

Appendix—Not for Print Publication

This appendix provides supplementary information not found in the main text. It is divided into four general areas:

- Specific wording from the SAVe questionnaire, which is divided into three subsections
 - Questions about military service
 - Questions about political attitudes and ideology
 - Questions about pre-treatment characteristics
- A sensitivity analysis, which provides details on the robustness of our findings to unobserved confounders
- A regression of service on respondents' pre-treatment characteristics, which are used in the matching scheme
- Tables of full regression results from the analyses in the main text
- A disaggregated analysis of the effects of veteran status across two different sets of subgroups
 - The first compares the effect of service for commissioned officers and non-commissioned personnel
 - The second compares the effect of service for those who served a short time (0–6 years) and those that served longer (7+ years)

Service

Our analysis relies on two sets of distinctions. One is between those who have served and those who have not. The other is between those who were compelled to serve (either directly or indirectly) and those who opted for service purely as a matter of choice. We use the following two questions, respectively, to get at these categories:

1. Are you currently serving in the United States military?
 - a. Yes
 - b. No, but I previously served in the military and I am no longer active
 - c. No, and I have never served in the US military

2. Were you drafted into military service?
 - a. Yes
 - b. No, but the draft influenced my decision to serve in the military
 - c. No, there was no draft when I volunteered or it did not influence me
 - d. Prefer not to say

Veterans are those who selected choice *b* in question 1.¹ *True volunteers* are those individuals that selected *b* in question 1 and *c* in question 2. *Reluctant volunteers* answered *b* in question 1 and either *a* or *b* in response to question 2.

Dependent Variables

Ideological Variables.

Our ideological variables consist of conventional measures of ideological and partisan self-placement. For ideology, we use a direct, five-point scale:

¹Those who selected *a* (about 4% of our total sample) are omitted as their socialization is incomplete.

Q: Thinking about politics these days, how would you describe your own political viewpoint?

- a. Very liberal
- b. Liberal
- c. Moderate
- d. Conservative
- e. Very conservative
- f. Not sure

We assess party identification with a series of questions. First, respondents are asked:

Q: Generally speaking, do you think of yourself as a Democrat, a Republican or an Independent?

- a. Democrat
- b. Republican
- c. Independent
- d. Don't Know
- e. Prefer not to say

If the respondent answers "Democrat" or "Republican," he or she is then asked:

Q: Would you call yourself a strong [Party] or a not very strong [Party]?

- a. Strong [Party]
- b. Not very strong [Party]
- c. Prefer not to say

If the respondent answers "Independent," he or she is asked:

Q: Do you think of yourself as closer to the Democratic or the Republican Party?

- a. Lean Democratic
- b. Independent
- c. Lean Republican
- d. Prefer not to say

We use this information to create the following seven-point scale:

- 1. Strong Democrat
- 2. Not very strong Democrat
- 3. Lean Democratic
- 4. Independent
- 5. Lean Republican
- 6. Not very strong Republican
- 7. Strong Republican

Social Variables.

Our social index is constructed from five different social policy questions. In each the respondent is asked to indicate the degree to which they agree with a given statement: *Strongly agree, Somewhat agree, Somewhat disagree, Strongly disagree, or No opinion*. We give these responses numeric values, ranging from one to four (a response of “No opinion” is treated as missing). Where necessary, we recode the variable so that the more liberal position is represented by a lower-numbered response. We then sum them to get an index of social conservatism. The exact wording of each of the five statements follows:

- 1. Providing vouchers to parents so they may use public funds to send their children to private schools.

2. Leaving abortion decisions to women and their doctors.
3. Requiring institutions of higher education to provide equal funding to men's and women's athletic programs.
4. Permitting prayer in public schools.
5. Barring homosexuals from marriage.

Economic Variables.

