Veteran Reintegration and Well-Being Outcomes: A Feasibility Study of the Service Platoon Program for The Mission Continues

Authors:

Kate H. Thomas, PhD
Department of Global and Community Health
George Mason University
4400 University Drive
Fairfax, VA 22030
Email: katehendricksthomas@gmail.com
Telephone: 843-408-5649

Justin T. McDaniel, PhD
School of Human Sciences
Southern Illinois University
475 Clocktower Drive
Carbondale, IL 62901
Email: jtmcd@siu.edu
Telephone: 618-453-1832

David L. Albright, PhD
School of Social Work
The University of Alabama
Box 870314
Tuscaloosa, AL 35487
Email: dlalbright@ua.edu
Telephone: 205-348-4416

Gina Rosen, PhD
The Mission Continues
220 N. Green Street
Chicago, IL 60607
Email: grosen@missioncontinues.org
Telephone: 414-975-6563

ABSTRACT

Purpose: *This study examined how participation in the Service Platoon program of The Mission Continues (TMC) impacts self-reported purpose in life (PIL), interpersonal support (IS), and civic engagement (CE) among military veterans.* ***Methods:*** *An online survey was given to military veterans upon initial registration with TMC and again 12 months later (n=395). The survey assessed Service Platoon program participation*

rates, as well as demographic factors, PIL, IS, and CE. Linear regression models were estimated to determine the effect of Service Platoon participation on change scores for PIL, IS, and CE. ***Results:*** *Post-test scores on all measures were higher at higher levels of event participation, although differences in scores were modest.* ***Conclusions:*** *Results showed that females with participation in seven or more events had significant increases in IS from pretest to posttest, b=4.56 (95% CI=0.44, 8.68).* ***Recommendations:*** *We recommend social networking programming that works to improve interpersonal support and community connectivity among veterans.*

Keywords: veterans; nonprofit; interpersonal support; evaluation

INTRODUCTION

Veteran Service Organizations

Military and Veteran Service Organizations (MSOs/VSOs) work to reach the military-connected community post-service to improve reintegration and well-being outcomes using a host of methods (Thomas, et al., 2015). Often, outreach initiatives intended to improve social support, mental health, and general well-being originating from the VSO space are well-received and successful (Thomas & Plummer Taylor, 2015). Part of the reason such success can be found in the non-profit space is that within the military community, screening and treatment for depressive disorders are readily available (Hoge & Castro, 2012), but getting veterans to avail themselves of treatment services is challenging (Koo & Maguen, 2014; Malmin, 2013).

Veterans' reported sense of disconnect while transitioning out of Active Duty service may actually be stronger for the modern veteran; only 12% of men and 3% of women under the age of 35 are veterans of Iraq or Afghanistan (Castro & Kintzle, 2014; Hoge, 2010). As such, VSOs serving the Post 9-11 veteran are uniquely positioned to improve reintegration outcomes when they focus on connection to the community, social support, and sense of purpose as drivers of improved or positive mental health outcomes (Thomas et al., 2015). Because of military culture insularity and the lack of communication between bureaucratic treatment agencies, programs that seek to collaborate, bridge gaps, and use peer leadership meet with real success (Greden, 2010).

The Mission Continues

The Mission Continues works to reach reintegrating veterans at all life stages and improve well-being by channeling veteran energy towards community development and engagement. Communities all across America are struggling with a host of social problems. Veterans returning from military service in Iraq and Afghanistan are encountering these issues first-hand in their hometowns, on college campuses, and in at-risk neighborhoods plagued with violence and unrest. Armed with leadership and community engagement skills, these veterans are coming together with The Mission Continues in an effort to tackle some of the most pressing community needs while also improving their reintegration outcomes.

The Mission Continues is a national nonprofit organization that supports continued post-military civic service as an innovative social approach to facilitate improved outcomes for these communities, as well as for the veterans who call them home. In 2007, The Mission Continues started the Fellowship Program, which provided individual post-9/11 veterans with a stipend to complete six months of volunteer service at a local nonprofit organization. Evaluation results indicated that veterans who completed this program were able to actively translate their military leadership skills and experiences into purpose-driven, organized volunteering activities – resulting ultimately in positive personal, professional,

family, and community outcomes (Matthieu, et al., 2011; Matthieu, et al., 2013).

The Service Platoon Program

Based on early results from the Fellowship Program, in 2013, The Mission Continues launched a new program to broaden the benefits of civic service to help veterans in their reintegration process after leaving the military. The Service Platoon program provides veterans with the same key elements of The Fellowship Program: structured volunteer experiences, peer support, and community engagement, yet through monthly group service projects instead of individual 20 hour-per-week volunteer commitment at one agency.

In contrast to the individualized fellowship model, each Service Platoon is a group of 40 to 100+ "Platoon Members" who mobilize and collectively address an important social issue for their home community. Platoon Members can be veterans of any era: Active Duty, National Guard, or Reserve military service members. Each Platoon has a "Platoon Leader", a post-9/11 veteran selected and trained by The Mission Continues staff to function as the central organizer of the Platoon's activities in that community.

