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Satisfaction With Psychology Training In the Veterans Healthcare Administration

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Running head: PSYCHOLOGY TRAINING

Satisfaction with Psychology Training in the Veterans Healthcare Administration

Abstract

Given that VA is the largest trainer of psychologists in the United States, this study sought to understand satisfaction with VA psychology training and which elements of training best predict trainees' positive perceptions of training (e.g., willingness to choose training experience again, stated intentions to work in VA). Psychology trainees completed the Learners' Perceptions Survey (LPS) from 2005 to 2017 (N=5,342). Satisfaction was uniformly high. Trainee satisfaction was significantly associated with level of training, facility complexity, and some patient-mix factors. Learning environment (autonomy, time with patients, etc.), clinical faculty/preceptors (teaching ability, accessibility, etc.), and personal experiences (work/life balance, personal responsibility for patient care, etc.) were the biggest drivers of stated willingness to repeat training experiences in VA and seek employment there. Results have implications for psychologists involved in the provision of a training experience valued by trainees.

Key words: Psychology training, Learners' Perceptions Survey, Satisfaction, Professional Psychology

Public Significance: Psychology trainees within the Veterans Health Administration reported being quite satisfied with the training they received and most would consider VA employment. Training sites should provide resources to bolster the learning environment (autonomy, time with patients, etc.), clinical faculty/supervisors (teaching ability, accessibility, etc.), and personal experiences (work/life balance, personal responsibility for patient care, etc.).

Satisfaction with Psychology Training in the Veterans Health Administration

To provide more effective health and mental health care for military veterans, the United States Congress authorized the Department of Veterans Affairs [VA] to develop and carry out programs of education and training of health personnel (38 U.S.C. 7302(a)(1)). Administered through VA's Office of Academic Affiliations (OAA), support for psychology training has increased annually in recent years, making VA the largest venue for training psychologists in the United States.

Since 2001, OAA has been surveying its medical and allied health professions trainees via the Learners' Perceptions Survey (LPS). Currently, OAA is funding 679 psychology internship positions across 125 VA internship programs located in every US state, the District of Columbia, and Puerto Rico. OAA also currently funds 513 postdoctoral residency positions in 74 facilities. The purpose of this study is to gain an understanding of trainee satisfaction with VA psychology training and what elements of training satisfaction best predict intentions regarding employment. The results will inform training directors and programs about the trainee's perspective on training and help guide national efforts to improve training and recruitment for psychologists in all settings.

Methods

Participants

All psychology trainees are offered the opportunity to complete the LPS near the end of their training program. Participation is voluntary and anonymous. The LPS has been administered to psychology trainees at VA sites across the country annually since 2001. In this study, we used archival LPS data obtained from 5,342 self-identified psychology trainees collected from 2005 to 2017. Annually, VA medical centers are required to report the total

number of clinical trainees on-site by profession. From 2005 to 2017, VA medical centers self-reported 23,932 psychology students, interns, and residents. With a sample size of 5,342 LPS respondents identifying as psychology trainees, approximately 22% of psychology trainees voluntarily completed LPS during the study timeframe.

Measure

The Learners' Perceptions Survey (LPS) is a standardized, validated instrument that has been designed to measure how health professions trainees perceive their clinical training experiences at a VA medical center, hospital, or outpatient care facility (Kashner et al., 2017). LPS questionnaires are anonymously administered annually to VA trainees through OAA's Data Management and Support Center in St. Louis, MO. VA trainees are encouraged by email and direct contact of local education officers to complete the LPS questionnaire at or near the end of their clinical rotations via OAA's website.

For psychology trainees, the LPS measures satisfaction with clinical learning experiences on a 5-point Likert scale: 5 - Very satisfied; 4 - Somewhat satisfied; 3 – Neither; 2 - Somewhat dissatisfied; 1 - Very dissatisfied. Satisfaction questions are divided into a Learning Environment Domain (15 items) and a Clinical Faculty/Preceptors Domain (13 items) designed to describe a trainee's learning experiences; Physical (8 items), Working (9 items), and Personal Experience (7 items) Domains to describe a trainee's working experiences; and a Clinical Environment Domain (6 items) to describe a trainee's clinical experiences (see Table 1 for specific item content). After respondents answer all items for a given domain, the respondent rates their "overall satisfaction with" that domain.

Respondents also rate two Positive Training Outcomes: their willingness to consider VA for future training experiences (4 - 'definitely would' to 1-'definitely would not'), and their

willingness to consider VA for future employment (5 - very likely; 4 - somewhat likely; 3 - had not thought about it; 2 - somewhat unlikely; 1 - very unlikely).

