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American Military Veteran Entrepreneurs: A Comprehensive Profile of Demographic, Service History, and Psychosocial Characteristics

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Abstract

American military veterans are nearly twice as likely to be self-employed compared to non-veterans, and are majority owners in nine percent of all businesses nationwide. Despite their contribution to the broader economy and the potential for training programs to cultivate and foster successful self-employment and veteran-lead entrepreneurial ventures, research on veteran entrepreneurs remains limited. In order to gain a better understanding of the potential strengths and vulnerabilities of veteran entrepreneurs, the current study utilized data from a large, nationally representative sample to profile self-employed veterans (n=230) and compare them to veterans who work as employees (n=1,055) with respect to demographic, military service history, and psychosocial characteristics. Results indicated that self-employed veterans were older and more educated and more likely to utilize VA healthcare. Self-employed veterans were more likely to serve in Vietnam and to serve in the military for fewer years. No differences were noted in perceived military experience, level of combat exposure, or military branch served as a function of self-employment. Although reporting more lifetime traumas, self-employed veterans did not experience higher rates of current or lifetime psychopathology or lower perceived quality of life. Potential protective resilience-promoting factors may be associated with the higher levels of openness, extraversion, optimism, achievement-orientation (purpose in life), and greater need for autonomy and professional development observed among self-employed veterans. Moreover, self-employed veterans demonstrated higher levels of gratitude, community integration, and altruistic service to others. Findings have potential to inform human resources management strategies and vocational training and reintegration initiatives for veterans.

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Keywords

Veteran; Entrepreneur; Self-Employed; Mental Health; Functioning

Introduction

Entrepreneurship (self-employment with or without employees) drives economic growth and job creation (Kochar, 2015; Stangler & Litan, 2009). Military veterans pursue self-employment, start and grow businesses, and create jobs at meaningful rates. According to data from the United States Census Bureau (2007), veterans are majority owners of nine percent of all businesses nationwide (i.e., over 2.4 million businesses). These veteran-owned businesses employ nearly 5.8 million people and generate approximately $1.22 trillion in revenue (U.S. Census Bureau, 2007). In addition, veterans are significantly more likely than non-veterans to be self-employed (Fairlie, 2004; at least 45% more likely; Hope & Mackin, 2011). Indeed, military experience is credited to positively impact self-employment (Hope & Mackin, 2011; Moutray, 2007) as it uniquely prepares individuals to lead others, work collaboratively, and adapt to frequently changing and unpredictable circumstances (e.g., Pittaway, 2010; Waldman Associates & RDEA International, 2004).

Given the high representation of military experience in startup ventures, veteran entrepreneurs might be viewed as an inherent potential resource for the armed services and for the country. For instance in Israel, a country of approximately 7 million people founded not yet 70 years ago that faces constant threat of attack, military veterans with specific types of training are credited with helping the economy to flourish while strengthening national defense via their entrepreneurial endeavors (Senor & Singer, 2011). In addition, personality traits associated with success in military operations are also associated with success in entrepreneurship (e.g. risk propensity, self-efficacy; Rauch & Frese, 2007). Veterans are often confronted with multiple risk factors for suboptimal vocational outcomes (e.g., David, Duggan, & Lyle, 2011; Savoca & Rosenheck, 2000; unemployment, lower earnings). Supporting self-employment may mitigate unemployment among veterans. Accordingly, it is important to better understand how these assets and vulnerabilities come together to influence career choices in this population. This information can then in turn, inform and support effective military human resources and transition policies and programs.

