8,800	10,000	12,000
Median percentage of family income from Social Security [b]	29.4	35.9	40.5	43.1	50.2	47.0	32.3	47.4	42.8
Percentage of beneficiaries receiving—									
50% or more of family income from Social Security [b]	30.9	39.7	40.2	44.9	50.6	47.1	34.7	48.2	41.8
90% or more of family income from Social Security [b]	14.1	20.8	15.7	23.9	28.3	20.0	18.2	27.3	14.6

SOURCE: Authors' calculations using ACS.

NOTE: Estimates are weighted using ACS sample weights.

a. Annual individual Social Security benefit received by disabled worker, retired worker, spouse, and survivor beneficiaries.

b. Social Security benefits received by all family members as a percentage of total family income.

Security benefit received by female veteran beneficiaries aged 25–54 over the period 2015–2019 was $12,000. This was equal to 30 percent of the median annual earnings of all female veterans aged 25–54 with earned income during that period. Most of the beneficiaries in this age range were receiving DI benefits.

Comparisons across the three beneficiary groups show substantial differences. Among female beneficiaries, veterans had higher benefit levels. For example, female veteran beneficiaries aged 62 or older had a median annual Social Security benefit of $12,900, compared with $12,000 among nonveterans of the same ages. This was, however, less than the $17,000 median benefit among male veteran beneficiaries in the same age range.

The estimates for the 75th percentile show that one-fourth of female veteran beneficiaries aged 62 or older received annual Social Security benefits of $17,800 or more. The 25th percentile estimate, by contrast, reveals that one-fourth of female veteran beneficiaries in all three age groups received benefits of $8,800 or less. The percentile thresholds are lower still for female nonveteran beneficiaries: One-fourth of those aged 62 or older received benefits of $16,600 or more and one-fourth received benefits of $8,400 or less. Annual Social Security income of male veteran beneficiaries aged 62 or older was $21,600 at the 75th percentile and $12,000 at the 25th percentile.

Family reliance on Social Security income is a key socioeconomic indicator. Because this measure accounts for the income of all family members, it is influenced by variables including the respondent's marital status and family size. Many Social Security beneficiaries have other sources of income or live with family members who have income. Our estimates, like any survey-based estimates, are also subject to possible measurement error in income reporting. Insofar as pension income is underreported in surveys (Dushi and Trenkamp 2021; Tamborini and Kim 2020), the true mean reliance on Social Security income among persons aged 62 or older might be somewhat lower than what is presented here. Comparisons with tax returns and administrative program data confirm that household survey participants tend to underreport the income they receive from most sources. Respondents report their earnings and Social Security income more accurately than their income from interest, dividends, rent, pensions, and means-tested income support programs (Dushi and Trenkamp 2021; Kim and Tamborini 2014).

Table 3 shows differences in Social Security income reliance across the groups. The median percentage of family income represented by the Social Security benefits received by all family members ranged from a low of 29.4 percent among female veteran beneficiaries aged 25–54 to a high of 50.2 percent among female nonveteran beneficiaries aged 55–61. In all three age groups, the median share of family income provided by Social Security was comparatively lower for female veteran beneficiaries than for the other two beneficiary groups. The median share of family income from Social Security was highest among female nonveteran beneficiaries.

Overall, a substantial proportion of beneficiaries received at least half of their total family income from Social Security. This proportion ranged from a low of 30.9 percent among female veterans aged 25–54 to a high of 50.6 percent among female nonveterans aged 55–61. In all three age groups, female veterans were less likely than female nonveterans or male veterans to receive half or more of their family income from Social Security. Some beneficiaries received 90 percent or more of their family income from Social Security. This proportion ranged from a low of 14.1 percent among female veterans aged 25–54 to a high of 28.3 percent among female nonveterans aged 55–61. Among male veteran beneficiaries, the proportion who received 90 percent or more of family income from Social Security ranged from 14.6 percent among those aged 62 or older to 27.3 percent among those aged 55–61.