The LPS has been shown to have excellent test-retest reliability with intraclass correlation coefficients ranging from 0.86 to 0.92 (Kashner et al., 2017), excellent internal consistency with Cronbach alphas ranging from 0.90 to 0.96 (Kashner et al., 2017) and very good Mokken Test Scalability Coefficients which ranged from 0.60 to 0.75 (Kashner et al., 2017). Both content (Keitz et al., 2003) and construct validity (Cannon et al., 2008; Kaminetzky et al., 2011; Kashner et al., 2017; Torralba et al., 2016; Kashner et al., 2017a) have been demonstrated. Furthermore, factor analysis suggests each of the six domains represent a single dimension (Kashner et al., 2017).

Insert Table 1 about here

Procedure

This was a cross-sectional survey design. Respondents included psychology trainees who were engaged in clinical care at a VA medical center. Respondents were contacted by email to participate in the study for those enrolled in VA's Talent Management Program and who had a valid email address.

Statistical Analyses

Satisfaction domains were scored using two methods. Likert scales z-scores were calculated by taking the mean response across all item questions composing the domain, subtracting the sample mean, and dividing the difference by the sample standard deviation. The z-score ensures that all item questions are considered equally when computing the domain score.

Respondents “overall satisfaction” rating with each domain was also analyzed. This ordinal summary score reflects how each respondent weighed the domain.

We report means and frequencies of trainee satisfaction based on ordinal summary domain scores of their clinical learning experiences. Generalized linear regression with a multinomial error distribution and cumulative logit link function was used to examine potential factors predictive of training satisfaction and the three Program Domains scores. Satisfaction predictors included the level of training (practicum, intern, resident), gender (male, female), facility complexity (most complex, very complex, complex, medium complexity, least complex), rural vs urban setting, and the mix of patients the trainee sees based on age (>65 years vs younger), patient chronic mental illness, patient chronic medical illness, multiple illnesses, alcohol/substance dependence, socioeconomic status, and social support.

Predictors of how trainees rated program domains included the six satisfaction domain scores computed as z-scores. All satisfaction domain scores were included as predictors in the same model in order to estimate their independent association on program domains.

Both satisfaction ratings and program domain ratings were calibrated to reflect variation in response thresholds (how satisfied a respondent must be to report being ‘very satisfied’ from ‘somewhat satisfied’) and expectation biases (added disappointment or excitement when perceptions is less or more than what was expected by the respondent) (Kashner et al., 2017). Uncalibrated associations have been shown to differ from calibrated associations in estimating predictor effect sizes. (Torralba et al., 2016). Calibration is achieved by including a calibration index regressor in the satisfaction and program domain models. The calibration index is constructed by computing how individual respondents differ from other respondents at the same facility and during the same academic year when rating common elements. For this study, we

used facility parking, convenience location, and computer access as elements not expected to vary, so differences between a respondent's satisfaction rating and the mean rating for all respondents reporting about the same facility during the same academic year reflect differences in expectations and rating thresholds.

Results

As seen in Table 2, respondents were primarily female (74.8%) with a bit more than half from the most complex facilities (51.2%). Table 2 presents additional descriptive data on the sample.

Insert Table 2 about here

Predictors of Satisfaction

Table 3 presents the "overall satisfaction" score percentages within satisfaction domain. Most would choose the training experience again and over 80% would consider the VA for future employment. Satisfaction with various aspects of the training experience was uniformly high. Table 4 presents the odds ratios associated with the regression models that examined which respondent or facility characteristics predicted satisfaction in each domain.

Insert Tables 3 and 4 about here

Satisfaction with Learning Environment. Overall, the model was significant: $\chi^2=509.23, p<.001$. Training level and various patient characteristics were significantly associated with satisfaction with the learning environment. Overall postdoctoral residents were

generally less satisfied with their clinical learning environment. Specifically, postdoctoral residents were only 77% as likely to report a higher level of satisfaction than their practicum student counterparts. Practicum students and interns did not significantly differ. The mix of patients seen were significantly associated with learning satisfaction. That is, psychology students reported lower rates of satisfaction when they saw patients with chronic illness or those with little or no social support, while reporting higher satisfaction rates when they saw patients with multiple illnesses or who had alcohol and substance dependence. For example, students who treated patients with multiple medical illnesses were 1.62 times more likely to report a higher level of satisfaction for their clinical learning environment than students who did not treat patients with multiple conditions.