Entrepreneurs must overcome extrinsic and intrinsic barriers to success and confront stressful situational adversities as they pursue enterprise formation, growth, and maintenance. These adversities coupled with potential mental health vulnerabilities can significantly impede entrepreneurs' ability to create the social and economic benefits society depends on such as new jobs and innovative products and services that improve quality of life. Findings on the health characteristics of entrepreneurs from previous research have been mixed with some studies showing higher (e.g., Freeman, Johnson, Staudenmaier, & Zisser, 2015) and lower rates (e.g., Rietveld, Kippersluis, & Thurik, 2015; Stephan & Roesler, 2010) of mental and physical health problems compared to employees. In terms of protective factors, additional studies on entrepreneurship indicate that the resilience (i.e., hardiness, resourcefulness, and optimism) of entrepreneurs may account for entrepreneurial success

(Ayala & Manzano, 2014). The heterogeneity of these findings may reflect differences across the populations sampled (i.e., different countries and industries) and highlight the need for further research specifically focused on military veterans.

Following separation from the military, veterans are often faced with the challenge of building a second career (e.g., Vigoda-Gadot, Baruch, & Grimland, 2010) yet little is known about factors that may motivate and support their transition to self-employment or how they fare compared to veteran employees. In fact no studies have comprehensively examined psychosocial risk and protective resilience factors as they relate to both American veteran entrepreneurs and employees. Such information could function as a critical first step for informing post-discharge reintegration planning and services that cater to the strengths of our returning veterans, as well as older veterans, and help mitigate potential vocational vulnerabilities.

Research on American military veteran entrepreneurs remains limited despite their notable contribution to the broader economy and the potential for targeted reintegration and training programs to cultivate and foster successful veteran-lead entrepreneurial ventures (e.g., VetStart, Kerrick, Cumberland, Church-Nally, & Kemelgor, 2014; Entrepreneurship Bootcamp for Veterans with Disabilities, Shaheen & Myhill, 2009). Accordingly, the current study aims to add to the literature by examining demographic, psychosocial, and military service history characteristics of a nationally representative sample of military veteran entrepreneurs in a comparative analysis with veterans who are paid employees. Although the current study is descriptive and exploratory in nature, psychosocial variables were strategically selected for examination that represented clinically malleable constructs. It was hypothesized that self-employed veterans would demonstrate higher levels of psychological resilience characteristics compared to veterans who worked as employees given the inherent challenges associated with entrepreneurial ventures. No previous research has examined how psychopathology rates and aspects of military service history (e.g., branch, era, years of service, combat exposure) among veterans relate to self-employment, thus no specific hypotheses were advanced.

It is hoped that information yielded from the current study will allow for a better understanding of potential strengths and vulnerabilities that characterize an important yet understudied subset of our nation’s economy. In addition, findings could hold meaningful implications for human resources management and vocational counseling, training, and reintegration programs (e.g., Rausch, 2014). This line of inquiry is also particularly timely given that the United States is in one of the largest ever transitions of military personnel returning to civilian life and employment.

Method

Participants

Data were drawn from the National Health and Resilience in Veterans Study (NHRVS), a nationally representative study of 3,157 U.S. military veterans aged 21 and older conducted in the Fall of 2011. Only the 1,285 participants who endorsed current employment were included in the current study (self-employed, n=230, 18%; paid employee, n=1,055, 82%).

The majority of participants excluded from the analyses were retired (n = 1,474), followed by disabled (n = 192), unemployed, looking for work (n = 131), and not working for other reasons (n = 75). The analytical sample was significantly younger (Mean = 54.45, SD = 11.44) than the excluded sub-sample (mean = 67.23, SD = 11.51) presumably because the majority of the excluded subsample were retired and no longer of working age ($t = -30.75$, $p < .001$).

