

RESEARCH

Post-9/11 Veteran Transitions to Civilian Life: Predictors of the Use of Employment Programs

Keith R. Aronson¹, Daniel F. Perkins¹, Nicole R. Morgan¹, Julia A. Bleser¹, Dawne Vogt², Laurel Copeland³, Erin Finley⁴ and Cynthia Gilman⁵

¹ Clearinghouse for Military Family Readiness, Pennsylvania State University, US

² Boston VA Medical Center, US

³ VA Central Western Massachusetts Healthcare System, Leeds, MA, US

⁴ University of Texas Health Science Center San Antonio, US

⁵ Henry M. Jackson Foundation for the Advancement of Military Medicine, US

Corresponding author: Keith R. Aronson (kra105@psu.edu)

Post-9/11 veterans indicate that obtaining employment is both a priority and a challenge. Numerous federal, state, community, foundation-funded and corporate programs have been created to assist veterans; however, there is little empirical evidence to know what programming is effective and for whom. This study examined predictors of employment program use among new post-9/11 veterans. Male veterans were less likely to utilize online job databases and resume writing assistance than female veterans. Veterans from the junior enlisted paygrades (E1 to E4) were less likely to use online job databases, career fairs, resume writing assistance, job placement, career counseling, and training or certification programs than more senior enlisted paygrades or officers. Veterans from racial or ethnic minority groups (e.g., Black non-Hispanic, Asian) were more likely to utilize a variety of employment programs than their White non-Hispanic peers. Veterans who were exposed to warfare and those with a current physical health condition were more likely to use employment programs. Moreover, veterans with an ongoing mental health problem were no more likely to use any employment programs than veterans without such problems. To increase the use of employment programs, accessibility and targeted engagement strategies should be developed for veterans of different backgrounds and circumstances. Future directions for the longitudinal analysis of veteran's utilization of employment programs and their effectiveness in obtaining employment are discussed.

Keywords: veterans; employment; post-deployment functioning; military-to-civilian transitions; VA; PTSD

Introduction

With more than 3.3 million post-9/11 veterans currently in the United States and roughly 200,000 veterans that transition from the military each year, the number of post-9/11 veterans is projected to grow to more than four million by the end of 2026 (National Center for Veterans Analysis and Statistics, 2016). In the process of transitioning to civilian life, many veterans indicated that they were most concerned about their employment prospects (Curry, Hall, Harrell, Bicksler, Stewart, & Fisher, 2014) and consider obtaining employment as a top priority (Perkins, Aronson, & Olson, 2017). Despite the overall veteran unemployment rate declining significantly in recent years to 3.4% in July 2019 (Bureau of Labor Statistics, 2018a), post-9/11 veterans have the highest unemployment rate of veterans of all wars (Bureau of Labor Statistics, 2018b) and the unemployment

rate for post-9/11 male veterans between the ages of 18 to 24 years old remains high with an average of 8.5% from January to July 2019.

A recent study found that 53% of new post-9/11 veterans used employment programs within the first 90 days after discharge (Perkins, et al., 2019). However, there is a dearth of empirical literature about what these programs offer, who is more likely to utilize them, or how effective they are in helping veterans obtain gainful employment. Given these challenges, a number of federal, state, community-based, foundation-funded and corporate programs exist to assist veterans seeking employment (Carter, 2013). Federal programs include Department of Defense (DoD) Transitional Assistance Program (TAP) workshops in person or online (e.g., Transition GPS). State programs include employment centers (e.g., California Employment Development

Department) and allowing for preferential employment practices for hiring veterans (e.g., providing bonus points on civil service examinations for state public service positions). Local community initiatives are efforts to build support specific to a community's veteran, employer, and provider populations (e.g., Vetlanta). Corporate programs are funded to increase employment for a particular company (e.g., Walmart Careers with a Mission).

Many programs currently available to veterans offer employment services such as online job boards, career fairs, resume writing resources, career counseling, training and certification programs, and formal networking opportunities. With the increased availability of technology-supported resources, online job boards are the most used employment services by civilians (Kaufman, 2011). However, little is known about how job boards contribute to employment outcomes for veterans. Career fairs are also available to assist veterans in obtaining employment. Beyond giving participants direct personal interaction with potential employers, career fairs may help participants determine if a specific employment opportunity is a good fit for them (Stonebraker, Maybee, & Chapman, 2019). In the realm of resume writing, veterans may need assistance in translating their military job to comparable civilian occupations, or highlighting the soft employment skills (e.g., team work, leadership) they developed through military service. Indeed, veterans reported that translating their military skills was one of the most significant barriers to finding employment (Prudential, 2012).