Satisfaction with Clinical Faculty. The overall model was significant: $\chi^2=315.67$, $p<.001$. Level of training was significant such that postdoctoral and intern level trainees were less satisfied with the clinical faculty than practicum students. As can be seen in Table 4, interns were only 83% as likely and postdoctoral students were only 81% as likely as practicum students to report a higher level of satisfaction with clinical faculty. Students working in level complexity 3 and 1c facilities were significantly less satisfied than those in 1a facilities. Finally, patient mix factors that were significantly associated with satisfaction in this domain included having patients with mentally illness, substance/alcohol dependence, and higher social support.

Satisfaction with Working Environment. The overall model was significant: $\chi^2=1211.15$, $p<.001$. Level of training was again a significant predictor such that trainees at postdoctoral level were less satisfied than practicum students (who did not differ from interns). Other significant predictors were facility complexity, as well as the mix of patients the student saw with substance/alcohol dependence and with no social support.

Satisfaction with Physical Environment. The overall model was significant: $\chi^2=1710.86$, $p<.001$. Again, the level of training was inversely related to satisfaction with the physical environment. As can be seen in Table 4, postdoctoral residents were 0.58 times as likely to report one higher level of satisfaction with the working environment than practicum students. Other significant predictors were facility complexity, urban/rural setting (rural settings associated with greater satisfaction) and the mix of patients seen with substance/alcohol dependence, low socioeconomic status, and no social support.

Satisfaction with Personal Experience. The overall model was significant: $\chi^2=665.56$, $p<.001$. Level of training was a significant predictor such that both postdoctoral trainees and interns were less satisfied than practicum students. As can be seen in Table 4, postdoctoral residents were 0.52 times as likely to be satisfied with the working environment as practicum students, for example. Other significant predictors were facility complexity and urban/rural setting (rural settings associated with greater satisfaction).

Satisfaction with Clinical Environment. The overall model was significant: $\chi^2=418.43$, $p<.001$. Level of training was significant such that trainees at postdoctoral and intern level were less satisfied than practicum students. The only other significant predictor was facility complexity, such that less complex facilities (i.e., 1c and 3) were less satisfied than more complex (1a) facilities.

Predictors of Intentions and Perceived Care

Regression analyses were run to examine whether the various domains of satisfaction with training predicts the likelihood of considering the training experience again and the likelihood of considering VA employment. Table 5 presents the odds ratios associated with the various regression models that examined these issues.

Insert Table 5 about here

Based on your experience, how likely would you be to choose this training experience again? The overall model was significant: $\chi^2=1177.94$, $p<.001$. The learning environment, clinical faculty, and personal experience were all predictive. As can be seen in Table 5, the most dramatic predictor was clinical faculty. Those trainees who were most satisfied with clinical faculty were nearly three times more likely to consider the training experience again.

Would you consider VA for future employment? The overall model was significant: $\chi^2=465.66$, $p<.001$. Learning environment, clinical faculty, working environment, and personal experience were all predictive. As can be seen in Table 5, the best predictor was the learning environment. Those trainees who were most satisfied with the learning environment were nearly two times more likely to consider the VA for future employment.

Perception of care at VA facility. The overall model was significant: $\chi^2=1022.74$, $p<.001$. Learning environment, clinical faculty, working environment, physical environment, and clinical environment were all predictive. As can be seen in Table 5, the best predictors were the clinical environment and the learning environment.

Discussion

This study represents the first attempt to understand large scale trainee satisfaction in the context of psychology training within the VA. Overall, our findings indicate broad satisfaction with psychology training within the VA. Satisfaction with psychology training was high across domains and over 80% would likely consider the VA for future employment.

Career theorists such as Holland (1985) and Herzberg et al. (1967) have long understood the importance of satisfaction as it relates to areas such as job retention and productivity. As agencies look beyond the training years, having a pool of satisfied trainees provides for a pool of potential future psychologists from which to hire who will likely have greater job satisfaction and greater longevity in the position.

Within the context of general satisfaction with training, there is an inverse relation between level of training and satisfaction with several aspects of the training environment. Postdoctoral trainees (and sometime interns) were less satisfied than practicum students within several domains. However, the reasons for these inverse relations are unclear. It is possible that novelty plays some role, as practicum students are frequently engaging in clinical activity for the first time, and may therefore report greater relative satisfaction (Gonzalez-Cutre, Sicilia, Sierra, Ferriz & Hagger, 2016). This hypothesis may relate to habituation, such that those further along in training have diminished satisfaction due to greater repeated exposure to training opportunities and experiences. Another possibility is that resource scarcity plays some role as many graduate programs may have limited practicum sites, thereby driving a 'supply and demand' type of satisfaction, which would be less apparent in later training years. These hypotheses are speculative and require further investigation to explain this counter-intuitive finding.