The NHRVS sample was drawn from a research panel of more than 50,000 households that is developed and maintained by GfK Inc., which maintains KnowledgePanel®, a probability-based, online non-volunteer access survey panel of a nationally representative sample of U.S. adults that covers approximately 98% of U.S. households, including cell-phone only households (see Fuehrlein et al., 2016 for detailed information on sampling procedures). GfK uses probability-based sampling of household addresses from the US Postal Service's Delivery Sequence File, a method that allows for the inclusion of even those households with no telephone access. Participants are additionally provided with a computer and accompanying internet access to participate, if required. GfK operates a modest incentive program to encourage participation and create member loyalty. Members can enter special raffles or can be entered into special sweepstakes with both cash rewards and other prizes. In the current study, participants received 30,000 'points' equal to $30 for completion of the survey. Of the 3,408 panelists who completed the initial screening question to ascertain veteran status, 3,188 (93.5%) completed the survey. Information was not collected for individuals who did not complete the survey to determine if there were potential differences between the groups. Participants completed the 60-minute anonymous web-based survey in their home locations. Study procedures were approved by the VA and Yale University Institutional Review Boards.

Measures

Demographics and Military Service History—Participants completed a demographic questionnaire that assessed employment status, age, education, race/ethnicity, household income, VA as a primary source of healthcare, and marital status. Assessment of military service history included military branch, conflict served, years of service, effect of military on life ("How has being in the military affected your life?" 1 = "strong positive effect," 7 = "strong negative effect"), combat status ("Did you serve in a combat or war zone?"), level of combat exposure (Combat Exposure Scale; Keane et al., 1989), and whether they had been drafted or enlisted.

Psychiatric and Substance Use Disorder History—A sum of total lifetime traumas was measured using a 15-item version of the Trauma History Screen (Carlson et al., 2011). Life-time and past-month PTSD symptoms were assessed with the PTSD Checklist for DSM-IV-TR (Weathers, Litz, Herman, Huska, & Keane, 1993), with a positive screen for PTSD operationalized as a total score of 44 and higher (Blanchard, Jones-Alexander, Buckley, & Forneris, 1996). Lifetime major depression, social phobia, alcohol use disorder (AUD), and drug use disorder (DUD) were assessed with the MINI Neuropsychiatric Interview (Sheehan et al., 1998); abuse and dependence were combined into single variables for AUD and DUD. Gambling behavior and pathological gambling in the past year was

assessed using the Biosocial Gambling Screen (Gebauer, LaBrie, & Shaffer, 2010). A cut score of ≥ 5 on the Alcohol Use Disorders Identification Test-Consumption (AUDIT-C) was used to assess past-year probable AUD (Dawson, Grant, & Stinson, 2005; Rumpf, Hapke, Meyer, & John, 2002). A score of ≥ 3 on the major depression and Generalized Anxiety Disorder (GAD) questions of the Patient Health Questionnaire-4 (PHQ) was used to index a positive screen for current (past 2 weeks) major depression and GAD (Kroenke, Spitzer, Williams, & Löwe, 2009). Participants were also asked about current suicidal ideation (endorsement of at least 1 of 2 items of the PHQ-9) as well as history of suicide attempts and utilization of mental health treatment ("Have you ever received mental health treatment (e.g., prescription medication or psychotherapy for a psychiatric or emotional problem)?)."

Resilience Characteristics and Personality—Resilience, optimism, purpose in life, gratitude, and curiosity/exploration were assessed with the Connor–Davidson Resilience Scale-10 (e.g., "I am able to adapt when changes occur," 1 = "not true at all," 5 = "true nearly all the time"; Campbell-Sills & Stein, 2007), Life Orientation Test-Revised (single item, "In uncertain times, I usually expect the best." 1 = "strongly disagree," 7 = "strongly agree"; Scheier, Carver, & Bridges, 1994), Purpose in Life Test-Short Form (e.g., 4-items, "My personal existence is:" 1 = "meaningless, without purpose," 7 = "purposeful, meaningful"; Schulenberg, Schnetzer, & Buchanan, 2011), Gratitude Questionnaire (single item, "I have so much in life to be thankful for" 1= "strongly disagree," 7 = "strongly agree"; McCullough, Emmons, & Tsang, 2002), and Curiosity and Exploration Inventory-II (single item, "I frequently find myself looking for new opportunities to grow as a person," 1 = "strongly disagree," 7 = "strongly agree"; Kashdan et al., 2009), respectively. A brief 10-item measure of the big-five personality domains was employed to assess openness, conscientiousness, extraversion, agreeableness, and emotional stability (e.g., "I see myself as extraverted, enthusiastic" 1 = "disagree strongly," 7 = "agree strongly"; Gosling, Rentfrow, & Swann, 2003).