Disability Prevalence

Table 4 shows the prevalence of ACS-defined and service-connected disabilities of female veterans who receive Social Security income and of the two beneficiary comparison groups. As noted above, the ACS questionnaire asks all respondents, regardless of veteran status, whether they have difficulty in any of six functional limitation categories. We estimate that female veteran beneficiaries in all three age groups have a higher prevalence of having at least one ACS-defined limitation (63.5 percent among ages 25–54, 64.1 percent among ages 55–61, and 40.7 percent among ages 62 or older) than their nonveteran female counterparts. The largest gap is among women aged 62 or older (40.7 percent among veterans versus 34.0 percent among nonveterans).

Recall that about nine-tenths of adult Social Security beneficiaries younger than 62 received benefits because of a disability in 2020 (SSA 2021). Functional

Table 4.
Disability prevalence among female veteran and nonveteran Social Security beneficiaries and male veteran beneficiaries, by age: Average annual estimates for 2015–2019 (in percent)

Characteristic	Female veterans			Female nonveterans			Male veterans		
	25–54	55–61	62 or older	25–54	55–61	62 or older	25–54	55–61	62 or older
Number (thousands)	30	29	299	1,533	1,189	25,055	156	194	8,115
ACS-defined functional limitation									
Cognitive difficulty	37.4	29.8	10.4	32.8	24.8	8.7	39.9	26.0	8.8
Ambulatory difficulty	41.1	46.1	27.9	35.4	46.5	24.1	41.3	48.6	21.7
Independent living difficulty	34.6	30.9	17.1	33.5	29.7	16.0	33.9	26.3	12.1
Self-care difficulty	18.1	15.0	9.4	16.0	16.3	8.3	18.9	16.9	7.2
Vision difficulty	7.8	10.2	7.7	9.4	9.9	6.4	8.5	9.7	6.3
Hearing difficulty	6.0	9.3	15.1	6.0	7.1	10.7	14.1	16.0	23.9
Any of these	63.5	64.1	40.7	58.3	61.0	34.0	66.6	65.8	40.5
VA service-connected disability									
0% or unknown rating	3.1	2.4	1.7	. . .	. . .	. . .	3.4	3.4	1.8
10% or 20% rating	5.3	3.6	4.4	. . .	. . .	. . .	4.1	6.7	6.2
30%, 40%, 50%, or 60% rating	5.9	6.3	5.0	. . .	. . .	. . .	6.0	7.7	5.3
70% rating or higher	37.7	26.7	6.2	. . .	. . .	. . .	37.4	17.9	7.0
Any of these	52.0	39.0	17.3	. . .	. . .	. . .	50.8	35.6	20.3
ACS-defined and VA service-connected disability	36.4	27.2	8.3	. . .	. . .	. . .	38.1	26.2	11.5

SOURCE: Authors' calculations using ACS.

NOTE: . . . = not applicable.

limitations like those identified on the ACS and work-limiting disabilities that qualify an insured worker for DI benefits are often, but not always, present simultaneously. In contrast with beneficiaries younger than 62, those aged 62 or older are most often retired workers or the spouses or widows of retired workers.

The prevalence of an ACS-defined disability differed relatively little between female and male veteran beneficiaries. Among beneficiaries aged 25–54, 63.5 percent of female veterans and 66.6 percent of male veterans reported having one or more functional limitations, while among beneficiaries aged 55–61, 64.1 percent of female veterans and 65.8 percent of male veterans reported at least one functional limitation. Among beneficiaries aged 62 or older, the proportions of female veterans and male veterans who reported one or more functional limitations were nearly the same at 40.7 percent and 40.5 percent, respectively.

The ACS-defined disability rate was higher among male and female veteran beneficiaries than among female nonveteran beneficiaries. In all three groups of beneficiaries and in all three age categories, ambulatory difficulty was the most frequently reported

functional limitation. Difficulty seeing even when wearing glasses was the least frequently reported functional limitation.

Table 4 also shows the prevalence of a service-connected disability among veterans who receive Social Security income. As discussed earlier, the ACS asks all veterans if they have a VA service-connected disability rating. If they answer "yes," they are asked to classify their disability rating into one of five categories (0 percent, 10 percent or 20 percent, 30 percent or 40 percent, 50 percent or 60 percent, or 70 percent or higher).