Other factors such as facility complexity, rurality, and patient-mix were also related to some domains of satisfaction. Respondents in more rural facilities tended to report greater satisfaction with the physical environment and their personal experience of training. Facility complexity, on the other hand, had variable relations with satisfaction – in some domains (clinical faculty, clinical environment) less complex facilities were associated with less satisfaction while in other domains (physical environment, personal experience), the converse

was true. Finally, of the patient-mix factors, substance/alcohol dependence and degree of social support were most consistently associated with satisfaction. Specifically, respondents who saw a greater proportion of substance/alcohol dependence tended to be more satisfied across several domains (learning environment, clinical faculty, working environment, physical environment). This was also apparent in that those respondents who saw a greater proportion of patients with multiple illnesses, as they were 1.6 times more likely to be satisfied with their learning environment. In contrast, respondents generally were less satisfied when their caseload had a higher proportion of patients with little to no social support.

Specific factors such as perceptions of the learning environment, clinical faculty, working environment, and personal experiences predicted choosing a training experience again and considering work in a setting like where training took place. Of the factors predicting choosing a training experience again, satisfaction with clinical faculty was the strongest predictor. Indeed, those who were highly satisfied with clinical faculty were nearly three times more likely to consider the training experience again. This result is consistent with previous research demonstrating that supervisor mentoring and the quality of trainee and supervisor relationship are the most important supervisor characteristics associated with perceptions of professional development and satisfaction with training rotation for a sample of nurses (Carless, Robertson, Willy, Hart, & Chea, 2012). Further, previous research has demonstrated that negative interactions with role models serve as a detractor from choosing a career path in that role model's field (Mutha et al., 1997). In the context of these previous studies, the current findings underscore the importance of specifically attending to the relationship between trainees and their supervisors in order to most positively impact trainee satisfaction.

As trainees have positive experiences in training rotations, it would follow that the possibility of considering a career path consistent with their training experience would increase. Previous research has demonstrated the positive relationship between satisfaction with on the job training and job satisfaction (Schmidt, 2007). Similarly, the findings of the present study suggest satisfaction in many areas of training are predictive of selecting the VA for future employment, the most potent predictor being the learning environment. Those who reported greater satisfaction with the learning environment were nearly two times more likely to indicate that they would consider the VA for future employment. The learning environment includes things like time working with patients, degree of autonomy, interdisciplinary approach, time for learning, quality of care, diversity of patients, etc. (see Table 1 for items on this scale). One might summarize these items as the extent to which the facility promotes learning and quality.

Training programs would likely benefit from understanding how personal experiences influence career choice, especially in agencies or facilities that look to their training programs as a source of applicants for staff positions (e.g., Department of Veterans Affairs, Bureau of Prisons, community mental health agencies, hospitals). Mitchell, Levin, and Krumboltz (1999) described a process through which individuals' career development is influenced by both preparation (e.g., development of competencies) and unplanned events (e.g., learning of a potential advanced rotation in a VA facility, computerized internship match, etc.). Through the creation and maintenance of training opportunities that emphasize factors such as competency development, personal reward from work, work/life balance, positive relationships with patients, and the role of a professional psychologist in patient care, programs will positively influence trainees' consideration of similar work for their careers. Finally, from Herzberg's two factor theory, these factors (considered motivators) are associated with increased professional

satisfaction. It follows that training experiences that emphasize these factors would lead to the trainee's belief that a career consistent with the training experience will lead to personal and professional satisfaction and a personality-environment fit, consistent with Holland's career choice theory (Swanson & Fouad, 1993).

There were several limitations of this study. First, the sample represented an estimated 22% of the entire population of VHA trainees during the study period, which could limit generalizability. The sample was also self-selected, such that only those trainees who chose to respond to the survey were included, a limitation that could also have implications for generalizability. Finally, the sample could conceivably have included the same individuals' responses in consecutive years. So for example, an intern at a given VA might have become a postdoctoral resident at the same or different VA and responded each year. While presumably they would be responding to the relevant questions for that particular training experience (internship vs residency), there would obviously be some correlation possible between responses because it would be the same individual. On the other hand, the survey makes clear that respondents are to consider only their most 'recent' training experience in the VA. Survey anonymity prevented us from connecting scores.