Well-being and Social Functioning—Perceived stress and quality of life were employed as indices of well-being and were assessed with the Perceived Stress Scale-4 (Cohen, Kamarck, & Mermelstein, 1983; "In your lifetime, how often have you felt that things were going your way?" 0 = "never," 4 = "very often") and the Quality of Life Enjoyment and Satisfaction Questionnaire-Short Form (Endicott, Nee, Harrison, & Blumenthal, 1993; "Taking everything into consideration, during the past week how satisfied have you been with your social relationships?" 1 = "very poor," 5 = "very good"), respectively. Community integration was assessed using a single item: "I feel well integrated in my community (e.g., regularly participate in community activities)," (rating − 1 = "strongly disagree," 7 = "strongly agree") as was altruism ("Do you volunteer weekly or more?"), and were employed as proxies of social functioning.

Data Analysis

First, descriptive statistics were performed to demographically characterize the sub-sample of currently employed veterans. Second, t-tests (and Spearman Rho correlations in instances of a non-normal distribution) and Pearson chi-square analyses were conducted to assess differences between veterans who were self-employed and those who were working as paid

employees on study measures. A Bonferroni correction for t-tests was employed to control for Type 1 error rate (.05/16 = p = .003). Third, a multivariate analysis controlling for key covariates on which the groups differed (i.e., age, race, education), was conducted using a logistic regression to determine variables associated with self-employment. Demographic, military service history, and protective psychosocial Variables associated with resilience identified in univariate analyses as associated with self-employment (significantly $p < .05$ and at trend level $p < .07$) were entered into the regression model. Risk factors included in the model included presence of lifetime psychopathology and substance use disorders. To permit generalizability of study results to the entire population of U.S. veterans, post-stratification weights were applied in all the below analyses involving inferential statistics based on demographic distributions (i.e., age, gender, race/ethnicity, education, census region, and metropolitan area) from the most contemporaneous US Census Bureau Current Population Survey (October, 2011) . These weights adjust for any survey non-response as well as any non-coverage or under- and over-sampling resulting from the study-specific sample design.

Results

In the full sample, participants were 89% male, 71% Caucasian, 12% Black, 11% Hispanic, 6% other, and mean age was 51.4 (SD = 12.8; range = 22–91). Twenty-nine percent of the sample had obtained a Bachelor's degree or higher, 59% reported a household income of $60,000 or higher, and 78% were married or living with a partner.

Univariate Analyses

As shown in Table 1, in terms of demographic characteristics, compared to veterans who worked as employees, self-employed veterans were more likely to be Caucasian, older, more educated, and more likely to utilize VA as their primary source of health care. In terms of their military experience, self-employed veterans did not see more combat but were more likely to have served in the Vietnam War and less likely to have served in the Iraq/Afghanistan conflicts. No differences were noted in employment type as a function of military branch, level of combat exposure, or perceived effect of military on participants' lives. Self-employed veterans were more likely to have been drafted and to spend marginally fewer years in the military.

As shown in Table 2, in terms of wellbeing, self-employed veterans did not experience worse quality of life or higher levels of perceived stress. With regard to psychological outcomes, although self-employed veterans reported a greater number of lifetime traumas, they did not experience higher rates of current or lifetime psychopathology (including PTSD), substance use disorders, or suicidal ideation or attempts. Of note however, self-employed veterans were less likely to gamble, though those that did were more likely to screen positive for pathological gambling in the past year compared to veterans that worked for others.