Veterans can also utilize career counseling and mentoring services with experienced professionals who individually tailor employment-related content and address veterans' questions (e.g. American Corporate Partners; Meyers, 2013). Career counseling programs assist veterans by helping them learn about their career goals, identifying transferable skills or alternative career opportunities, and providing veterans with actionable steps to identify and achieve appropriate vocational outcomes (Buzetta, Hayden, & Ledwith, 2017; Clemens & Milsom, 2008; Rausch, 2014). Some corporations attempt to meet the needs of underemployed veterans by providing the necessary training and certification for civilian careers (e.g., Troops to Teachers, Solar Ready Vets), although only a few evaluations of these programs have been published (Owings, Kaplan, Khrabrova, 2015). Finally, there are programs dedicated to connecting veterans to employment networking opportunities and by teaching veterans networking strategies such as how to make new networking contacts and use existing connections to help find employment opportunities (Van Hoye, van Hooft, & Lievens, 2009). Networking may be the most effective strategy for obtaining employment (Kaufman, 2011), especially for those seeking professional and managerial occupations (Green, de Hoyos, M., Li & Owen, 2011).

There is some evidence that participation in employment-related programs yields positive results (Curry Hall et al., 2014a; Curry Hall, Harrell, Bicksler, Stewart & Fisher, 2014b; Kerrick, Cumberland, & Choi, 2016; Kerrick,

Cumberland, Church-Nally, & Kemelgor, 2014; U.S. Department of Labor, 2012). However, many such programs do not have evidence of their effectiveness. Scholars have suggested that veteran-serving organizations should develop and implement a strategy to determine what types of programs are being offered, who is more or less likely to utilize programs, and if different program types achieve targeted outcomes (Batka & Hall, 2016; Morgan et al., 2017).

One way to assess whether or not different program types achieve targeted outcomes is the use of common components analysis. Recently, a modified common components analysis was introduced (Morgan et al., 2017). The approach uses a quasi-experimental design to determine the effectiveness of program use. In common components analysis, programs are separated into their content components (i.e., what is taught) and process components (i.e., how content is taught), and similar content and process components can be compared across multiple programs to determine the individual component's effectiveness. In order to address this gap within the literature, the present study utilized the exploratory approach (Morgan, et al., 2017) to examine what content is taught within the employment domain.

To provide a framework for this evaluation, Andersen's Behavioral Model of Health Services Use was used (Andersen, 1995). This model proposes that each individual has predisposing characteristics that can predict their decision to seek out services. The model suggests that there must also be a need for the services in order for an individual to seek them out. Within the employment domain, Green et al. (2011) found in the general population that men, the unemployed, and younger people were more likely to use job centers and multiple job search methods, which are considered predisposing characteristics. However, this research has not been replicated with veterans. For example, are veterans with a medical discharge or an ongoing physical or mental health problems more likely to utilize certain types of employment programs? Or do veterans in specific career fields use different types of employment programs? This study attempted to provide a comprehensive understanding of veteran employment program utilization and identify the key characteristics of veterans who use or do not use specific types of employment programs.

Methods

Participants

The Veterans Affairs/Department of Defense Identity Repository (VADIR) was used to identify all post-9/11 veterans who had separated from the military within the prior 90 days before August 9, 2016 and September 20, 2016 (Vogt et al., 2018). All participants in those time periods were invited to participate in The Veterans Metrics Initiative (TVMI) study. Eligibility criteria included recently separating from the active component (Army, Navy, Air Force, Marine Corps) or deactivating from active status in the National Guard or Reserve and having a US address. A pre-alert letter with \$5 pre-incentive to participate was mailed to the veterans. The web-based survey remained open from September

2016 to November 2016. A \$20 incentive was provided upon completion of the wave one survey. The wave one online survey took approximately 45 minutes to complete, five additional surveys were administered in 6-month intervals. The institutional review board at ICF approved the study and informed consent was provided by participants. Of the total invited population of 48,965 veterans, complete data were provided by 9,566 veterans. Sample demographics are provided in **Table 1**. The average age was 34.46 (SD = 9.54).

Measures

To examine veterans' participation in programs designed to improve their employment prospects, respondents were asked to name up to two programs per question stem which they had used since separating from active duty service. The individual questions focused on their use of online job databases, career fairs, programs that helped with resume writing or military skills translators, job placement assistance, career counseling, job training, programs that helped them obtain a certification, or "other" employment programs. Veterans were asked to think of programs as any activity designed to meet their specific needs and that could be offered by any organization (e.g., community, government, private, or faith-based). Veterans were also asked to report who they had been networking with in terms of job opportunities (e.g., military friends, social networking sites-LinkedIn, recruiter). Any selected option was recoded to "yes" for networking use.

Covariates included service branch, gender, paygrade (i.e., wages and benefits that correspond to the rank of a service member), military occupation (i.e., service support, combat arms, and combat support), exposure to warfare (i.e., nine-item measure to access types of combat events), race/ethnicity, medical discharge status, self-reported ongoing physical and mental problems, and if the veteran was already employed full-time during the first assessment. Combat arms occupations include paratroopers, sharpshooters, and door gunners. Combat support occupations include military intelligence, engineering, and munitions control. Service support occupations include nursing, information technology, and public affairs positions.