We construct our economic index similarly, using a battery of six different economic policy questions. The first five are given in the same format as those in the social policy section, wherein respondents are asked to indicate their level of agreement with a statement or concept. The precise wording of these questions follows:

1. Redistributing income from the wealthy to the poor through taxation and subsidies.
2. To remedy a deficit, the government should focus on reducing spending rather than increasing taxes.
3. If the government had to choose between reducing military spending or spending on entitlement programs including Medicare and Social Security, the government should reduce spending on "the military and not entitlement programs.
4. Barriers to imports should be raised to protect jobs at home even if it means higher prices for consumers.
5. It is important to keep inflation low even if it means slower economic growth in the short term .

The sixth item concerns the Affordable Care Act, and is given on a two-point scale, with different responses:

Q: From what you have heard about the new health care law, do you think it is a good idea or a bad idea?

- a. Good idea
- b. Bad idea
- c. No opinion

Pre-Treatment Variables

Conducting causal inference through matching techniques is, to a large extent, limited by the quality of the pre-treatment variables used to preprocess each observation. The Survey of American Veterans includes a wide variety of items which have been found to predict military service. In each case, we omit observations in which the respondent declines to provide an answer.

County Growing Up.

The area in which a respondent grows up may affect his or her willingness to join the military. In particular, those who come from counties with a significant military population are themselves more likely to serve ([Goldberg et al. 2018](#)). To this end, we ask respondents to tell us the state or territory in which they were raised, or if they moved around frequently, the state or territory with which they identify. For those born in a U.S. state or territory, we then ask for the county, parish, or location with which they identify.

Q: Thinking back to your childhood, is there a [county/parish/location] within [state] with which you most closely identify?

Respondents then choose from a dropdown list of all locations relevant to that state or territory. We use this information to determine the proportion of veterans to which they were likely exposed, the proportion of college students to which they were likely exposed, and whether or not there was a base near them growing up.

Parental Military Service.

Children of current and former military members are more likely to serve themselves (Faris 1981, 1984; Kilburn and Klerman 1999; Segal and Segal 2004). We include a variable for parental military service based on the following question.

Q: Did either of your parents serve in the military?

- a. Yes, both
- b. My father served in the military but my mother did not
- c. My mother served in the military but my father did not
- d. Neither parent served in the military
- e. Not sure

High school GPA.

Individuals with higher grade point averages in high school have lower rates of enlistment (Bachman et al. 2000). To get at this, we ask respondents about their high school performance.²

Q: Thinking back to when you were in high school, which of the following best describes your final grade point average?

- a. A (3.67–4.0 or 90–100)
- b. B (2.67–3.66 or 80–89)
- c. C (1.67–2.66 or 70–79)
- d. D (0.67–1.66 or 60–69)
- e. I don't remember or my school did not assign grades
- f. Prefer not to say

²This question is only asked of respondents who indicated that they completed high school.

Race and Ethnicity.

The existing literature suggests that African-Americans are more likely than whites to serve in the military, while Hispanics are less likely to serve than non-Hispanic whites and African-Americans ([Bachman et al. 2000](#); [Segal and Segal 2004](#)). We include separate dummy variables for each of these three indicators of race and ethnicity. Respondents were first asked about their racial or ethnic group, and then about their Hispanic or Latino status.

Q: What racial or ethnic group best describes you?

- a. White
- b. Black
- c. Asian
- d. Native American
- e. Middle Eastern
- f. Mixed
- g. Other

Q: Are you of Spanish, Latino, or Hispanic descent?

- a. Yes
- b. No

Family Ties to Veterans.

Family ties to current and former military members may also be more likely to serve themselves ([Kleykamp 2006](#)). The Survey of American Veterans has information on the number of family members who had served in the military when the respondent was 16. Respondents were asked the following question and provided with a numerical text box in which to provide their answer.

Q: Thinking back to when you were 16, other than your parents, how many family members close to you—if any—served or had served in the military? This could include siblings, grandparents, stepsiblings, relatives by marriage or other close familial connections.