Self-employed veterans, when compared to veterans who worked as employees, demonstrated higher levels of several protective, resilience factors. They were more open to experience, optimistic, achievement-oriented (purpose in life), and had greater need for

autonomy (curiosity and opportunities to grow). They demonstrated marginally lower levels of conscientiousness yet higher levels of gratitude and extraversion. In terms of social functioning, self-employed veterans endorsed higher levels of community integration and altruistic service to others. Following the Bonferroni correction, levels of optimism and gratitude were no longer significantly higher in self-employed veterans compared to veterans who worked as employees.

Multivariate Analysis

Table 3 shows results of a binary logistic regression analysis, which revealed that relative to veteran employees, self-employed veterans were older and more educated. They also had fewer years of military service and were more likely to use VA health care. In addition, they had greater openness to experience, lower levels of conscientiousness, were less likely to engage in gambling behavior, and had experienced a higher number of traumas.

Discussion

The present study sought to profile American military veteran entrepreneurs and determine whether they differed from veterans working as paid employees on key demographic, military service, and psychosocial characteristics that served as indices for risk and protective resilience factors. Overall results indicated that self-employed veterans were more likely to use VA as their primary source of health care and to be older and more educated. These sociodemographic differences may point to a wealth effect where more established veterans with benefits (e.g., pensions, health-care) may be better financially positioned to pursue self-employment. Conversely, these findings may suggest that entrepreneurs with the personality characteristics required to pursue entrepreneurship are more likely to accrue socioeconomic capital and resources and take advantage of health care services. Another possible interpretation is that because self-employed veterans were older, they had more years and more opportunities to pursue higher levels of education, accumulate more wealth, and move from being employed to self-employment. With regard to military service, self-employed veterans had fewer years of service in the military (consistent with Hope et al., 2011) and were more likely to have been drafted indicating that these individuals' motivation for service may have been institution-oriented rather than occupation-oriented (e.g., Avrahami & Lerner, 2003).

Veteran entrepreneurs experienced a higher number of traumas yet did not report higher levels of PTSD or other, related psychopathology. This potential evidence of resiliency suggests that higher trait levels of optimism, extraversion, gratitude, curiosity (need for autonomy), and openness may combine with elevated sense of purpose in life to help these individuals be more "gritty," resolute, and professionally self-reliant in the face of adversity. Indeed, these are qualities that well-suite individuals who are embarking on a self-employed career. In addition, entrepreneurs tend to operate in high-demand yet high-control settings (i.e., more decision authority; Parslow et al., 2004) which may buffer them from the stressful elements of self-employment and account for why self-employed veterans did not report higher perceived stress or lower quality of life despite the challenges and uncertainties associated with self-employment.

In contrast with previous research (Avrahami & Lerner, 2003; Zhao & Seibert, 2006) self-employed veterans were not more likely to experience combat and they had lower levels of conscientiousness and impulsivity (as indexed by past year gambling). Consciousness can include multiple facets (i.e., achievement, dependability), which were not assessed in the current study, and a more granular analysis may help identify which aspect of conscientious behavior is uniquely related to self-employment among veterans. Of note, self-employed veterans that did report gambling were more likely than veteran employees to screen positive for pathological gambling and may have been self-employed as professional gamblers.

Future Directions

The current study possesses a number of strengths, most notably the large and nationally representative sample and the comprehensive assessment of psychosocial characteristics paired with demographic and military service history information. The current study also highlights the significant scope of job creation and economic activity driven by self-employed veterans and the importance of devoting further attention to this group of veterans. Accordingly, results from this investigation address an important gap in the literature pertaining to the characteristics and strengths and vulnerabilities of veteran entrepreneurs across a number of domains relevant for developing more optimal human resources management and veteran services such as reintegration, vocational counseling, and training programs.