Conclusions and Implications

This is the first large-scale study of satisfaction with psychology training. The VA trains more psychologists than any other entity in the nation. Like previous research in areas such as palliative medicine (Carmody et al., 2005), understanding what drives trainee satisfaction will aid employers of psychologists in addressing those factors which may facilitate recruitment and retention. Though many factors likely contribute to decisions to pursue future training and employment, this study suggests at least some of the variance may be attributable to satisfaction with training.

In general, VA trainees report being quite satisfied and most would consider VA employment. The more important aspects of training, from a satisfaction perspective, broadly relate to satisfaction with clinical faculty and the extent to which the facility promotes learning and quality. In a recent survey of medical residency training programs, clinical productivity was perceived by the majority as the item most valued by their institutions, with little or no perceived value for teaching or educational efforts (Ibrahim et al., 2016). Given our study's finding of the strong relation between the learning environment and stated intentions to consider employment at that facility, healthcare systems in general might consider better ways to promote and support an environment of learning and scholarship.

Most importantly, training sites should focus their efforts on creating and sustaining training environments that provide quality supervision and mentorship as well as a learning environment focused on providing adequate time for learning, opportunities to see diverse clients/patients, access to specialty expertise, provide appropriate autonomy, etc. Based on the findings of this survey, providing resources to bolster supervision quality and the learning environment may provide the best return on investment. In an environment of limited resources, things like the physical environment are less important to trainee satisfaction, and ultimately, in attracting potential employees.

Table 1

Items on the Veterans Affairs Learners' Perception Survey by Domain

Domains	
<p>Clinical Faculty/Preceptors</p> <ul style="list-style-type: none"> Clinical skills Teaching ability Interest in teaching Research mentoring Accessibility/availability Approachability/openness Timeliness of feedback Fairness in evaluation Being role models Mentoring by faculty Patient-oriented Quality of faculty Evidence-based clinical practice 	<p>Learning Environment</p> <ul style="list-style-type: none"> Time working with patients Degree of supervision Degree of autonomy Amount of non-educational work Interdisciplinary approach Preparation for clinical practice Preparation for future training Preparation for business aspects of clinical practice Time for learning Access to specialty expertise Teaching conferences Quality of care Culture of patient safety Spectrum of patient problems Diversity of patients
<p>Physical Environment</p> <ul style="list-style-type: none"> Convenience of facility location Parking Personal safety Availability of needed equipment Facility maintenance/upkeep Facility cleanliness/housekeeping Call rooms Availability of food at the medical center when on call 	<p>Clinical Environment</p> <ul style="list-style-type: none"> Hours at work Number of inpatients admitted for respondent's care Number of outpatients/clinic patients seen How well physicians and nurses work together Ease of getting patient records Back-up system for electronic health records
<p>Working Environment</p> <ul style="list-style-type: none"> Ancillary / support staff morale Call schedule Computerized patient record system Access to online journals Resources and references Computer access Workspace Laboratory services Radiology services 	<p>Personal Experience</p> <ul style="list-style-type: none"> Personal reward from work Balance of personal and professional life Level of job stress Level of fatigue Continuity of relationship with patients Ownership and personal responsibility Enhancement of clinical knowledge, skills

Table 2. Sample Characteristics (N=5,342)

Facility/ Respondent Variables	Percent
Gender	
Male (<i>n</i> =1,241)	25.2
Female (<i>n</i> =3,686)	74.8
Level of Training	
Practicum (<i>n</i> =1,429)	26.8
Intern (<i>n</i> =2,945)	55.1
Postdoctoral Resident (<i>n</i> =968)	18.1
Fiscal year	
2005-2007 (<i>n</i> =803)	15
2008-2010 (<i>n</i> =1323)	24.7
2011-2013 (<i>n</i> =1037)	19.3
2014 (<i>n</i> =487)	9.1
2015 (<i>n</i> =510)	9.5
2016 (<i>n</i> =462)	8.6
2017 (<i>n</i> =726)	13.6
Complexity of facility	
1a (<i>n</i> = 2736)	51.2
1b (<i>n</i> =967)	18.1
1c (<i>n</i> = 694)	13.0
2 (<i>n</i> =523)	9.8
3 (<i>n</i> =422)	7.9
Primary patient population served	
Urban (<i>n</i> =3315)	62.1
Rural (<i>n</i> =2027)	37.9
Patient population characteristics:	
Proportion of patients seen 65 or older	
<10% (<i>n</i> =1069)	21.5
10-24% (<i>n</i> =1194)	24.0
25-49% (<i>n</i> =976)	19.6
50-74% (<i>n</i> =1002)	20.1
>74% (<i>n</i> =741)	14.9
Proportion of patients seen with chronic mental illness	
<25% (<i>n</i> =1068)	21.5
25-49% (<i>n</i> =827)	16.6
50-74% (<i>n</i> =1016)	20.4
75-89% (<i>n</i> =1067)	21.4
90-100% (<i>n</i> =1003)	20.1