Data Analytic Approach

In the current study, both weighted and unweighted proportion estimates were computed using STATA svy: proportion (STACorp, 2013). Differences between the weighted and unweighted proportion estimates were analyzed for design effects (Johnson & Elliott, 1998). Weighted logistic regression analyses using STATA logistic were used to examine the predictors of the types of employment program use.

Results

Predictors of Online Job Database Program Use

As described in **Table 2**, veterans from the Navy and Air Force were slightly more likely to report using online job database programs than Army veterans. Army veterans were significantly more likely than veterans from the National

Guard or Reserves to use online job databases. Male veterans were significantly less likely to use job databases in comparison to female veterans. Veterans from the middle-enlisted paygrades (E5–E6), senior enlisted (E7–E9), warrant officers (W1–W5), junior officer (O1–O3), and senior officer paygrades (O4–O10) were significantly more likely to use job databases than those from the junior enlisted paygrades (E1–E4). Veterans who listed their military occupation as combat arms were less likely to use an online job database than those who had service support occupations. In addition, veterans who reported exposure to warfare were 36% more likely to use an online job database. Black non-Hispanic veterans were 36% more likely and Hispanic veterans were 25% more likely to use an online job database than White non-Hispanic veterans. Veterans with ongoing physical health conditions were 46% more likely to use an online job database program than veterans without ongoing physical health conditions. There were no differences in job database use between veterans with and without a mental health condition and between those with and without full-time employment.

Predictors of Career Fair Use

Veterans from the Air Force and Marine Corps were significantly less likely to report attending career fairs than Army veterans. Veterans from junior enlisted paygrades (E1–E4) were less likely to utilize career fairs than all other paygrades. Veterans whose occupation was combat support were significantly more likely than those from a service support occupation to attend career fairs. Veterans exposed to warfare and those who had an ongoing physical health condition were significantly more likely to attend career fairs than those not exposed to warfare and who were without physical health problems. Black non-Hispanic and Asian veterans were significantly more likely to attend job fairs than White non-Hispanic veterans. Veterans who reported working full-time were significantly less likely to attend career fairs than those not working full-time.

Predictors of Resume Writing Program Use

Male veterans were significantly less likely than female veterans to use programs assisting with resume writing. As observed with other types of programs, junior enlisted paygrades (E1–E4) were less likely to use resume writing program than all the other paygrades. Veterans with a combat arms military occupation were significantly less likely to use resume writing programs than those from service support military occupations. Veterans who were exposed to warfare were 37% more likely to use a resume writing program. Black non-Hispanic veterans were significantly more likely to use resume writing programs than White non-Hispanic veterans. Veterans with a physical health problem were 53% more likely to use a resume writing program than veterans without a physical health problem, while veterans with and without mental health problems did not differ in their use of such programs. Veterans working full time were significantly less likely to use these programs.

Table 1: Sample Demographics.

Demographics	Unweighted (n = 9,466)	Weighted Estimate (SE) (n = 48,629)	Design Effect
Male gender	81.7%	84.0% (0.4%)	1.02
White non-Hispanic	65.1%	63.2% (0.5%)	1.17
Black non-Hispanic	10.8%	10.6% (0.3%)	1.12
Hispanic	13.8%	15.5% (0.4%)	1.23
Asian, Hawaiian, Pacific Islander non-Hispanic	4.4%	4.6% (0.2%)	1.21
Other race non-Hispanic	5.9%	6.1% (0.3%)	1.17
Paygrade			
Junior enlisted E1–E4	28.1%	41.4% (.6%)	1.26
Mid-grade enlisted E5–E6	30.0%	29.5% (.5%)	1.09
Senior enlisted E7–E9	17.9%	13.4% (.3%)	0.90
Warrant officers W1–W5	1.6%	1.1% (.09%)	0.83
Junior officers O1–O3	8.4%	6.4% (.2%)	0.84
Senior officers O4–O10	14.0%	8.2% (.2%)	0.73
Service branch			
Army	33.0%	32.1% (.5%)	1.12
Navy	19.2%	18.7% (.4%)	1.18
Air Force	19.0%	13.6% (.3%)	0.86
Marine Corps	15.9%	17.3% (.4%)	1.21
National Guard/Reserve	12.9%	18.4% (.5%)	1.38
Currently serving active component	14.9%	14.2% (.1%)	1.10
Currently serving National Guard/Reserve	12.3%	17.5% (.5%)	1.39
Service support military occupation	38.2%	37.0% (.5%)	1.15
Combat arms military occupation	22.7%	22.9% (.5%)	1.16
Combat support military occupation	39.1%	40.1% (.5%)	1.16
Warfare exposure	53.5%	47.8% (.5%)	1.15
Medical discharge	5.9%	6.2% (0.2%)	1.15
Ongoing physical health conditions, illness, or disability	57.1%	52.7% (.6%)	1.17
Ongoing mental/emotional health condition, illness or disability	33.7%	32.5% (0.5%)	1.13
Working full-time at initial survey	51.0%	49.8% (0.6%)	1.16
Employment program used			
Online job database	47.7%	44.1% (0.5%)	1.14
Career fair	11.7%	10.0% (0.3%)	1.01
Resume writing assistance	21.6%	19.2% (0.4%)	1.06
Job placement	12.1%	11.1% (0.3%)	1.06
Career counseling	5.7%	4.9% (0.2%)	1.02
Training or certification	3.7%	3.2% (0.2%)	1.02
Networking	84.2%	83.9% (0.4%)	1.17