Additional research on veteran entrepreneurship is needed to expand upon the current study to better identify opportunities for the military services to include entrepreneurship training and mentorship for properly qualified veterans transitioning to civilian life. Similarly, entrepreneurial veterans may find post-service career opportunities in startup companies funded by the Department of Defense (DOD). Appropriately selected women, people of color, and technology specialists may particularly benefit from entrepreneurship mentoring given the current emphasis on diversity recruitment and technology knowledge within the startup community. In this vein, further research is required on the characteristics of veteran entrepreneurs and particularly those who are minorities (e.g., Puryear et al., 2008), as well as the perceived value of these entrepreneurs to DOD-funded startups. Finally, a needs assessment for entrepreneurship mentoring and training, and the feasibility of developing targeted pilot programs should be considered (e.g., screening recruits for entrepreneurial intent and potential; building relationships between the armed forces and MBA programs and incubators).

Several limitations of the current study should be mentioned. First, data were not available on military position and rank. However, officers do tend to hold a bachelor’s degree or higher and education was associated with self-employment in this sample. Although findings in the literature are mixed with regard to rank (e.g., Avrahami & Lerner, 2003), anecdotal evidence (Senor & Singer, 2011) suggests that certain elite units of the military (e.g., special operations) may be a more optimal fit for later entrepreneurial ventures. For instance, military psychologists have noted that soldiers who excel in combat tend to be assertive, active, excitement-seeking and enthusiastic (Carey, 2016) and these are qualities that might be harnessed to help returning veterans thrive in entrepreneurial vocations. Future research

should explore whether some soldiers are better suited for organizational employment or independent business launches as a function of their military training and experiences along with other characteristics.

Second, data were not available on occupational class and number of employees among veteran entrepreneurs. Such information could help entrepreneurial training programs develop and tailor content that is more relevant to the focus and scope of veterans' businesses. Third, data were not available on prevalence of bi-polar spectrum disorders which have been associated with self-employment in previous research (e.g., Freeman et al., 2015). Fourth, although the current study offers an important first step with descriptive analyses, future studies should prospectively examine these demographic, service history, and psychosocial associations, with particular focus on factors that may help veterans newly separated from the military successfully transition to self-employment. Fifth, to improve generalizability of the observed relations, future work should aim to replicate findings among more diverse samples of veterans including those from more recent conflicts, and particularly ones that offer better representation of females and veterans with disabilities (who account for 8.3% of veteran-owned businesses; United States Census Bureau, 2012).

Finally, self-employment was equated with entrepreneurial behavior. Although the majority of research on entrepreneurship uses self-employment as a proxy for business creation and innovation (i.e., entrepreneurism), self-employment is not a direct measure entrepreneurial behavior. Seminal theory (e.g., Knight, 1921; Schumpeter, 1921) suggests that entrepreneurs bring innovations to the market that are disruptive (i.e., creative destruction) and do so in a way that bears the risk of great uncertainty. Based on these conceptual definitions, not all self-employed individuals (e.g., replicative entrepreneurs) would be considered genuine entrepreneurs. Further, there is some research to suggest that self-employment is more closely aligned with innovative business creation in urban areas than in rural areas where there are fewer labor market opportunities (Faggio & Silva, 2014).

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Public Significance Statement

This study evaluated entrepreneurship among American military veterans and found that self-employed veterans, an important yet understudied subset of the United States economy, were older, more educated, served fewer years in the military, endured more lifetime traumas, and demonstrated evidence of psychological resilience when compared to veterans working as employees. Findings suggest the need for future research on strengths and vulnerabilities of veteran entrepreneurs, and can inform veteran human resources services programs that support self-employment among veterans, such as reintegration vocational counseling and training programs.