Proportion of patients seen chronic medical illness

<25% (n=590)	11.1
25-49% (n=901)	16.9
50-74% (n=1384)	25.9
75-89% (n=1338)	25.0
90-100% (n=769)	14.4

Proportion of patients seen with multiple medical illnesses

<25% (n=650)	12.2
25-49% (n=901)	16.9
50-74% (n=1344)	27.0
75-89% (n=1306)	26.2
90-100% (n=780)	15.7

Proportion of patients seen with alcohol/substance dependence

<10% (n=656)	13.2
10-24% (n=1132)	22.7
25-49% (n=1283)	25.8
50-74% (n=1029)	20.7
>74% (n=882)	17.7

Proportion of patients seen with low socioeconomic status

<25% (n=786)	15.8
25-49% (n=1308)	26.3
50-74% (n=1413)	28.4
>74% (n=1475)	29.6

Proportion of patients seen with lack of social/family support

<25% (n=1142)	22.9
25-49% (n=1576)	31.6
50-74% (n=1339)	26.9
>74% (n=925)	18.6

Note. +complexity determined based upon patient volume, breadth of specialty care, levels of patient risk, teaching and research, and ICU units, with 1a indicating most complex

Table 3. Percent “Overall Satisfaction” responses within domain

Domain	Percent
Choose Training Experience Again	
Definitely Not (<i>n</i> =78)	1.7
Probably Not (<i>n</i> =282)	6.1
Probably Would (<i>n</i> =1,163)	25.0
Definitely Would (<i>n</i> =3,134)	67.3
Consider VA for Future Employment?	
Very Unlikely (<i>n</i> =45)	2.9
Somewhat Unlikely (<i>n</i> =118)	7.7
Had Not Thought About It (<i>n</i> =20)	1.3
Somewhat Likely (<i>n</i> =382)	25.0
Very Likely (<i>n</i> =961)	63.0
Satisfaction with Learning Environment	
Very Dissatisfied (<i>n</i> =26)	0.5
Somewhat Dissatisfied (<i>n</i> =99)	1.9
Neither (<i>n</i> =162)	3.2
Somewhat Satisfied (<i>n</i> =1482)	29.0
Very Satisfied (<i>n</i> =3339)	65.4
Satisfaction with Clinical Faculty/Preceptors	
Very Dissatisfied (<i>n</i> =36)	0.7

Somewhat Dissatisfied (<i>n</i> =153)	3.0
Neither (<i>n</i> =129)	2.5
Somewhat Satisfied (<i>n</i> =1171)	22.8
Very Satisfied (<i>n</i> =3641)	71.0

Satisfaction with Working Environment

Very Dissatisfied (<i>n</i> =28)	0.6
Somewhat Dissatisfied (<i>n</i> =257)	5.1
Neither (<i>n</i> =533)	10.5
Somewhat Satisfied (<i>n</i> =2370)	46.7
Very Satisfied (<i>n</i> =1882)	37.1

Satisfaction with Physical Environment

Very Dissatisfied (<i>n</i> =46)	0.9
Somewhat Dissatisfied (<i>n</i> =347)	7.0
Neither (<i>n</i> =628)	12.6
Somewhat Satisfied (<i>n</i> =2152)	43.1
Very Satisfied (<i>n</i> =1816)	36.4

Satisfaction with Personal Experience

Very Dissatisfied (<i>n</i> =20)	0.4
Somewhat Dissatisfied (<i>n</i> =93)	1.9
Neither (<i>n</i> =182)	3.7
Somewhat Satisfied (<i>n</i> =1366)	27.4
Very Satisfied (<i>n</i> =3322)	66.7

Satisfaction with Clinical Environment

Very Dissatisfied (<i>n</i> =4)	0.2
Somewhat Dissatisfied (<i>n</i> =20)	1.0
Neither (<i>n</i> =149)	7.6
Somewhat Satisfied (<i>n</i> =852)	43.3
Very Satisfied (<i>n</i> =944)	47.9

Note. Sample sizes differ for domains because not all respondents completed all items.