Table 2: Demographic Predictors of Veterans' Employment Program Use (Weighted Results).

	Online job database Odds Ratio (SE)	Career fair Odds Ratio [CI]	Resume writing Odds Ratio [CI]	Job placement Odds Ratio [CI]
Constant	0.58 [0.49, 0.69]***	0.05 [0.03, 0.06]***	0.18 [0.15, 0.23]***	0.07 [0.05, 0.09]***
Army (reference)				
Navy	1.24 [1.09, 1.42]***	1.14 [0.94, 1.38]	1.10 [0.95, 1.28]	0.90 [0.74, 1.09]
Air Force	1.18 [1.03, 1.35]*	0.73 [0.59, 0.89]***	0.92 [0.78, 1.08]	0.82 [0.67, 1.00]
Marine Corps	1.01 [0.88, 1.16]	0.79 [0.63, 0.98]*	0.92 [0.78, 1.08]	0.81 [0.66, 1.00]
National Guard/Reserve	0.48 [0.26, 0.89]*	0.74 [0.29, 1.87]	0.70 [0.34, 1.46]	0.42 [0.14, 1.31]
Male	0.69 [0.61, 0.78]***	1.05 [0.86, 1.28]	0.80 [0.69, 0.93]***	0.86 [0.72, 1.04]
Junior enlisted E1–E4 (reference)				
Mid-grade enlisted E5–E6	1.47 [1.31, 1.66]***	1.68 [1.36, 2.08]***	1.49 [1.28, 1.73]***	1.27 [1.05, 1.53]*
Senior enlisted E7–E9	1.83 [1.58, 2.13]***	2.31 [1.82, 2.94]***	1.85 [1.55, 2.20]***	1.52 [1.22, 1.89]***
Warrant officers W1–W5	2.08 [1.41, 3.07]***	2.79 [1.79, 4.34]***	1.89 [1.26, 2.84]***	1.02 [0.61, 1.71]
Junior officers O1–O3	1.47 [1.23, 1.75]***	2.62 [1.99, 3.46]***	1.47 [1.18, 1.83]***	1.44 [1.10, 1.89]*
Senior officers O4–O10	1.43 [1.22, 1.68]***	2.54 [1.96, 3.29]***	1.49 [1.22, 1.82]***	1.06 [0.81, 1.38]
Currently NGR after active duty	1.07 [0.93, 1.22]	0.97 [0.79, 1.21]	0.93 [0.79, 1.10]	1.21 [0.99, 1.48]
Currently serving NGR	1.42 [0.77, 2.63]	0.67 [0.26, 1.73]	0.41 [0.19, 0.87]*	1.54 [0.49, 4.84]
Service support occupation (reference)				
Combat arms occupation	0.77 [0.68, 0.88]***	0.95 [0.78, 1.16]	0.83 [0.71, 0.97]*	1.03 [0.85, 1.25]
Combat support occupation	0.95 [0.86, 1.06]	1.24 [1.05, 1.46]*	1.09 [0.96, 1.24]	1.02 [0.87, 1.19]
Exposure to warfare	1.36 [1.22, 1.51]***	1.59 [1.34, 1.89]***	1.37 [1.21, 1.56]***	1.68 [1.43, 1.99]***
White non-Hispanic (reference)				
Black non-Hispanic	1.36 [1.17, 1.58]***	1.68 [1.36, 2.06]***	1.30 [1.09, 1.54]***	2.14 [1.75, 2.60]***
Hispanic	1.25 [1.09, 1.43]***	0.86 [0.69, 1.08]	1.15 [0.98, 1.35]	1.27 [1.04, 1.55]*
Asian, HPI non-Hispanic	1.11 [0.89, 1.39]	1.45 [1.03, 2.03]*	1.16 [0.89, 1.53]	1.74 [1.27, 2.37]***
Other race non-Hispanic	1.14 [0.94, 1.39]	1.04 [0.77, 1.40]	1.06 [0.84, 1.33]	1.43 [1.08, 1.90]*
Medical discharge	0.92 [0.76, 1.12]	0.89 [0.66, 1.21]	1.07 [0.86, 1.33]	0.90 [0.68, 1.20]
Ongoing physical health condition	1.46 [1.32, 1.62]***	1.35 [1.14, 1.60]***	1.53 [1.34, 1.75]***	1.49 [1.27, 1.76]***
Ongoing mental/emotional health condition	0.99 [0.88, 1.10]	1.12 [0.95, 1.32]	0.97 [0.86, 1.11]	1.01 [0.86, 1.18]
Working full-time at initial survey	1.02 [0.92, 1.12]	0.84 [0.72, 0.98]*	0.76 [0.67, 0.85]***	0.85 [0.73, 0.99]*