Female.

Women are significantly less likely to enlist in the military ([Segal and Segal 2004](#)), so we included a dummy variable for female gender. We ask individuals to provide their preferred gender identity.

Q: Are you male or female?

- a. Male
- b. Female

Age.

There are likely to be significant cohort effects in the decision to serve. Wars, major world events (such as 9/11), and the U.S. political climate are likely to play a major role in the life decisions of individuals of military age. In addition, the presence of the draft for men born prior to 1958 should significantly increase the probability of service (both directly and by encouraging reluctant volunteers to join in order to avoid being drafted). We ask respondents for the year of their birth, and provide a numerical text box in which they can provide this value.

Q: In what year were you born?

Socioeconomic Status.

Both conventional wisdom and previous research suggest that individuals from higher socioeconomic backgrounds received more favorable treatment from draft boards ([Davis and Dolbeare 1968](#); [Shields 1981](#)) and to serve in more desirable, less combat-prone jobs

(Appy 1993). To account for these differences among veterans, we ask about their family's socioeconomic status at age sixteen.

Q: People sometimes describe themselves as belonging to the middle class, or the upper or lower class. Thinking back to when you were 16 years old, to which class would you describe your family as belonging?

- a. Upper class
- b. Upper middle class
- c. Lower middle class
- d. Lower class
- e. Prefer not to say

Sensitivity Analysis

Cinelli and Hazlett (2020) note that all empirical analyses ought to be accompanied by sensitivity analysis, to inform the reader about the degree to which the results are sensitive to factors such as omitted variables. This is particularly important when using strategies like matching. To this end, we follow Cinelli and Hazlett’s advice, including a sensitivity analysis for all of the results in the main text, which uses the recommended `sensemakr` package in R. Our results appear in Table A1.

Treatment	Outcome	Coef.	Std. Error	t-value	$R^2_{Y \sim D \mathbf{X}}$	RV	$RV_{\alpha=0.10}$	DF
Service (raw)	Party ID	0.365	0.113	3.223	0.8%	8.4%	4.2%	1355
Service (matched)	Party ID	-0.177	0.104	-1.709	0.2%	4.6%	0.2%	1344
True veteran	Party ID	0.419	0.226	1.858	1.1%	10%	1.2%	313
Service (raw)	Ideology	0.14	0.058	2.413	0.4%	6.4%	2.1%	1330
Service (matched)	Ideology	-0.153	0.053	-2.864	0.6%	7.6%	3.3%	1319
True veteran	Ideology	0.216	0.113	1.917	1.2%	10.3%	1.5%	310
Service (raw)	Social	0.405	0.207	1.961	0.3%	5.7%	0.9%	1107
Service (matched)	Social	-0.52	0.198	-2.628	0.6%	7.6%	2.9%	1096
True veteran	Social	0.306	0.431	0.71	0.2%	4.2%	0%	268
Service (raw)	Economic	0.837	0.165	5.069	2.2%	13.9%	9.6%	1146
Service (matched)	Economic	0.137	0.158	0.862	0.1%	2.5%	0%	1135
True veteran	Economic	0.397	0.336	1.182	0.5%	6.8%	0%	284

Table A1: Model robustness values

Two columns in the table are of particular import: RV and $RV_{\alpha=0.10}$. These are the two robustness values, which tell us the percent of residual variance that an unobserved confounder would need to explain in order for our estimated effect to go to zero, or for its 90% confidence interval to overlap zero, respectively. In many cases, the individual effects that we identify are not particularly large (and in some cases non-significant). So it is not surprising that the robustness values are often relatively low. The strongest results within the matched data tend to be for ideology and social issues. In both cases, to nullify the effect of service, an unincluded covariate would need to explain at least 7.6% of the residual variance. By contrast, for economic issues (where service was non-significant), it

would be only 2.5%.