Table 1

Demographic and military service history characteristics as a function of self-employment

	Total Wgt N	Self-Employed n = 230 M(SD)	Employee n = 1055 M(SD)	*t*/ρ^	*Cohen's d*
Age	1286	59.63 (12.18)	49.96 (12.41)	−9.95**	.78
Combat Exposure Scale (0–44, α = .90)	419	11.49 (10.37)	11.71 (11.52)	.14	−.02
Years of Military Service	1227^	6.39 (6.38)	7.29 (7.02)	−.06+	–
Effect of Military on Life (1–7)	1217^	2.13 (1.48)	2.03 (1.33)	.01	–
	Total Wgt N	**Self-Employed Wgt%, N**	**Employee gt %, N**	**χ^2**	
Gender Female	1287	7%, 24	11%, 149	2.59	
Ethnicity Caucasian (R)	1287	81%, 191	70%, 844	9.49**	
Education Some College or Higher	1287	80%, 205	67%, 896	13.26**	
Household Income ≥ 60k	1287	56%, 131	59%, 702	.48	
VA Primary Source Health Care	1286	23%, 53	14%, 127	9.10**	
Marital Status Married/Living with a Partner (R)	1286	80%, 185	78%, 849	.31	
Served in Combat	1280	33%, 85	33% 345	.01	
Drafted	1284	12%, 26	5% 79	10.92**	
Military Branch					
Army	1286	41%, 92	35%, 404	2.55	
Air Force	1286	18%, 51	20%, 254	.49	
Marine Corps	1287	14%, 26	16%, 111	.54	
Navy	1286	23%, 55	25%, 249	.65	
National Guard	1286	4%, 4	2%, 21	3.07	
Coast Guard	1286	1%, 2	1%, 9	.40	
Other	1286	0%, 0	1%, 5	1.05	
Conflict/Service Era					
Iraq/Afghanistan	1286	2%, 6	11%, 73	14.15**	
Gulf war	1286	5%, 8	8%, 72	2.52	

	Total Wgt N	Self-Employed n = 230 M(SD)	Employee n = 1055 M(SD)	*t*/ρ^	*Cohen's d*
Vietnam war	1287	19%, 57	10%, 155	11.90**	
Korean war	1286	0%, 0	1%, 6	.87	
WWII	1287	2%, 3	<1%, 2	16.86**	
Other	1268	4%, 11	3%, 29	.90	

Wgt = weighted. Employee = working as a paid employee. Values represent a weighted mean and SD or a weighted percent and raw, unweighted frequency (n).

+ $p < .07$,

* $p < .05$,

** $p < .01$.

^ Spearman rho correlation (ρ) is provided because of non-normal [skewed, kurtotic] distribution. (R) = reference group.

Table 2

Psychosocial factors as a function of self-employment

	Total Wgt n		Self-Employed Wgt%, n	Employee Wgt%, n	χ^2	
Suicide Attempt	1284		4%, 7	7%, 55	2.26	
Mental Health Treatment History	1282		24%, 47	21%, 231	.76	
Current Suicidal Ideation	1268		6%, 7	3%, 24	2.59	
Pos Screen Current PTSD	1193		6%, 12	6%, 44	.07	
Pos Screen Current GAD	1266		8%, 15	7%, 68	.17	
Pos Screen Current Depression	1268		6%, 13	7%, 64	.14	
Pos Screen Current AUD	1287		37%, 90	41%, 395	1.02	
Current Gambling Behavior	1261		31%, 78	41%, 403	5.97*	
Pos Screen Past Year Path. Gambling	497		17%, 9	4%, 18	15.05**	
Lifetime History of PTSD	1266		14%, 23	11%, 97	1.73	
Lifetime History of Social Phobia	1286		7%, 19	10%, 88	.94	
Lifetime History of Major Depression	1286		21%, 42	18%, 179	.56	
Lifetime History of Alcohol Use D/O	1286		43%, 87	43%, 435	.03	
Lifetime History of Drug Use D/O	1286		21%, 41	18%, 165	1.02	
Altruism – Volunteer Weekly	1211		44%, 97	32%, 363	9.34**	
	Total Wgt n	**α, (poss range)**	**Self-Employed M(SD)**	**Employee M(SD)**	***t*/ρ**^	***Cohen's d***
Total lifetime traumas	1278	−, (0–15)	3.88 (3.15)	3.21 (2.59)	−2.77**	.23
Resilience	1273	.93, (0–40)	29.74 (7.64)	29.70 (6.96)	−.06	.0
Optimism	1275	−, (1–7)	4.95 (1.46)	4.67 (1.51)	−2.34*	.19
Purpose in life	1214^	.91, (4–28)	22.18 (4.45)	21.22 (4.50)	.10**	−
Gratitude	1216^	−, (1–7)	6.17 (1.21)	6.03 (1.19)	.07*	−
Curiosity/Exploration	1274	−, (1–7)	5.57 (1.29)	5.22 (1.32)	−3.37**	.27
Openness to Experience	1274	.44, (1–7)	5.32 (1.20)	4.90 (1.21)	−4.43**	.35
Conscientiousness	1274	.57, (1–7)	5.44 (1.37)	5.64 (1.19)	1.86+	−.16