* p < .05; ** p < .01; *** p < .001; n = 9,466; population size = 48,427; NGR = National Guard/Reserve; HPI = Hawaiian Pacific Islander.

Predictors of Job Placement Program Use

Veterans from the middle-enlisted paygrades (E5–E6), senior enlisted (E7–E9), and junior officer (O1–O3) paygrades were significantly more likely to use job placement programs than junior enlisted paygrades (E1–E4). Veterans exposed to warfare were 68% more likely to use a job placement program than those who had not been exposed. Compared to White non-Hispanic veterans, Black non-Hispanic, Hispanic, and Asian veterans were all significantly more likely to use job

placement programs. Veterans with physical health conditions were 49% more likely than veterans without a physical health problem to use a job placement program. Veterans working full-time were less likely to use these programs.

Predictors of Career Counseling Program Use

As shown in **Table 3**, Veterans from the Navy were 37% more likely to use a career counseling program relative to Army veterans. Veterans from the senior enlisted paygrades

Table 3: Demographic Predictors of Veterans' Employment Program Use (Weighted Results).

	Career counseling Odds Ratio [CI]	Training & certification Odds Ratio [CI]	Networking Odds Ratio [CI]
Constant	0.02 [0.02, 0.04]***	0.02 [0.01, 0.03]***	4.17 [3.32, 5.24]***
Army (reference)			
Navy	1.37 [1.06, 1.78]*	0.90 [0.65, 1.24]	1.42 [1.18, 1.73]***
Air Force	1.08 [0.82, 1.42]	0.63 [0.44, 0.90]*	1.20 [1.00, 1.44]
Marine Corps	0.85 [0.62, 1.15]	1.11 [0.78, 1.56]	1.41 [1.16, 1.72]***
National Guard/Reserve	0.63 [0.15, 2.58]	0.82 [0.20, 3.41]	0.63 [0.34, 1.17]
Male	0.99 [0.76, 1.30]	0.95 [0.69, 1.31]	1.03 [0.87, 1.20]
Junior enlisted E1–E4 (reference)			
Mid-grade enlisted E5–E6	1.25 [0.94, 1.67]	1.37 [0.98, 1.92]	0.90 [0.77, 1.05]
Senior enlisted E7–E9	1.55 [1.11, 2.17]*	1.69 [1.14, 2.50]*	0.65 [0.54, 0.79]***
Warrant officers W1–W5	1.34 [0.66, 2.72]	2.21 [1.09, 4.45]*	0.83 [0.49, 1.41]
Junior officers O1–O3	2.50 [1.75, 3.55]***	2.12 [1.35, 3.33]***	0.99 [0.77, 1.27]
Senior officers O4–O10	1.94 [1.36, 2.76]***	2.32 [1.56, 3.46]***	0.69 [0.56, 0.85]***
Currently NGR after active duty	1.02 [0.76, 1.35]	0.86 [0.58, 1.27]	1.12 [0.92, 1.36]
Currently serving NGR	0.57 [0.13, 2.45]	0.44 [0.10, 1.93]	0.99 [0.53, 1.84]
Service support occupation (reference)			
Combat arms occupation	1.18 [0.90, 1.54]	0.95 [0.69, 1.31]	1.28 [1.08, 1.53]***
Combat support occupation	1.24 [0.99, 1.55]	1.03 [0.79, 1.35]	1.14 [0.99, 1.31]
Exposure to warfare	1.62 [1.28, 2.05]***	1.29 [0.97, 1.71]	1.21 [1.05, 1.39]*
White non-Hispanic (reference)			
Black non-Hispanic	1.59 [1.19, 2.13]***	1.53 [1.08, 2.17]*	1.37 [1.11, 1.70]***
Hispanic	1.10 [0.82, 1.48]	1.13 [0.79, 1.63]	1.00 [0.84, 1.19]
Asian, HPI non-Hispanic	1.74 [1.16, 2.62]*	1.70 [1.05, 2.75]*	1.08 [0.80, 1.47]
Other race non-Hispanic	1.14 [0.75, 1.71]	1.35 [0.83, 2.18]	1.00 [0.77, 1.29]
Medical discharge	0.69 [0.43, 1.09]	1.17 [0.73, 1.88]	0.62 [0.49, 0.79]***
Ongoing physical health condition	1.46 [1.16, 1.84]***	1.49 [1.12, 1.97]*	1.09 [0.95, 1.26]
Ongoing mental/emotional health condition	0.83 [0.66, 1.03]	0.90 [0.68, 1.18]	0.94 [0.81, 1.08]
Working full-time at initial survey	0.82 [0.67, 1.01]	0.96 [0.74, 1.25]	1.13 [0.99, 1.28]

* $p < .05$; ** $p < .01$; *** $p < .001$; $n = 9,466$; population size = 48,427; NGR = National Guard/Reserve; HPI = Hawaiian Pacific Islander.