Determinants of Service

We draw the pre-treatment variables upon which we match observations (detailed above) from the literature. These are factors that previous research has shown to be related, either positively or negatively, to voluntary military service. However, it is worth examining our sample to see the degree to which such factors are consistent with our expectations.

	Veteran status	Expected direction
Parental service	-0.10 (0.07)	+
GPA	-0.29*** (0.10)	-
White	0.78** (0.32)	+
Hispanic	1.63*** (0.43)	+
Black	1.55*** (0.46)	+
Family ties	0.07** (0.03)	+
Female	-2.81*** (0.15)	-
Age	0.03*** (0.00)	+
Prop. vets in county	6.99*** (2.59)	+
Base in county	0.08 (0.14)	+
Prop. college students in county	0.92 (2.14)	-
Constant	-1.09* (0.65)	
Log-likelihood	-691.74	
Number of Observations	1499	

*** $p < 0.01$; ** $p < 0.05$; * $p < 0.1$

Table A2: Determinants of military service

Table A2 shows the results of a regression of veteran status on each of our pre-treatment variables. All significant effects are in line with expectations. Three variables—parental

service, base in county, and college students in county—are non-significant. In general, then, Table A2 suggests that the variables on which we match are consistent with the expected relationships.

Full results

Here, we provide tables of complete results for the regressions reported in the main text. Note that the *Hispanic* dummy is omitted in the index regressions for Table A5. This is due to a lack of variation for those analyses, which requires that they be dropped.

	Party ID	Ideology	Social Index	Economic Index
Veteran status	0.37*** (0.11)	0.14** (0.06)	0.41* (0.21)	0.84*** (0.17)
Constant	4.02*** (0.08)	3.20*** (0.04)	10.87*** (0.15)	15.26*** (0.13)
R ²	0.01	0.00	0.00	0.02
Number of Observations	1357	1332	1109	1148

*** $p < 0.01$; ** $p < 0.05$; * $p < 0.1$

Table A3: Effect of service with no control variables

	Party ID	Ideology	Social Index	Economic Index
Veteran status	-0.18*	-0.15***	-0.52***	0.14
	(0.10)	(0.05)	(0.20)	(0.16)
Parental service	0.17***	0.10***	0.29***	0.25***
	(0.05)	(0.03)	(0.10)	(0.08)
GPA	-0.09	-0.07*	0.03	-0.10
	(0.07)	(0.04)	(0.14)	(0.11)
White	-0.81**	-0.19	0.00	-0.42
	(0.35)	(0.18)	(0.67)	(0.49)
Hispanic	-0.57*	-0.01	0.84	-0.62
	(0.32)	(0.16)	(0.62)	(0.45)
Black	-3.04***	-0.89***	-0.74	-3.77***
	(0.44)	(0.22)	(0.83)	(0.65)
Family ties	0.00	0.01	-0.03	-0.01
	(0.02)	(0.01)	(0.04)	(0.03)
Female	-0.27	-0.05	-0.98***	-0.27
	(0.16)	(0.08)	(0.32)	(0.25)
Age	0.01***	0.01***	0.02*	0.02***
	(0.00)	(0.00)	(0.01)	(0.01)
Prop. vets in county	9.09***	4.71***	25.43***	9.17***
	(2.01)	(1.03)	(3.91)	(3.01)
Base in county	-0.15	-0.11*	-0.34*	0.07
	(0.11)	(0.06)	(0.21)	(0.16)
Prop. college students in county	-4.88***	-0.29	-15.23***	-6.62**
	(1.76)	(0.96)	(3.25)	(2.64)
Constant	4.14***	2.55***	9.64***	14.78***
	(0.57)	(0.29)	(1.07)	(0.82)
R ²	0.12	0.09	0.11	0.10
Number of Observations	1357	1332	1109	1148