Table 4. Odds ratios of regression predictor variables for Satisfaction Domains

Factor	Learning Environment	Clinical Faculty	Working Environment	Physical Environment	Personal Experience	Clinical Environment
Training Level						
Practicum	1					
Intern	0.89 (0.77–1.04)	0.83 (0.71–0.98)	1.01 (0.89–1.16)	0.87 (0.76–0.99)	0.78 (0.66–0.91)	0.63 (0.51–0.79)
Postdoc	0.77 (0.64–0.93)	0.81 (0.66–0.98)	0.72 (0.61–0.85)	0.58 (0.49–0.69)	0.52 (0.43–0.63)	0.44 (0.33–0.58)
Gender of Trainee						
Male	1					
Female	1.14 (0.99–1.30)	1.00 (0.87–1.16)	1.05 (0.92–1.19)	0.89 (0.78–1.01)	0.97 (0.84–1.12)	1.01 (0.82–1.26)
Facility Complexity						
1a (Most Complex)	1					
1b (Very Complex)	0.87 (0.74–1.02)	0.92 (0.78–1.09)	0.85 (0.74–0.99)	1.13 (0.97–1.31)	0.93 (0.79–1.10)	0.88 (0.69–1.11)
1c (Complex)	0.98 (0.81–1.20)	0.80 (0.66–0.98)	1.13 (0.95–1.34)	1.38 (1.16–1.64)	1.11 (0.91–1.36)	0.72 (0.55–0.95)
2 (Medium Complex)	1.23 (0.98–1.55)	1.22 (0.95–1.57)	1.72 (1.39–2.14)	1.40 (1.14–1.72)	1.39 (1.09–1.78)	1.04 (0.70–1.54)
3 (Least Complex)	0.80 (0.64–1.01)	0.77 (0.61–0.97)	1.09 (0.88–1.34)	1.53 (1.25–1.86)	0.89 (0.71–1.12)	0.69 (0.49–0.96)
Rural/Urban						
Urban	1					
Rural	1.06 (0.92–1.21)	1.15 (0.99–1.32)	0.96 (0.85–1.08)	1.34 (1.19–1.50)	1.15 (1.00–1.31)	1.11 (0.91–1.37)
Patient Agedness						
>65 years	1.10 (0.86–1.40)	1.01 (0.78–1.30)	1.14 (0.91–1.42)	1.13 (0.91–1.41)	0.91 (0.71–1.17)	1.08 (0.74–1.57)
Patient Chronic Mental Illness						
With Mental Ill	1.11 (0.89–1.40)	1.29 (1.02–1.63)	0.95 (0.77–1.16)	1.05 (0.86–1.28)	1.10 (0.88–1.38)	0.96 (0.69–1.35)

Patient Chronic Medical Illness						
With Chronic Ill	0.62 (0.41–0.94)	0.71 (0.47–1.09)	0.78 (0.53–1.13)	0.89 (0.62–1.29)	0.79 (0.52–1.22)	0.96 (0.69–1.35)
Patient Multiple Illness						
With Multiple Med Ill	1.62 (1.09–2.40)	1.39 (0.32–2.10)	1.19 (0.83–1.72)	0.88 (0.61–1.26)	1.47 (0.97–2.23)	1.41 (0.76–2.61)
Patient Alcohol/ Substance Dependence						
With S/A	1.31 (1.01–1.70)	1.38 (1.05–1.82)	1.32 (1.04–1.68)	1.47 (1.16–1.86)	1.15 (0.88–1.50)	0.89 (0.61–1.32)
Patient Low SES						
With Low SES	0.82 (0.59–1.13)	0.80 (0.57–1.12)	0.81 (0.61–1.09)	0.61 (0.46–0.82)	0.83 (0.60–1.14)	0.93 (0.58–1.49)
Patient Low Social Support						
With No SS	0.65 (0.47–0.90)	0.60 (0.43–0.84)	0.72 (0.54–0.97)	0.72 (0.54–0.96)	0.90 (0.65–1.25)	0.81 (0.51–1.31)

Note. 95% confidence intervals are presented in parentheses. Estimates were calibrated by including the calibration index as a predictor variable. Reference group is indicated by the value 1. Odds ratios in bold indicate a significant difference from the reference group.