(E7–E9), junior officer paygrades (O1–O3), and senior officer paygrades (O4–O10) were significantly more likely to use career counseling than junior enlisted paygrades (E1–E4). Veterans exposed to warfare were 62% more likely to use career counseling programs than those not exposed. Black non-Hispanic and Asian veterans were more likely to use career counseling programs than White non-Hispanic veterans. Veterans with an ongoing physical health condition were 46% more likely to use career counseling than veterans without physical health conditions.

Predictors of Job Training or Certificate Program Use

Air Force veterans were significantly less likely than veterans from the Army to use job training or certificate programs. Veterans from the senior enlisted paygrades (E7–E9), warrant officers, and officers (O1–O10) were all significantly more likely to use these programs than junior enlisted paygrades (E1–E4). Black non-Hispanic and Asian veterans were more likely to use job training or certificate programs than White non-Hispanic veterans. Veterans with an ongoing physical health condition were 49% more likely to use

job training or certificate programs than veterans without physical health conditions.

Predictors of Engagement in Job Networking

Veterans from the Navy and Marine Corps were significantly more likely to report engaging in networking activities compared to those from the Army. Senior enlisted and senior officer paygrades were significantly less likely to engage in networking than veterans from junior enlisted paygrades (E1–E4). Veterans who had combat arms occupations and those exposed to warfare were significantly more likely to use networking-focused programs. Finally, veterans with a medical discharge were significantly less likely than those who did not have a medical discharge to use programs which taught networking strategies.

Discussion

This study examined predictors of post-9/11 veterans' reports of their use of programs designed to improve their employment prospects within the first three months after separating from active duty military service. Several consistent themes emerged from the data. In terms of employment program use, veterans of the National Guard and Reserves did not differ in comparison to veterans from the active-component. Veterans who were working full time within the first few months after military separation were less likely to have reported using employment programs than those who were not working full-time. Male veterans were less likely to use employment programs than female veterans. Nevertheless, both males and female veteran had similar rates of using networks to obtain employment (e.g., connecting with military friends, social networking sites-LinkedIn, recruiter).

Veterans from more senior enlisted and officer paygrades were significantly more likely to use a variety of employment programs than veterans from the junior enlisted paygrades, especially for the use of online job databases, career fairs, resume writing assistance, and job training and certification programs. Prior research suggests that networking is most likely to be used for professional and higher managerial occupations and less often within routine occupations (Green et al., 2011), which seems contrary to current findings that senior enlisted and officer paygrades were less likely to use networking.

In regards to racial and ethnic differences in program use, White non-Hispanic veterans were consistently less likely to use employment programs than their non-White or Hispanic peers, which is consistent with their lower unemployment rate (Bureau of Labor Statistics, 2017). In addition, non-White veterans have lower incomes and are more likely to live in poverty than their White non-Hispanic peers (National Center for Veteran Analysis and Statistics, 2012). Thus, non-White veterans may have more impetus to engage with employment programs as a strategy to improve their socioeconomic well-being.

Veterans with physical health issues were substantially more likely to use employment programs than those veterans without physical health issues. This was consistent with a prior study of Veterans Affairs medical center users which found that veterans with physical health problems were significantly more likely to be unemployed than those without physical health problems and were also more likely to experience difficult transitions to civilian life across all domains of functioning (Zivin et al., 2016). Thus, while this finding is encouraging in that veterans with physical health conditions are using programs; the impact of whether program use is improving their employment situations is not clear. In contrast, veterans with mental health problems did not differ significantly from veterans without mental health problems with respect to engagement with employment-related programs. Perhaps those veterans with mental health problems face added barriers to program use, such as low levels of motivation, poor concentration, and difficulty functioning at a high level.

There were a number of limitations with this study. First, while the sample was large and approximated the population of new veterans who left the military between July and September 2016 on most background characteristics, how well the sample represents the post-9/11 veteran population at large is not known. Second, veterans may have used more programs than they were able to report, as they were asked to nominate two programs for each domain of program use. This may have put an artificial cap on the number of resources used by veterans. However, the likelihood of them adding more programs seems low given the survey took on average 42- minutes to complete. Finally, this study addressed the self-reported use of employment programs among a group of veterans who had very recently disconnected from active-duty service. Thus, this study provides only a snapshot of the predictors of employment program use. Presumably, the predictors of employment program use as well as the programs that these veterans use will change over time.