*** $p < 0.01$; ** $p < 0.05$; * $p < 0.1$

Table A4: Effect of service with control variables

	Party ID	Ideology	Social Index	Economic Index
Voluntary service	0.42*	0.22*	0.31	0.40
	(0.23)	(0.11)	(0.43)	(0.34)
White	-0.07	-0.40	-2.17	0.73
	(1.18)	(0.51)	(3.59)	(1.68)
Hispanic	-2.01	-1.28		
	(2.03)	(1.01)		
Black	-2.75*	-1.24*	-3.57	-3.28
	(1.47)	(0.65)	(3.88)	(2.11)
Socioeconomic status	-0.10	0.01	-0.07	-0.14
	(0.21)	(0.11)	(0.40)	(0.32)
Age	0.01	0.00	-0.01	0.01
	(0.01)	(0.01)	(0.03)	(0.02)
Prop. vets in county	4.60	3.86*	20.45**	6.79
	(4.17)	(2.06)	(7.93)	(6.28)
Base in county	-0.07	0.08	0.08	0.07
	(0.23)	(0.12)	(0.44)	(0.34)
Constant	3.41**	3.02***	12.79***	14.50***
	(1.59)	(0.74)	(4.27)	(2.33)
R ²	0.05	0.05	0.04	0.04
Number of Observations	322	319	276	292

*** $p < 0.01$; ** $p < 0.05$; * $p < 0.1$

Table A5: Effect of voluntary service

Disaggregated analysis

With the exception of our analysis of true volunteers and their drafted or reluctant counterparts, our analysis generally treats veterans as a homogeneous group. It is possible, however, that effects may differ across subgroups within the veteran population. In particular, officers and enlisted personnel may exhibit different reactions to service, or careerists may differ from those who are mustered out after a single contract. To assess these differences, we divide our samples on two lines. First, we create a dummy variables for *officers*, which takes a value of one if an individual reports having received a commission within the military, and zero otherwise.³ We use this variable to create two samples. One includes only civilians and commissioned officers, and the other includes only civilians and non-commissioned service members. We then reapply our matching procedure to balance on the new subsets of the data, and reestimate our models.

We do the same thing for time in service, using six years as our benchmark. Enlisted personnel generally have contracts that include four years of active duty and two years inactive, while the standard contract for officers was six years prior to 1984 and eight years after. Six years is also useful as it is the median value within our data. Thus, we distinguish between the longer-serving subset of veterans and the shorter-serving subset. As with officers, we re-run our matching algorithm on both of these, and then estimate our models.

Figure A1 compares the estimated effect of service for commissioned officers and non-commissioned personnel. The results suggest that there is relatively little difference between the two groups. The point estimates are very similar for party identification and ideology, and neither is significantly different from zero. In terms of social issues, we find no effect for non-commissioned personnel, and a significant leftward shift for commissioned officers. We see the opposite for economic issues: no effect for commissioned

³Respondents are asked about their *highest* pay grades, so this includes those who initially enlisted but were later commissioned.

