Toward a "Dashboard" Indicator of Retention in U.S. Navy Personnel

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EXECUTIVE SUMMARY

Background

Current research implies that poor mental health, low appraisals of unit cohesion, low leadership satisfaction, and low social support may adversely affect military retention. There is a need to understand how these and other factors influence retention of U.S. Navy personnel.

Purpose

We evaluated a broad range of factors influencing job satisfaction and career intentions (proxies of retention) in a large sample of Navy personnel ($N = 798$).

Methods

A total of 798 U.S. Navy men and women participated in this study as part of the Naval Unit Behavioral Health Needs Assessment Survey (NHRC.2014.0006).

Results

Multivariate regression models accounted for 48% of variance in job satisfaction and 55% of variance in career intentions, respectively. The most robust predictors of job satisfaction were affective organizational commitment (i.e., one's emotional attachment to, identification with, and involvement in an organization), depressive symptoms, unit cohesion, and perceived stress; primary predictors of career intentions included affective organizational commitment, years of military service, marital status, and race/ethnicity.

Discussion

In this study, we evaluated diverse predictors of job satisfaction and career intentions of Navy men and women, with overall models accounting for substantial variance in both outcomes. This study informs evidence-based policies, programs, practices, and processes

designed to influence job satisfaction, career intentions, and retention of U.S. Navy service members. These study findings also inspire the development of a "dashboard" indicator of retention of U.S. Navy men and women. However, there are some limitations of this study. Of note, this study utilized a convenience sample, which is not perfectly generalizable to the broader U.S. Navy population. There are also additional constructs of known relevance to retention (e.g., combat exposure and family stressors) that were not captured in this study. Follow-on studies should evaluate the unique and combined effects of key predictors (e.g., affective organizational commitment, unit cohesion, and personal morale) on military retention. Additionally, there is a need to build upon the cross-sectional evidence derived from the current study, with more powerful longitudinal designs evaluating actual retention outcomes.

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BACKGROUND

Retention is a top priority for the U.S. Navy. However, our understanding of factors influencing the retention of Navy personnel is limited. A comprehensive understanding of such influences will guide policy and programming efforts to improve military retention.

Scientific evidence points to some factors influencing retention of U.S Navy personnel. For example, in a recent study of U.S. Navy Corpsmen, Booth-Kewley et al. (2017) discovered organizational commitment was predicted by motivation to be a Corpsman, positive perceptions of Corpsman training, confidence regarding promotions, occupational self-efficacy, social support for a Corpsman career, and depression. Here, organizational commitment was defined as a "psychological state that has a strong impact that an individual will remain in an organization." In another study of Navy medical personnel, Cox et al. (2010) showed that job satisfaction was the strongest predictor of retention among recalled Navy nurse reservists.

Additional work has explored factors relevant to retention in other military populations. For instance, in a seminal and widely publicized report, Hoge and colleagues (2006) found that combat duty and mental health problems reported by Army Soldiers and Marines after deployment to Iraq or Afghanistan predicted attrition. Other recent research (Klingaman et al., 2018) in a nationally representative sample of Army Soldiers identified insomnia as a novel predictor of career intentions. Furthermore, in a nationally representative study of military members, Ford et al. (2013) showed that no/low expectations that the military would yield positive benefits for their quality of life was associated with shorter career tenure. In a longitudinal study of National Guard members following deployment (Lancaster et al., 2013), perceived unit support was the strongest predictor of intention to

reenlist among males, while postdeployment life stressors and introversion were substantial predictors among females. Moreover, a study of 740 active duty Army Soldiers (Vasterling et al., 2015) revealed that unmarried status, fewer years of military experience, and lower levels of perceived unit support during deployment adversely affected retention. Lastly, a study of Army reservists (Stetz et al., 2007) showed that deactivation uncertainty, workload, and organization constraints predicted low mental well-being and high turnover intentions.

A small body of literature also explores factors influencing retention in international military populations. In a large study of deployed UK military personnel (Morris-Butler et al., 2018), fewer positive deployment experiences, poor mental health, lesser unit cohesion, and poorer impressions of leadership were associated with intentions to leave service. Also, a large study of Dutch military personnel in a downsizing environment found that the risk of losing one's job and fear of diminished future career opportunities combined to predict turnover intentions.