We estimate that the prevalence of a service-connected disability is lower than that of an ACS-defined disability among both male and female Social Security beneficiaries. This is expected because service-connected disability is more narrowly defined, requiring that the disability was "incurred or aggravated" while on duty in the armed forces and certified by the VA.[13] Functional limitations on the ACS, by contrast, are self-reported and may have initially occurred at any time, although most of them likely began after discharge from the armed forces.

The percentage of veteran beneficiaries who reported having a service-connected disability was substantially similar by sex across the three age groups. Among those aged 25–54, 52.0 percent of women and 50.8 percent of men had a service-connected disability. More female veterans than male veterans aged 55–61 reported having a service-connected disability,[14] while more men than women aged 62 or older reported having a service-connected disability. In both age groups, however, the percentages of male and female veteran beneficiaries with a service-connected disability differed by only about 3 percentage points.

Some veteran beneficiaries reported having at least one ACS-defined disability as well as a service-connected disability. Among veteran beneficiaries aged 25–54, 36.4 percent of women and 38.1 percent of men reported having both a functional limitation and a service-connected disability, while among beneficiaries aged 55–61, the proportions of men and women with both types of disability were 27.2 percent and 26.2 percent, respectively. Among veteran beneficiaries aged 62 or older, only 8.3 percent of women and 11.5 percent of men reported having both a functional limitation and a service-connected disability. The pattern of declining rates of disability by age among veteran beneficiaries is likely because of SSA's eligibility rules. As noted earlier, approximately nine-tenths of adult beneficiaries younger than 62 receive DI benefits. Beginning at age 62, workers can claim retirement benefits, which do not require a disability as a basis for eligibility.

Discussion

As the female share of veterans continues to increase, so does the importance of understanding female veteran Social Security beneficiaries' life circumstances. VA (2017) projects that by 2042, there will be 2.2 million female veterans, who will comprise 16.3 percent of living veterans. VA also projects that the proportion of female veterans who are aged 60 or older will increase from 31 percent to 51 percent. Most of these veterans will receive Social Security benefits in later life. Increasing the information available about female veterans' employment, earnings, income, and disability prevalence will help policymakers better understand how Social Security does, and might better, serve them.

In this article, we presented evidence from the 2015–2019 iterations of the ACS to describe the socioeconomic and demographic characteristics of female veterans, particularly those who receive Social Security income. Our analysis explored various characteristics and resources important to a person's life circumstances, including employment, earnings, income, and disability status. We also assessed the degree to which Social Security benefits contribute to family income.

We found that female veterans are more likely than female nonveterans to have a college degree. We found that rates of employment, unemployment, and labor force participation are similar among female veterans and nonveterans; but, consistent with previous research, we found that employed female veterans had higher median annual earnings than female nonveterans.

We also found evidence that Social Security is a significant component of family income for veteran beneficiaries. Yet female veteran beneficiaries rely on Social Security income somewhat less than their female nonveteran and male veteran counterparts do. Given that female veterans have higher earnings and a higher scaled median family income, it is not surprising that their median share of family income from Social Security is smaller than that of nonveterans. For example, for female veteran beneficiaries aged 25–54, the median percentage of family income received from Social Security was 29.4 percent, compared with 43.1 percent for female nonveteran beneficiaries. Similarly, among the much more numerous beneficiaries aged 62 or older, the median percentage of family income received from Social Security income was 40.5 percent for female veterans, while among female nonveteran beneficiaries and male veteran beneficiaries, the median percentages of family income from Social Security were 47.0 percent and 42.8 percent, respectively.

We also found important differences in disability patterns. Overall, female veteran beneficiaries were more likely to report having one or more functional limitations than female nonveteran beneficiaries across the three age groups. The ACS-defined functional disability rates for male veteran beneficiaries were similar to those of female veteran beneficiaries. Among veteran beneficiaries younger than 62, approximately 64 percent of women and 66 percent of men reported having one or more functional limitations, compared with about 60 percent of female nonveterans younger than 62.