After a three-day orientation, Platoon Leaders coordinate and collaborate with local nonprofit organizations and recruit Platoon Members to volunteer for monthly service events. Platoon Leaders also organize social events to build professional networks between Platoon Members and resource events that link members with veteran-focused services in the community. In sum, all of these shared activities are intended to further the Service Platoons' goal to facilitate veteran reintegration and to enhance community engagement.

PURPOSE

The purpose of this study was to conduct a program evaluation by examining how participation in The Mission Continues' Service Platoon program affects self-reported purpose in life, interpersonal support, and civic engagement among military veterans. The following hypotheses were tested:

1. Participation in the Service Platoon program improves purpose in life.
2. Participation in the Service Platoon program increases interpersonal support.
3. Participation in the Service Platoon program strengthens reported levels of civic engagement.

METHODS

Study Design

In order to internally validate programs, The Mission Continues regularly requests survey feedback from participants. All veterans, Active Duty, National Guard and Reserve military service members who joined a Service Platoon via The Mission Continues website between August 2014 and December 2014 were invited to participate in a web-based, self-administered pre-survey. Those same individuals received a follow-up email with a link to the web-based post-survey 12 months later. While most questions were assessed in both the pre-survey and post-survey, some items that related specifically to the program were only assessed in the post-survey.

Of the 2,558 individuals who signed up, 1,036(40.5%) completed the base line survey and 395(15.4%) completed the 12-month survey. TMC offered no incentives for survey completion. Secondary analyses of the data were then conducted by an interdisciplinary research team beginning in March 2018. The study was submitted to the Institutional Review Board of Charleston Southern University for review. Because the analysis was secondary in nature and did not involve contact with human subjects, this study was granted exemption from the review process. Only individuals who participated in both the pre and 12-month post-

survey were included in the analysis to provide the strongest, statistically valid representation of participant changes.

Measures

Control Variables

Age was measured in eight 4-year categories, starting at the age of 22. Gender was measured dichotomously (male=0, female=1). Ethnicity was measured dichotomously (Non-Hispanic=0, Hispanic=1). Race was measured with the following categories: White, Black, and Other (i.e., Asian, Pacific Islander, Native American, Alaskan Native, or biracial). Race categories were coded as dummy variables in linear models. Military status was measured dichotomously (Active Duty, National Guard, or Reserve=0, Veteran=1). Deployment experience was measured dichotomously (never deployed =0, ever deployed=1). Regions included in the study were Washington DC, Houston, Los Angeles, New York City, and St. Louis. Region categories were coded as dummy variables in linear models.

Platoon Event Participation

The following post-test question was asked of participants in order to gauge event participation levels: "How many platoon events have you attended?" Response categories for this question included the following: none, 1 to 3, 4 to 6, and 7 or more. Platoon event participation levels were coded as dummy variables in linear models.

PHQ-2

The Patient Health Questionnaire (PHQ-2) was used as a measure of depressive symptoms in the present study (Kroenke, et al., 2003). The PHQ-2 has two questions: (1) Over the past two weeks, how often have you had little interest or pleasure in doing things? and (2) Over the past two weeks, how often have you felt down, depressed, or hopeless? Response categories for this question included the following: not at all (code=0), several days (code=1), more than half of the days (code=2), and nearly every day (code=3).

PC-PTSD

The Primary Care Post-Traumatic Stress Disorder (PC-PTSD) scale is a 5-item measure of PTSD symptomology (Prins et al., 2016). Participants were asked, for example, "In the past month, have you felt numb or detached from people, activities, or your surroundings?" and "In the past month, have you been constantly on guard, watchful, or easily startled?" Response categories for the questions in this scale included yes (code=1) and no (code=0).

Ryff's Purpose in Life Subscale

The Ryff Purpose in Life subscale (PIL) is a 7-item scale measuring the extent to which one thinks his/her life is meaningful (Ryff, 1989). Participants were asked, for example, to rate their agreement with the following prompts, "I am an active person in carrying out the plans I set for myself" and "I enjoy making plans for the future and working to make them a reality." Response options for these questions included the following: strongly disagree (code=1), moderately disagree (code=2), slightly disagree (code =3), slightly agree (code=4), moderately agree (code=5), and strongly agree (code=6).

Interpersonal Support Evaluation List

The Interpersonal Support Evaluation List (IS) is a 12-item scale measuring functional social support (Cohen & Wills, 1985). Participants were asked, for example, to rate their agreement with the following prompts, "There is someone I can turn to for advice about handling problems with my family" and "When I need suggestions on how to deal with a personal problem, I know someone I can turn to." Response options for these questions included the following: definitely false (code=1), probably false (code=2), probably true (code=3), and definitely true (code=4).

Civic Engagement

Civic engagement (CE) was measured with 5 Likert-scale items. Participants were asked, for example, to rate their agreement with the following prompts, "I often discuss and think about how larger political and social issues affect my community" and "I try to find the time or a way to make a positive difference in my community." Response options for these questions included the following: strongly disagree (code=1), disagree (code=2), neither disagree nor agree (code=3), agree (code=4), and strongly agree (code=5).