	Total Wgt n		Self-Employed Wgt%, n	Employee Wgt%, n	χ^2	
Extraversion	1274	.54, (1–7)	4.30 (1.39)	3.98 (1.47)	−2.77**	.22
Agreeableness	1274	.50, (1–7)	5.05 (1.32)	4.91 (1.24)	−1.37	.11
Emotional Stability	1274	.70, (1–7)	5.17 (1.52)	5.17 (1.36)	.05	0
Community Integration	1276	−, (1–7)	4.52 (1.75)	4.06 (1.65)	−3.50**	.27
Perceived Stress	1271	.73, (0–16)	5.57 (2.68)	5.75 (2.70)	.86	−.07
Quality of Life	1265	.94, (14–70)	54.15 (10.84)	54.89 (9.48)	.89	−.07

Wgt = weighted. Employee = working as a paid employee. Values represent a weighted mean and SD or a weighted percent and raw, unweighted frequency (n).

+ $p < .07$,

* $p < .05$.,

** $p < .01$

^ Spearman rho correlation (ρ) is provided because of non-normal distribution.

Table 3

Multivariable binary logistic regression of variables associated with self-employment

	β(SE)	Wald	OR/Exp(β)	95% CI
Age	.07(.01)**	51.39	1.07	1.05–1.09
Ethnicity Caucasian	.41(.23)	3.20	1.51	.96–2.38
Education	.15(.06)*	5.78	1.16	1.03–1.31
VA Primary Source of Health Care	.61(.23)**	6.84	1.85	1.17–2.92
Years in Military	−.05(.02)**	10.35	.95	.93–.98
Drafted	.07(.32)	.05	1.07	.57–2.01
Served in Vietnam	−.09(.25)	.14	.91	.56–1.48
Current Gambling Behavior	−.62(.20)**	9.80	.54	.37–.79
Community Integration	.02(.07)	.06	1.02	.88–1.18
Altruism – Volunteer Weekly	.11(.21)	.26	1.11	.73–1.69
Openness to Experience	.21(.10)*	5.13	1.24	1.03–1.49
Extraversion	.01(.07)	.02	1.01	.88–1.16
Conscientiousness	−.34(.09)**	14.11	.72	.60–.85
Gratitude	−.13(.11)	1.24	.88	.71–1.10
Purpose in Life	.05(.03)	2.57	1.05	.99–1.12
Curiosity	.18(.11)	2.52	1.19	.96–1.49
Optimism	.09(.09)	1.07	1.09	.92–1.29
Number of Traumas	.09(.04)*	5.02	1.09	1.01–1.17
Lifetime Psychopathology	.31(.24)	1.58	1.36	.84–2.18
Lifetime Substance Use Disorder	.01(.20)	.00	1.01	.69–1.48

Weighted N = 1176.

* $p < .05$,

** $p < .01$. OR = Odds Ratio. CI = Confidence Interval.