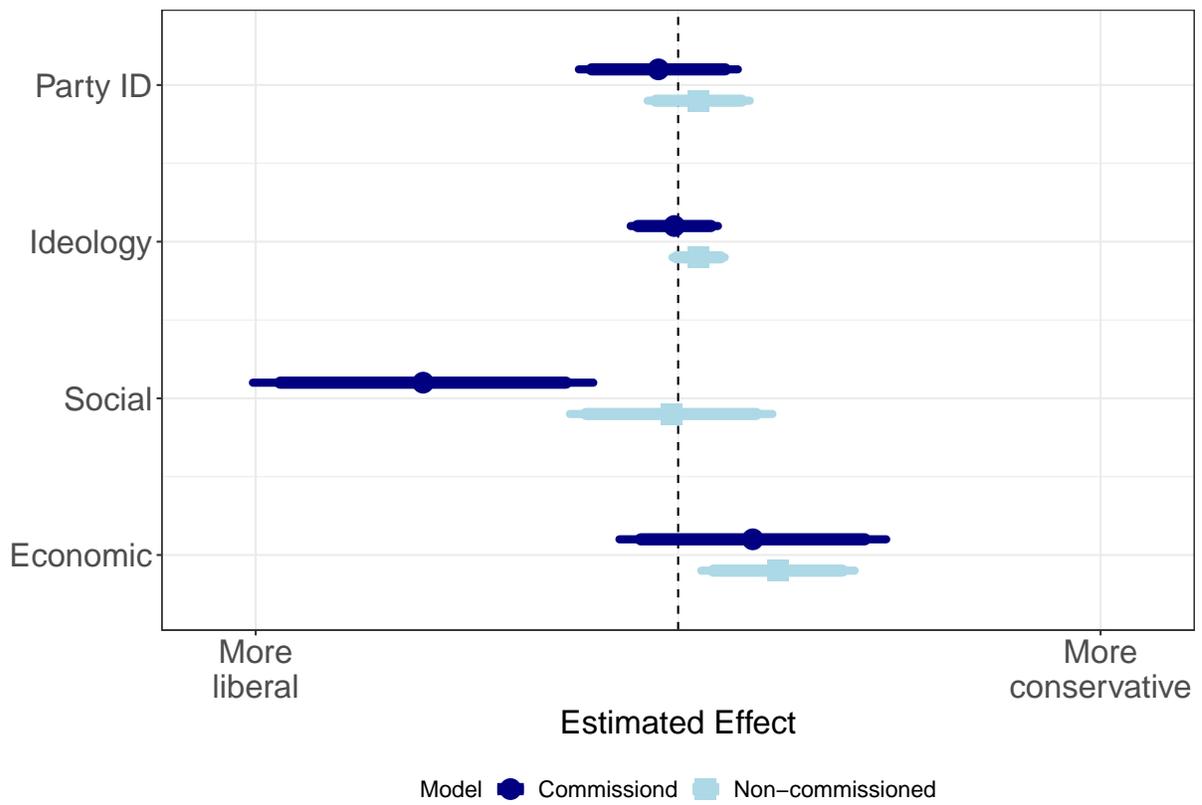


Figure A1: Effects of veteran status by rank

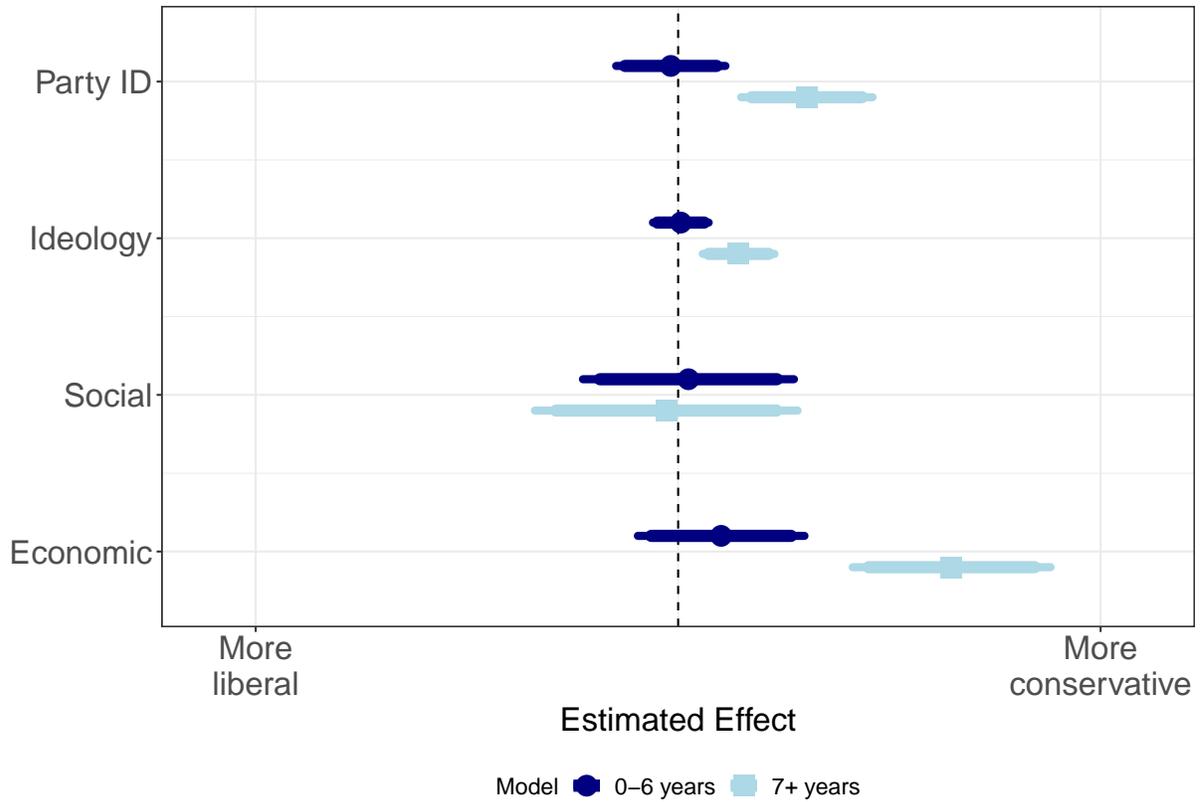


Figure A2: Effects of veteran status by time served

officers, and a significant positive shift for non-commissioned veterans. It is worth noting, however, that the confidence intervals overlap in both cases.

Figure A2 compares those who served for zero to six years to those that served for seven or more. In general, we find evidence that longer-serving individuals tended to be more conservative and Republican, and to shift rightward on economic issues. We find no effect for social issues. This suggests that the socialization process may occur over time, working most strongly on those that remain in the service the longest.

References

- Appy, Christian G. 1993. *Working-Class War: American Combat Soldiers and Vietnam*. Chapel Hill, NC: University of North Carolina Press.
- Bachman, Jerald G., Peter Freedman-Doan, David R. Segal and Patrick M. O'Malley. 2000. "Distinctive Military Attitudes among US Enlistees, 1976-1997: Self-Selection versus Socialization." *Armed Forces & Society* 26(4):561-585.