Implications for Future Research

Understanding the characteristics of veterans who utilize specific employment programs is the first step in the process of evaluating employment programs. Future directions should include investigating which types of programs are related to gaining employment and improving employment opportunities. Given that veterans from the junior enlisted paygrades experience higher rates of unemployment compared to veterans from the senior enlisted or officer paygrades (Zogas, 2017), low engagement with employment-related programs among veterans from the junior enlisted paygrades in the current study is concerning as these programs could potentially assist veterans in securing gainful employment. Career counselors and employment programs could assist veterans by using techniques like cognitive information processing to improve the way veterans from

the junior enlisted paygrades think about career alternatives and assist them in planning concrete steps to identify and achieve appropriate vocational outcomes (Buzzetta, et al., 2017; Rausch, 2014).

While veterans with ongoing mental health conditions used programs at similar rates to veterans without mental health conditions, the need for additional supportive services for veterans with mental and/or physical health conditions cannot be overlooked due to their higher risk of un- and under-employment (U.S. Department of Veterans Affairs, 2015). Specialized programs targeting veterans with mental health symptoms should be considered. In one study, virtual reality job interviewing training was offered to veterans with PTSD and those veterans showed significant improvement in their interviewing skills and confidence (Smith et al., 2015).

Organizations that support veterans in the vocational domain should consider targeting their marketing and programming efforts to veterans with the highest risk of un- and under-employment and who may need assistance finding programs or experience barriers to participation in programs that could serve their needs following their military service. Education about the importance of each area of employment program support may increase utilization especially after the effectiveness of each strategy is demonstrated.

Competing Interests

The authors have no competing interests to declare.

References

- Andersen, R. M.** (1995). Revisiting the behavioral model and access to medical care: does it matter? *Journal of health and social behavior*, 36(1), 1–10. DOI: <https://doi.org/10.2307/2137284>
- Batka, C., & Hall, K. C.** (2016). *More research on veteran employment would show what's good for business and for veterans*. Santa Monica, CA: RAND Corporation. DOI: <https://doi.org/10.7249/PE196>
- Bureau of Labor Statistics.** (2018a). *The employment situation*. Washington, DC: U.S. Department of Labor.
- Bureau of Labor Statistics.** (2018b). *Employment situation veterans 2017*. Washington, DC: U.S. Department of Labor.
- Buzzetta, M., Hayden, S. C. W., & Ledwith, K.** (2017). Creating hope: Assisting veterans with job search strategies using cognitive information processing theory. *Journal of Employment Counseling*, 54(2), 63–74. DOI: <https://doi.org/10.1002/joec.12054>
- Carter, P.** (2013). *Expanding the net: Building mental health capacity for veterans*. Washington, DC: Center for a New American Security.
- Clemens, E. V., & Milsom, A. S.** (2008). Enlisted service members' transition into the civilian world of work: A cognitive information processing approach. *The Career Development Quarterly*, 56(3), 246–256. DOI: <https://doi.org/10.1002/j.2161-0045.2008.tb00039.x>
- Curry Hall, K., Harrell, M. C., Bicksler, B., Stewart, R., & Fisher, M. P.** (2014a). *Connecting veterans and employers*. Santa Monica, CA: RAND Corporation. DOI: <https://doi.org/10.7249/RB9829>
- Curry Hall, K., Harrell, M. C., Bicksler, B. A., Stewart, R., & Fisher, M. P.** (2014b). *Veteran employment: Lessons from the 100,000 jobs mission*. Santa Monica, CA: RAND Corporation. DOI: <https://doi.org/10.7249/RR836>
- Green, A. E., de Hoyos, M., Li, Y., & Owen, D.** (2011). *Job search study: Literature review and analysis of the Labour Force Survey*. London, England: Department for Work and Pensions.
- Johnson, D. R., & Elliott, L. A.** (1998). Sampling design effects: Do they affect the analyses of data from the National Survey of Families and Households? *Journal of Marriage and Family*, 60(4), 993–1001. DOI: <https://doi.org/10.2307/353640>
- Kaufman, W.** (2011, February 3). A Successful Job Search: It's All About Networking. *All Things Considered*. Washington, DC: National Public Radio.
- Kerrick, S. A., Cumberland, D., Church-Nally, M., & Kemelgor, B.** (2014). Military veterans marching towards entrepreneurship: An exploratory mixed methods study. *The International Journal of Management Education*, 12(3), 469–478. DOI: <https://doi.org/10.1016/j.ijme.2014.05.006>
- Kerrick, S. A., Cumberland, D. M., & Choi, N.** (2016). Comparing military veterans and civilians responses to an entrepreneurship education program. *Journal of Entrepreneurship Education*, 19(1), 9.
- Meyers, T.** (2013). *Serving those who served: A wise giver's guide to assisting veterans and military families*. The Philanthropy Roundtable.
- National Center for Veteran Analysis and Statistics.** (2012). *Characteristics of rural veterans*. Washington, DC: U.S. Department of Labor.
- National Center for Veterans Analysis and Statistics.** (2016). *Profile of post-9/11 veterans: 2014*. Washington, DC: National Center for Veterans Analysis and Statistics.
- Owings, W. A., Kaplan, L. S., Khrabrova, I., & Chappell, S.** (2015). Troops to teachers update: Changing, but still pleasing principals with high teaching quality. *NASSP Bulletin*, 99(1), 70–98. DOI: <https://doi.org/10.1177/0192636515571933>
- Perkins, D. F., Aronson, K. R., & Olson, J. R.** (2017). *Supporting United States veterans: A review of veteran-focused needs assessments from 2008–2017*. University Park, PA: Clearinghouse for Military Family Readiness.
- Perkins, D. F., Aronson, K. R., Morgan, N. R., Bleser, J. A., Vogt, D., Copeland, L. A., Gilman, C., et al.**