Some recurring themes emerge from the above-reviewed studies. Specifically, poor mental health, low appraisals of unit cohesion, low leadership satisfaction, and low social support appear to adversely affect retention. There is a need to clarify whether, and how, these and other factors influence retention of U.S. Navy personnel.

PURPOSE

We evaluated a broad range of factors influencing job satisfaction and career intentions (proxies of retention; Cowin et al., 2008; Royle & Robertson, 1981) in a large sample of active duty Navy personnel ($N = 798$).

HYPOTHESES

Overarching Hypothesis

We hypothesized that job satisfaction and career intentions would be predicted by a diverse set of factors reflecting three broad areas: morale, stress, and behavioral health.

Specific Hypothesis

In light of the extant literature, we anticipated that poor mental health (e.g., depression and/or anxiety), high perceived stress, low appraisals of unit cohesion, low leadership satisfaction, and low social support would adversely influence retention. We also anticipated that low personal/unit morale, affective organizational commitment (i.e., one's emotional attachment to, identification with, and involvement in the organization) and demographic characteristics (e.g., fewer years of service, single/nonmarried status) would negatively predict retention in this population.

METHODS

A total of 798 active duty U.S. Navy service members participated in this study as part of the Naval Unit Behavioral Health Needs Assessment Survey (NUBHNAS; McAnany et al., 2014). Participation was voluntary and all subjects gave informed consent. The protocol was approved by the Naval Health Research Center (NHRC) Institutional Review Board, and all data were collected anonymously with unique identification codes.

Data Source

From 2014 to 2016, NUBHNAS conducted surveillance assessment of Navy and Marine Corps personnel in diverse force settings for the purpose of informing leadership decisions about stress and health maintenance (McAnany et al., 2014).

Measures

Personal and Unit Morale

Participants were asked to rate their personal morale and unit morale, respectively.

Possible responses range from 1(*very low*) to 5 = (*very high*). These two questions were

drawn from the Army Mental Health Advisory Team (MHAT) surveys (MHAT 9, 2013).

Unit Cohesion

Seven items are used to assess unit cohesion, and an overall unit cohesion summary

score is created by summing the six common items. Higher scores indicate a higher level of

unit cohesion. This scale was adapted from the Army MHAT surveys (MHAT 9, 2013). The

introductory stem reads, "Tell us how much you DISAGREE or AGREE with the statements

below about your military job." Examples of items include, "The members of my unit are

cooperative with each other, "The members of my unit stand up for each other," and "I think

my unit would do (or did) an excellent job in combat." Cronbach reliability for this scale is

0.91.

Affective Organizational Commitment

Developed by Gade et al. (2003), the Affective Organizational Commitment Scale

includes four items that are summed to create an affective overall score. Participants were

asked to indicate how much they disagree or agree with statements such as, "I feel like 'part

of the family' in the military," and "The military has a great deal of personal meaning for me.

Response options range from 1 (*strongly disagree*) to 5 (*strongly agree*). Adequate factor

structure and internal reliability for this scale has been reported (Gade et al., 2003), and prior

research indicates that affective organizational commitment predicts retention in military

medical personnel (Kim et al., 1996). Cronbach reliability for this scale in the present sample is 0.91.

Social Support

Seven items used to assess subjective social support were from a subjective support subscale of the abbreviated Duke Social Support Index (Koenig et al., 1993). Adequate validity and internal reliability have been routinely demonstrated for this scale (Jia & Zhang, 2012). A summary score is created by summing the seven items, with higher scores indicating a higher level of social support. Examples of items include, "Does it seem that your family and friends (people who are important to you) understand you?" and "Do you feel useful to your family and friends?" Cronbach reliability for this scale in the present sample is 0.84.

Depressive Symptoms

The Patient Health Questionnaire depression scale (Spitzer, Kroenke, & Williams, 1999) is a widely used scale that has demonstrated excellent psychometric properties and convergent validity with other scales that assess depression (Löwe et al., 2004), as well as convergence with clinical interviews used to diagnose depression (Gilbody et al., 2007). Cronbach reliability for this scale in the present sample is 0.88.