- Cinelli, Carlos and Chad Hazlett. 2020. "Making Sense of Sensitivity: Extending Omitted Variable Bias." *Journal of the Royal Statistical Society: Series B (Statistical Methodology)* 82(1):39-67.
- Davis, James Warren and Kenneth M. Dolbeare. 1968. *Little Groups of Neighbors: The Selective Service System*. Chicago, IL: Markham Publishing Company.
- Faris, John H. 1981. "The All-Volunteer Force Recruitment from Military Families." *Armed Forces & Society* 7(4):545-559.
- Faris, John H. 1984. "Economic and Noneconomic Factors of Personnel Recruitment and Retention in the AVF." *Armed Forces & Society* 10(2):251-275.
- Goldberg, Matthew S, Karen Cheng, Nancy M Huff, Dennis D Kimko and Alexandra M Saizan. 2018. *Geographic Diversity in Military Recruiting*. Technical report Institute for Defense Analyses.
- Kilburn, M. Rebecca and Jacob Alex Klerman. 1999. *Enlistment Decisions in the 1990s*. Rand Corporation.
- Kleykamp, Meredith A. 2006. "College, Jobs, or the Military? Enlistment During a Time of War." *Social Science Quarterly* 87(2):272-290.
- Segal, David R. and Mady Wechsler Segal. 2004. *America's Military Population*. Vol. 59 Washington, DC: Population Reference Bureau.

Shields, Patricia M. 1981. "The Burden of the Draft: The Vietnam Years." *Journal of Political and Military Sociology* 9(2):215–228.