- (2019). Veterans' use of programs and services as they transition to civilian life: Baseline assessment for the Veteran Metrics Initiative. *Journal of Social Service Research* (pp. 1–15). DOI: <https://doi.org/10.1080/01488376.2018.1546259>
- Prudential.** (2012). *Veterans' employment challenges: Perceptions and experiences of transitioning from military to civilian life*. Newark, NJ: Prudential.
- Rausch, M. A.** (2014). Contextual career counseling for transitioning military veterans. *Journal of Employment Counseling*, 51(2), 89–96. DOI: <https://doi.org/10.1002/j.2161-1920.2014.00044.x>
- Smith, M. J., Humm, L. B., Fleming, M. F., Jordan, N., Wright, M. A., Bell, M. D., et al.** (2015). Virtual reality job interview training for veterans with posttraumatic stress disorder. *Journal of Vocational Rehabilitation*, 42(3), 271–279. DOI: <https://doi.org/10.3233/JVR-150748>
- StataCorp.** (2013). STATA Survey Data Reference Manual: Release # 13. College Station, TX. Available from: <https://www.stata.com/manuals13/svy.pdf>
- Stonebraker, I., Maybee, C., & Chapman, J.** (2019). Undergraduate students' experiences of using information at the career fair: A phenomenographic study conducted by the libraries and career center. *The Journal of Academic Librarianship*, 45(4), 358–367. DOI: <https://doi.org/10.1016/j.acalib.2019.05.002>
- U.S. Department of Labor.** (2012). *Vets fact sheet 1: Transition Assistance Program*. Washington, DC: U.S. Department of Labor.
- U.S. Department of Veterans Affairs.** (2015). *2015 Veteran economic opportunity report*. Washington, DC: U.S. Department of Veterans Affairs.
- Van Hoye, G., Van Hooft, E. A., & Lievens, F.** (2009). Networking as a job search behaviour: A social network perspective. *Journal of Occupational and Organizational Psychology*, 82(3), 661–682. DOI: <https://doi.org/10.1348/096317908X360675>
- Vogt, D., Perkins, D. F., Copeland, L. A., Finley, E. P., Jamieson, C. S., Booth, B., Gilman, C. L., et al.** (2018). The Veterans Metrics Initiative study of US veterans' experiences during their transition from military service. *BMJ Open*, 8(6), e020734. DOI: <https://doi.org/10.1136/bmjopen-2017-020734>
- Zivin, K., Yosef, M., Levine, D. S., Abraham, K. M., Miller, E. M., Henry, J., Valenstein, M., et al.** (2016). Employment status, employment functioning, and barriers to employment among VA primary care patients. *Journal of Affective Disorders*, 193, 194–202. DOI: <https://doi.org/10.1016/j.jad.2015.12.054>
- Zogas, A.** (2017). US military veterans' difficult transitions back to civilian life and the VA's response. Providence, RI: Brown University.

How to cite this article: Aronson, K. R., Perkins, D. F., Morgan, N. R., Bleser, J. A., Vogt, D., Copeland, L., Finley, E., & Gilman, C. (2019). Post-9/11 Veteran Transitions to Civilian Life: Predictors of the Use of Employment Programs. *Journal of Veterans Studies*, 5(1), pp. 14–22. DOI: <https://doi.org/10.21061/jvs.v5i1.127>

Submitted: 29 July 2019

Accepted: 12 October 2019

Published: 22 November 2019

Copyright: © 2019 The Author(s). This is an open-access article distributed under the terms of the Creative Commons Attribution 4.0 International License (CC-BY 4.0), which permits unrestricted use, distribution, and reproduction in any medium, provided the original author and source are credited. See <http://creativecommons.org/licenses/by/4.0/>.