Table 5. Regression Models: Independent and Calibrated Associations Between How Trainees Rated Satisfaction with the Clinical Learning Experience and Their Stated Intentions

Domain	Consider Training Exp Again?	Consider work at VA?
Learning Environment	2.49 (1.89 – 3.28)	1.96 (1.51 – 2.54)
Clinical Faculty	2.86 (12.25 – 3.65)	1.23 (1.01 – 1.49)
Working Environment	1.07 (0.91 – 1.27)	1.26 (1.07 – 1.49)
Physical Environment	1.00 (0.85 – 1.17)	0.98 (0.83 – 1.16)
Personal Experience	1.94 (1.64 – 2.30)	1.79 (1.51 – 2.11)
Clinical Environment	1.17 (0.93 – 1.46)	0.91 (0.73 – 1.14)

Note. Odds ratios and 95% confidence intervals. Odds ratio computes the increase in likelihood that a respondent reports one higher level on the five or four-point program scale for a one standard deviation increase in a respective satisfaction domain, after holding other satisfaction ratings constant, and calibrating to account for respondent variation in response threshold and expectation biases. Values in **bold font** indicate statistical significance such that willingness or perception is significantly different from the next level of satisfaction in that domain. Exp = experience.

References

- Carless, S.A., Robertson, K., Willy, J., Hart, M., & Chea, S. (2012) Successful postgraduate placement experiences: What is the influence of job and supervisor characteristics. *Australian Psychologist*, 47, 156-164. doi: 10.1111/j.1742-9544.2012.00085.x.
- Carmody, S., Meier, D., Billings, J.A., Weissman, D.E., & Arnold, R.M. (2005) Training of palliative medicine fellows: A report from the field. *Journal of Palliative Medicine*, 8, 1005-1015. doi: 10.1089/jpm.2005.8.1005.
- Gonzalez-Cutre, D., Sicilia, A., Sierra, A.C., Ferriz, R., & Hagger, M.S. (2016). Understanding the need for novelty from the perspective of self-determination theory. *Personality and Individual Differences*, 102, 159–169. <http://dx.doi.org/10.1016/j.paid.2016.06.036>.
- Holland, J.L. (1985). *Making vocational choices: a theory of vocational personalities and work environments*. Englewood Cliffs, New Jersey: Prentice Hall.
- Ibrahim, H., Stadler, D.J., Archuleta, S., Shah, N.G., Bertram, A., Nair, S.C., Alkhal, A., Ali Al-Mohammed, A., & Cofrancesco Jr., J. (2016). Clinician-educators in emerging graduate medical education systems: description, roles and perceptions. *Journal of Postgraduate Medicine*, 92, 14-20. doi: 10.1136/postgradmedj-2015-133241.
- Kashner, T.M., Clarke, C.T., Aron, D.C., Byrne, J.M., Cannon, G.W., Deemer, D.A., Gilman, S.C., Kaminetzky, C.P., Wicker, A.B., Li, S., Keitz, S.A. (2017). A Psychometric Analyses of VA's Learners' Perceptions Survey. Manuscript.
- Kashner, T.M., Hettler, D.L., Zeiss, R.A., Aron, D.C., Bennett, D.S., Brannen, J.L., Byrne, J.M., Cannon, G.W., Chang, B.K., Dougherty, M.B., Gilman, S.C., Holland, G.J., Kaminetzky, C.P., Wicker, A.B., Keitz, S.A. (2017a) Has interprofessional education changed learning preferences: A National perspective. *Health Services Research*, 52(1,Pt.1), 268-290.

- Keitz, S.A., Holland, G.J., Melander, E.H., Bosworth, H.B., Pincus, S.H. (2003). The Veterans Affairs Learners' Perceptions Survey: The Foundation for Education Quality Improvement. *Academic Medicine*, 78, 910-917.
- Mitchell, K.E., Levin, A., & Krumboltz, J.D. (1999) Planned happenstance: Constructing unexpected career opportunities. *Journal of Counseling and Development*, 77, 115-124. doi: 10.1002/j.1556-6676.1999.tb02431.
- Schmidt, S. (2007). The relationship between satisfaction with workplace training and overall job satisfaction. *Human Resource Development Quarterly*, 18, 481-498. doi: 10.1002/hrdq.1216.
- Torralba, K.D., Loo, L.K., Byrne, J.M., Baz, S., Cannon, G.W., Keitz, S.A., Wicker, A.B., Henley, S.S., and Kashner, T.M. (2016). Does psychological safety impact the clinical learning environment for physician residents? *Journal of Graduate Medical Education*, 8(5), 699-707.