Anxiety Symptoms

The Generalized Anxiety Disorder 7-item scale (Spitzer et al., 2006) assesses seven core generalized anxiety symptoms, such as "Feeling nervous, anxious, or on edge," and "Not being able to stop or control worrying." Scores for each item are summed, with higher scores indicating greater anxiety symptoms. This scale routinely demonstrates good reliability, as well as criterion, construct, and factorial validity (Spitzer et al., 2006). Cronbach reliability for this scale in the present sample is 0.91.

Posttraumatic Stress Symptoms

The PTSD Checklist for DSM-5 (PCL-5) was used to assess posttraumatic stress disorder (PTSD) symptoms (Weathers et al., 2013).This measure contains 20 items corresponding to symptom criteria for PTSD. Adequate internal consistency, test-retest reliability, and convergent validity have been demonstrated for this scale. Cronbach reliability for this scale in the present sample is 0.95.

Aggressive Behavior

Participants were asked to indicate how often they engaged in aggressive behaviors during the past month (see Killgore et al., 2008). Examples of items include, "Get angry at someone in your unit and yell or shout at them?" and "Threaten someone in your unit with physical violence?" Items are summed to create an overall aggressive behavior score, with higher scores indicating greater aggression. Cronbach reliability for this scale in the present sample is 0.66.

Amount of Sleep

Participants were asked, "On average, how many hours of sleep do you get per day?"

Leadership Satisfaction

Participants were asked to rate a set of nine items on a 5-point scale, once for senior enlisted leadership and once for officer leadership. Examples of items include, "Tell service members when they have done a good job," and "Embarrass service members in front of other service members." Cronbach reliabilities for these scales in the present sample are 0.89 (senior enlisted leadership) and 0.87 (officer leadership).

Perceived Stress

The four-item Perceived Stress Scale (Cohen, 1988) was used to assess stress perceptions during the last month, such as whether one feels able to control important things in one's life, and whether perceived difficulties can be overcome. Adequate internal consistency and construct validity have been demonstrated for this scale (Vallejo et al., 2018). Subjects answered on a 5-point Likert-type scale, from 1 (*never*) to 5 (*very often*). Cronbach's alpha reliability for this scale is 0.73.

Assignment-Related Stressors

Four items explored current assignment-related stressors, family/relationship stressors, and the interaction of the two. Examples of items include, "How much stress do you experience at work or while carrying out your military duties?" and "How much does stress in your family life interfere with your ability to perform your military job?" These items were included only in the exploratory univariate analyses.

Job Satisfaction and Career Intentions

Two dependent variables (job satisfaction and career intentions) were selected based on their established, historical relevance to actual retention (Cowin et al., 2008; Royle & Robertson, 1981). Participants were asked, "Overall, how satisfied are you with your military job/career?" and "If you could stay on active duty as long as you want, how likely is it that you would choose to serve in the military for at least 20 years?" For job satisfaction, possible responses ranged from 1 (*very dissatisfied*) to 5 (*very satisfied*). For career intentions, possible responses ranged from 1 (*very unlikely*) to 5 (*very likely*). These two constructs are the most frequently studied proxies of retention in cross-sectional studies, where actual retention outcomes are not quantified prospectively.

Data Analysis

Data were analyzed using IBM SPSS Statistics, version 25.0 (IBM, Armonk, NY). Distribution characteristics for all continuous variables were examined to determine if assumptions of normality were met, following conservative predefined limits (e.g., skewness between −1 and 1 [Leech et al., 2013], kurtosis between −3 and 3 [Taylor et al., 2016]). Variables exceeding these limits were transformed prior to performing the relevant statistical tests. All data transformations reduced skewness and kurtosis to acceptable levels. Exploratory associations between independent and dependent variables were evaluated with Pearson product-moment correlation analyses (0.1 = small, 0.3 = moderate, 0.5 = high; Cohen, 1988). Then, separate multivariate regression models examined the unique and combined associations of independent and demographic variables with each of the two dependent variables: job satisfaction and career intentions, respectively. Specifically, independent (and demographic) variables that were substantially related to a dependent variable in the correlational models ($r \geq .25$) were selected for inclusion in the corresponding regression model. Collinearity statistics were computed for each independent predictor, following a conservative criterion (variance inflation factor [VIF] ≤ 5.0; see O'Brien, 2007) for inclusion. All hypothesis tests were two-sided and the probability of committing a Type 1 error was set at 0.05. It was noted when more stringent conventional alpha levels were achieved ($p < .01$ or $p < .001$).