We also found that a sizable percentage of female veteran beneficiaries have a service-connected disability. Slightly more than half of both the female and male veteran beneficiary populations aged 25–54

https://www.ssa.gov/policy/docs/ssb/

(52 percent and 51 percent, respectively) reported that they had a service-connected disability. Among those aged 55–61, the proportions dropped to 39 percent for female veterans and 36 percent for male veterans. Among beneficiaries aged 62 or older, 17 percent of female veteran beneficiaries and 20 percent of male veteran beneficiaries reported having a service-connected disability. This lower percentage for beneficiaries aged 62 or older is due to the much higher proportion of beneficiaries aged 62 or older who receive retirement benefits rather than DI benefits.

The number of veteran Social Security beneficiaries who are women is likely to increase in the near term because of broad demographic and social changes in the U.S. population. Although the projected population of 2.2 million female veterans 20 years from now will be relatively small compared to the 86 million individuals that SSA estimates will be receiving Social Security benefits at that time (Board of Trustees 2022, Tables V.C4 and V.C5), some will have special needs because of their service-connected disabilities, and all will be members of a group deserving the highest levels of attention and interest from SSA.

Notes

[1] In this article, "Social Security" is synonymous with Old-Age, Survivors, and Disability Insurance.

[2] ACS respondents reporting a serious difficulty in cognition, hearing, mobility, and vision, or any difficulty in self-care and independent living, are considered to have a functional disability.

[3] A service-connected disability is a disability, disease, or injury incurred or aggravated during active military service. This can include combat injuries such as hearing loss, physical injuries, and posttraumatic stress disorder.

[4] Gumber and Vespa (2020), using data from the 2014–2018 ACS, found that among female veterans whose most recent period of service occurred after September 11, 2001, 29.5 percent of those who were employed and 44.1 percent of those who were not employed reported that they had a service-connected disability. About 8 percent of those who were employed and 22.7 percent of those who were not employed reported having a functional disability. Among female nonveterans, only 4.3 percent of the employed and 16.6 percent of the nonemployed had a functional disability.

[5] For more information about the ACS, see https://www.census.gov/programs-surveys/acs/about.html. The ACS data were downloaded from IPUMS USA (https://www.ipums.org). The IPUMS version 11.0 dataset, which we used for this analysis, was compiled by Ruggles and others (2021).

[6] Some other household surveys include a question about the basis of eligibility for Social Security benefits, and administrative data from SSA also include this information. The specific work-limiting disabilities that qualify an individual for DI benefits are defined in statute and regulation and do not correlate exactly with either ACS functional disabilities or VA service-connected disabilities.

[7] Census Bureau (2021) defines family as a group of two persons or more (one of whom is the householder) residing together and related by birth, marriage, or adoption.

[8] See the questions at https://www.census.gov/acs/www/about/why-we-ask-each-question/veterans/.

[9] For more information on sampling and nonsampling error in the ACS, see https://www.census.gov/programs-surveys/acs/technical-documentation/code-lists.html.

[10] As we describe in more detail later, income data reported by survey participants are less accurate than income data from sources such as tax returns and administrative records. However, there is no evidence that veterans report their income any more or less accurately than nonveterans, which would complicate a comparison of their incomes.

[11] Scaled family income is total family income divided by the square root of the number of persons in the family. This adjusts income for economies of scale that occur as family size increases. Median earnings in Table 1 were calculated only among individuals with earnings. Scaled median family income was calculated among all families with any income.

[12] The earliest eligibility age for retired-worker benefits is 62. Benefits claimed between age 62 and FRA are permanently reduced by actuarial adjustment factors, as specified by law. FRA is 67 for individuals born after 1959. For more information, see https://www.ssa.gov/pressoffice/IncRetAge.html.

[13] Chapter 38, § 3.1 of the Code of Federal Regulations states, "Service-connected means, with respect to disability or death, that such disability was incurred or aggravated, or that the death resulted from a disability incurred or aggravated, in line of duty in the active military, naval, or air service."

[14] The only category in which rates of service-connected disability differed greatly between men and women was the proportion of beneficiaries aged 55–61 who reported having a disability rating of 70 percent or higher. Nearly 27 percent of female beneficiaries aged 55–61 reported having a disability rating of 70 percent or higher, compared with 17.9 percent of male beneficiaries in that age group. The data available from the ACS lacked the detail necessary to suggest a possible explanation for this difference.

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