RESULTS

Participant Characteristics

Participant demographic characteristics are detailed in Table 1. The majority of participants were white (56%), male (83%), 17–24 years old (42%), and enlisted (94%). Most participants were also married (49%) and had 1–2 years of military experience (28%).

The most frequently reported occupational specialties were health services (26%), aviation (12%), and ship operations (9%).

Descriptive characteristics for each independent and dependent variable are shown in Table 2. On average, participants endorsed moderate levels of personal (3.3/5.0) and unit morale (2.8/5.0), relatively high levels of social support (17.8/21.0), low depressive symptoms (6.8/30.0), and low to moderate posttraumatic stress symptoms (19.9/80.0). Moderate/neutral levels of officer leadership satisfaction (31.3/45.0) and enlisted leadership satisfaction (31.0/45.0) were reported. Participants also reported "neutral" job satisfaction (3.4/5.0), and were "neither likely nor unlikely" to complete a 20-year military career (3.5/5.0).

Exploratory Univariate Predictors of Job Satisfaction

An exploration of univariate predictors of job satisfaction is represented in Table 3. As shown, there were numerous substantial predictors. The most powerful observed predictors of job satisfaction (in the expected directions) were organizational commitment ($r = .66$), unit cohesion ($r = .53$), personal morale ($r = .42$), unit morale ($r = .43$), perceived stress ($r = -.43$), as well as officer ($r = .44$) and senior enlisted leadership satisfaction ($r = .42$). Because these models are exploratory and would be vulnerable to Type 1 error inflation due to multiple comparisons, tests of statistical significance were not conducted.

Exploratory Univariate Predictors of Career Intentions

An exploration of univariate predictors of career intentions is represented in Table 3. Several substantial predictors emerged. The most powerful predictors of intention to remain in the military for 20 years (in the expected positive directions) were organizational commitment ($r = .68$), unit cohesion ($r = .39$), and senior enlisted leadership satisfaction ($r =$

.37). As in the models tested above, these model would be vulnerable to Type 1 error inflation due to multiple comparisons. Therefore, tests of statistical significance were not conducted.

Multivariate Predictors of Job Satisfaction

Results of the multivariate regression model on job satisfaction are displayed in Table 4. Overall, the model accounted for 48% of variance in job satisfaction, $F = 23.6$, $p < .001$. Adjusted for all other contributors, affective organizational commitment ($p < .001$), depressive symptoms ($p < .05$), unit cohesion ($p < .001$), and perceived stress ($p < .05$) remained as unique (independent) predictors. Collinearity diagnostics yielded acceptable values for all predictors in this model (VIF ≤ 5.0).

Multivariate Predictors of Career Intentions

Results of the multivariate regression model on career intentions are displayed in Table 5. Overall, the model accounted for 55% of variance in career intentions, $F = 85.3$, $p < .001$. Adjusted for all other contributors, the following remained as unique (independent) predictors: affective organizational commitment ($p < .001$), years of military service ($p < .001$), marital status ($p < .01$; with married participants reporting greater intentions to remain compared with nonmarried participants), and race/ethnicity ($p < .05$; with non-white participants reporting greater intentions to remain compared with white participants). Collinearity diagnostics yielded acceptable values for all predictors in this model (VIF ≤ 5.0).

Relationships Between Job Satisfaction and Career Intentions

Job satisfaction and intentions to remain in the military for 20 years were positively linked ($r = .58$, $p < .001$).

DISCUSSION

In this study, we evaluated diverse predictors of job satisfaction and career intentions of Navy service men and women, with overall models accounting for substantial variance in both outcomes. Robust predictors of job satisfaction were affective organizational commitment, depressive symptoms, unit cohesion, and perceived stress. Career intentions were primarily influenced by affective organizational commitment, years of military service, marital status, and race/ethnicity.

Job satisfaction was largely influenced by affective organizational commitment, unit cohesion, depressive symptoms, unit cohesion, and perceived stress. Organizational commitment, which is described as a psychological state characterizing an employee's relationship with an organization, has been previously linked to job satisfaction and retention (Meyer et al., 2002). In the military sector, it is also predictive of reenlistment intentions, job performance, morale, and perceived readiness (Gade et al., 2003; Karrasch, 2003). Although subtypes of organizational commitment have been identified (e.g., affective, normative, continuance), evidence suggests that affective organizational commitment (i.e., the employee's emotional attachment to, identification with, and involvement in the organization) is most relevant to retention (Meyer et al., 2002). Accordingly, this construct registered the highest coefficient of all predictors in the model. Another influential predictor of job satisfaction was unit cohesion. As mentioned earlier, recent research (Morris-Butler et al., 2018) showed that lesser unit cohesion predicted intentions to leave service among deployed UK military personnel, and related work negatively implicates lower perceived unit support in career intentions (Lancaster et al., 2013; Vasterling et al., 2015). Lastly, the observed relationships between depressive symptoms and perceived stress and job

satisfaction was consistent with our hypothesis and aligned with prior research in diverse

military settings (Booth-Kewley et al., 2017; Hoge et al., 2006).

Several predictors of career intentions also emerged, the most prominent of which

were affective organizational commitment, years of military service, marital status, and

race/ethnicity. As with job satisfaction, the observed impact of affective organizational

commitment on career intentions was profound and consistent with existing research.

Synthesized with prior research, our findings suggest that affective organizational

commitment may not only be the most instrumental subtype of organizational commitment in

relation to retention, but it may also be one of the most influential of all human factors that

influence job satisfaction, career intentions, and related occupational outcomes. While it is

intuitive that those with more time in service would indicate greater career intentions, more

future research should clarify why non-white, married personnel endorse stronger intentions

to remain in the military long term. For instance, it would be useful to specify whether

sociocultural and/or socioeconomic factors influencing the decision of non-white service

members to stay in the military long term, and whether spousal support is causally implicated

in married individuals' decision to stay long term (Office of People Analytics, 2017).

Our final analysis showed that job satisfaction and career intentions were positively

linked, which is intuitive and consistent with prior research. In a related study, Cox and

colleagues (2010) utilized structural equation models to demonstrate that environmental and

employee- and work-related factors each influenced job satisfaction, which, in turn,

profoundly indicated the intentions of U.S. Navy nurse reservists to stay in the military.

Together, these findings imply possible causal chains between job satisfaction, career

intentions, and retention of military members.

Implication for Policy and Programming

As alluded to above, this study can drive policies, programs, practices, and processes designed to influence retention of U.S. Navy service members. To the fullest extent possible, these efforts should be "precision guided" by scientific evidence. With this in mind, target characteristics that should be implicit in these efforts include affective organizational commitment, personal morale, unit cohesion, length of military service, marital status, and race/ethnicity. Likewise, our results build the case for promoting values and behaviors conducive to affective organizational commitment, which, in turn, may positively affect retention. Examples of such values and behaviors are inclusion, trust, belonging, transparency, and psychological safety (i.e., feeling comfortable speaking up). Furthermore, to systemically enact such changes, it would be of value to identify and empower leaders and members who have the capacity to embrace, espouse, and advance these values and behaviors.

The findings of this study also can inspire the development of a "dashboard" indicator of retention of U.S. Navy personnel. That is, service members could be periodically profiled on key predictors (i.e., affective organizational commitment, perceived stress), thus reliably estimating the likelihood of an individual to remain in the military long term. Such "actionable intelligence" could be used not only to inform leadership regarding the intentions of their members, but also to shape policy and programming decisions to enhance retention.

Study Limitations

Although these findings are provocative, there are some limitations. First, a convenience sample of U.S. Navy personnel was studied; therefore, the results do not seamlessly generalize to the broader U.S. Navy population. That said, many of the

occupational specialties of this present study are similarly represented in the broader Navy

population with two exceptions: health services are overrepresented and the officer

population is underrepresented. Another limitation is that combat exposure was not

quantified in this study. Prior research implicates combat duty with retention (Hoge et al.,

2006). This construct, then, may be an additional source of variance explained, and should be

considered as a candidate predictor in future studies. This study also does not extensively

characterize stressors related to family, relationships, children, caregiving, and/or pregnancy.

Such factors are likely to influence service members' career intentions and should be

integrated into future research. Lastly, the two endpoints in this study (job satisfaction and

career intention) are proxies of retention, rather than retention itself. However, this is a

reasonable measurement approach within the limits of a cross-sectional study design. Future

work utilizing longitudinal predictors of actual retention are warranted.

Future Research and Development

Follow-on studies should evaluate the unique and combined effects of key predictors

(e.g., affective organizational commitment, unit cohesion, perceived stress) on retention of

Navy personnel. For example, a testable scientific hypothesis is that organizational

commitment/unit cohesion moderates the association of perceived stress and career

intentions. More specifically, while perceived stress may impair career intentions in the

absence of organizational commitment and/or unit cohesion, this association may disappear

in their presence. Other modifiable factors should be explored, such as psychological

performance strategies (e.g., emotional control) that are capable of enhancing job satisfaction

and affecting career intentions. Moreover, it appears that many/most of the predictors

identified in this study (e.g., personal morale) may be mediated via affective organizational

commitment. Altogether, we recommend that follow-on studies replicate the current results in separate samples and also extend our work with detailed investigations of mediated, moderated, and interactive effects.

Equally important, it is essential to build upon this cross-sectional evidence with longitudinal studies evaluating actual retention outcomes. In one concrete example, NHRC is positioned to longitudinally evaluate factors influencing retention of U.S. Navy Explosive Ordnance Disposal (EOD) candidates throughout their rigorous training pipeline. EOD training is characterized by notoriously high levels of attrition during the early phases of instruction. Guided by the current findings, we could hypothesize that affective organizational commitment, personal morale, unit cohesion, organizational commitment, length of military service, marital status, and race/ethnicity would emerge as longitudinal predictors of retention. Armed with the present results, it is important to validate interventions aimed at improving job satisfaction and solidifying intentions to stay in the military by targeting modifiable factors such as affective organizational commitment, unit cohesion, personal morale, and perceived stress. Additionally, we propose that future studies target "vulnerable" subgroups. This study suggests that those subgroups comprise individuals who are less satisfied with their military occupations and/or are less likely to remain in the military. This proposed research strategy may help leaders decide where to invest resources in order to maximize retention outcomes. Lastly, these results inspire the development and implementation of a "dashboard" indicator of retention. Specifically, there is a need to (1) establish a prototype for such a dashboard system, (2) determine its utility among unit leaders and policymakers, and (3) refine the tool with insight derived from an iterative feedback loop.

In summary, this study identified several robust predictors of job satisfaction and career intentions of Navy service members, with overall models accounting for substantial variance in both outcomes. These findings are well positioned to inform intervention, policy, programming, and future research aimed at understanding and improving retention. All together, these efforts may effect sizeable improvements in retention of U.S. Navy personnel.

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Table 1

Subject Characteristics

Variable	*n*	%
Gender		
Male	663	83.1
Female	133	16.7
Missing data	2	00.3
Age, years		
17–24	335	42.0
25–29	252	31.6
30–39	178	22.3
40+	32	04.0
Missing	1	00.1
Pay grade		
Enlisted	746	93.7
Officer	50	06.3
Missing data	2	00.3
Education		
High school/GED	263	33.0
Some college/associate degree	431	54.0
Bachelor's degree or higher	104	13.0
Race/ethnicity		
White	449	56.3

Black	145	18.2
Hispanic	139	17.4
Other	63	07.8
Missing data	2	00.3

Marital status

Married	392	49.1
Divorced	54	06.8
Widowed	2	00.3
Never married	350	43.9

Military experience, years

>1	54	6.8
1–2	226	28.3
3–5	188	23.6
6–9	169	21.2
10+	160	20.1
Missing data	1	00.1

Occupational field

Administration	26	03.3
Aviation	97	12.2
Aviation support	70	08.8
Communications/information systems	25	03.1
Construction	1	00.1

Health services	206	25.8
Law enforcement/security	2	00.3
Supply/logistics	62	07.8
Electronics	40	05.0
Engineering	70	08.8
Ordnance/warfare systems	58	07.3
Ship operations	73	09.1
Special warfare/operations	7	00.9
Mechanized maintenance/support	2	00.3
Combat service support	2	00.3
Other	57	07.1

Table 2

Descriptive Characteristics for Independent and Dependent Variables

Variable	α	*N*	%	M ± SD	Possible scores (range)	Minimum	Maximum
				Dependent variables			
Personal morale	–	797	–	3.3 ± 1.1	1–5	1	5
Unit morale	–	795	–	2.8 ± 1.0	1–5	1	5
Unit cohesion	.91	797	–	22.8 ± 6.2	7–35	7	35
Affective organizational commitment	.91	796	–	12.7 ± 4.5	4–20	4	20
Social support	.84	798	–	17.8 ± 3.1	7–21	7	21
Depressive symptoms	.88	797	–	6.8 ± 5.8	0–30	0	26
Anxiety symptoms	.91	796	–	6.2 ± 5.5	0–21	0	21
Posttraumatic stress symptoms	.95	797	–	19.9 ± 16.9	0–80	0	70
Aggression	.66	796	–	1.7 ± 2.6	0–16	0	16
Sleep (hours per day)	–		–				
≤3		35	4.4				

4		137	17.2				
5		255	32.0				
6		219	27.4				
7		112	14.0				
≥8		33	4.1				
Missing data		7	0.9				
Perceived stress	.73	797	–	5.8 ± 3.4	0–16	0	15
Assignment-related stressors							
Work stress							
Not at all		38	4.8				
Some		223	27.9				
A little		269	33.7				
A lot		268	33.6				
Family/relationship stress							
Not at all		151	18.9				

Some		304	38.1			
A little		205	25.7			
A lot		138	17.3			
Family stress interferes with job						
Not at all		394	49.4			
Some		222	27.8			
A little		125	15.7			
A lot		57	7.1			
Work stress interferes with job						
Not at all		246	30.8			
Some		277	34.7			
A little		165	20.7			
A lot		110	13.8			
Leadership satisfaction – Senior enlisted	.89	781		31.0 ± 7.6	9–45	9	45
Leadership satisfaction – Officer	.87	798		31.3 ± 7.1	9–45	9	45

Dependent variables

Job satisfaction	794	3.4 ± 1.2	1–5	1	5
Career intention	797	3.5 ± 1.6	1–5	1	5

Table 3

Exploration of Univariate Predictors of Job Satisfaction and Career Intentions

	Job satisfaction	Career intentions
Personal morale	.42	.26
Unit morale	.43	.32
Unit cohesion	.53	.39
Affective organizational commitment	.66	.68
Social support	.25	ns
Depressive symptoms	−.36	−.12
Anxiety symptoms	−.30	−.11
Posttraumatic stress symptoms	−.37	−.16
Aggression	−.28	−.17
Sleep (hours per day)	.17	ns
Perceived stress	−.43	−.22
Leadership satisfaction – Senior enlisted	.42	.34
Leadership satisfaction – Officer	.44	.28

ns = not significant.

Table 4

Multivariate Predictors of Job Satisfaction

Variable	Standardized beta	t	p
Gender	.05	1.4	ns
Marital status	.05	1.2	ns
Years of service	.04	1.0	ns
Education	−.01	−0.3	ns
Personal morale	.08	1.6	ns
Unit morale	−.02	−0.4	ns
Unit cohesion	.18	3.9	<.001
Affective organizational commitment	.39	7.6	<.001
Social support	.06	1.5	ns
Depressive symptoms	−.19	−2.5	<.05
Anxiety symptoms	.08	1.2	ns
Posttraumatic stress symptoms	02	3.7	ns
Aggression	.00	0.0	ns
Perceived Stress	−.11	−2.0	<.05
Leadership satisfaction – Officer	.09	1.8	ns
Leadership satisfaction – Senior enlisted	−.07	−1.3	ns

$R^2_{adj} = .48$, $F = 23.6$, $p < .001$; ns = not significant.

Table 5

Multivariate Predictors of Career Intentions

Variable	Standardized beta	t	p
Gender	−.01	−0.4	ns
Race/ethnicity	−.06	−2.5	<.05
Marital status	.08	2.9	<.01
Years of service	.31	10.7	<.001
Education	−.01	−0.4	ns
Personal morale	.03	1.2	ns
Unit morale	.01	0.3	ns
Unit cohesion	.01	0.3	ns
Affective organizational commitment	.53	15.7	<.001
Leadership satisfaction – Officer	−.06	−1.7	ns
Leadership satisfaction – Enlisted	.00	0.1	ns

R^2_{adj} = .55, F = 85.3, p < .001; ns = not significant.

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job satisfaction, career intentions, Navy personnel

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