Data Analysis

To determine the dimensionality of the multi-item constructs measured in this study (i.e., PIL, IS, CE, PTSD, PHQ, and PC-PTSD), principal components analysis ([PCA]; Hotelling, 1933) with varimax rotation (Kaiser, 1958) was conducted on the pre-test scores. Dimensionality was assessed according to Kaiser's (1958) procedure; factors were retained if their eigenvalue (λ) was larger than one. As per Guadagnoli and Velicer (1988), principal component loadings of at least 0.60 were deemed satisfactory. Cronbach's alpha (Cronbach, 1951), an index of reliability, was calculated in order to determine the internal consistency of the separate scales.

Descriptive statistics—means and standard deviations—were calculated for PIL, IS, and CE pre-test and post-test outcomes by event participation and gender. Subsequently, three regression models were estimated in this study. The dependent variables in the three models were thus: pre-test to post-test changes in PIL, IS, and CE. Robust linear regression with M-estimation was used to examine the effect of platoon event participation on changes in PIL, IS, and CE (Huber, 1981). The control variables listed earlier in this paper were included as independent variables in all models. Beta coefficients in all models were bootstrapped with 1,999 resamples (Shorak, 1982), and bias-corrected 95% confidence intervals were generated for each estimate (DiCiccio and Romano, 1988).

RESULTS

Psychometric Analysis

Results of the PCA are presented first. Regarding the 7-item PIL scale, results showed that a one-factor solution (λ=3.4, α=0.8) explained 48.4% of the variance in the measure, with component loadings ranging from 0.6 to 0.8. Regarding the 12-item IS scale, results showed that a one-factor solution (λ=6.4, α=0.9) explained 53.4% of the variance in the measure, with component loadings ranging from 0.6 to 0.8. Regarding the 5-item CE scale, results showed that a one-factor solution (λ=3.0, α=0.8) explained 60.2% of the variance in the measure, with component loadings ranging from 0.7 to 0.8.

The 4-item PC-PTSD scale exhibited satisfactory internal consistency reliability (α=0.9) with a one-factor solution (λ=2.9), accounting for 72.3% of the variance in the measure. Component loadings for the PC-PTSD scale were between 0.8 and 0.9. The 2-item PHQ-2 also exhibited satisfactory internal consistency reliability (α=0.8) with a one-factor solution (λ=1.7) accounting for 86.6% of the variance in the measure. Component loadings for the PHQ-2 scale were between 0.9 and 1.0. As such, we computed summative composite scores on the aforementioned scales for each individual.

Demographic Information

Demographic information about the study sample is shown in Table 1 at the end of this manuscript. An equal distribution of age was observed across age groups, ranging from 22 to 55 or older. The sample was predominantly composed of male (66.1%) veterans who identified as non-Hispanic White. Results showed that 91.8% of the sample had never been deployed. Participants were from the Washington DC

area, Houston area, Los Angeles area, New York City area, and St. Louis area. Over half of the sample attended no platoon events (56.9%). Depression (PHQ-2) and PTSD (PC-PTSD) measures were collected at the baseline of the study. Results showed that the sample had an average PHQ-2 score of 3.36 and an average PC-PTSD score of 5.56.

Descriptive Results

Descriptive results for pre-test and post-test scores on PIL, IS, and CE are presented by event participation and gender in Table 2. In general, post-test scores on all measures were higher at higher levels of event participation, although differences in scores were modest.

The largest increase from pre-test (M=36.13) to post-test (M=37.63) was observed in interpersonal support (IS) for females who attended seven or more platoon events. Females who attended seven or more events had larger changes in pre-test to post-test scores in IS (M_{pre}=36.13, M_{post}=37.63) than females who attended no events (M_{pre}=36.88, M_{post}=35.89) and males who attended no events (M_{pre}=37.05, M_{post}=38.09).

PIL Model Results

A robust linear regression model, including changes in PIL pre-test to post-test scores as the dependent variable, was statistically significant at $F_{(21,151)}$=2.6, p<0.001. However, results showed that changes in PIL scores did not differ by event participation, gender, or an interaction between gender and event participation (Table 3). Black participants were more likely than white participants to have positive changes in PIL scores. Furthermore, participants with higher PHQ-2 scores at the baseline were less likely to have positive changes in PIL.

IS Model Results

A robust linear regression model, including changes in IS pre-test to post-test scores as the dependent variable, was statistically significant at $F_{(21,151)}$=2.3, p=0.003. Results of the model showed that an interaction term of gender by event participation was statistically significant, b=4.56, p=0.03 (Table 4). Therefore, females, when compared to males, were more likely to have pre-test to post-test increases in IS if they attended seven or more events rather than no events. Additionally, participants with higher PHQ-2 scores at the baseline were less likely to have positive changes in IS scores.

CE Model Results

A robust linear regression model, including changes in CE pre-test to post-test scores as the dependent variable, was statistically significant at $F_{(21,151)}$=2.0, p=0.011. However, results showed that changes in CE scores did not differ by event participation, gender, or an interaction between gender and event participation (Table 5). Descriptively, while males and females had higher CE post-test scores with greater levels of platoon event participation, these results were not statistically significant after accounting for the control variables presented in Table 5.

DISCUSSION

Limitations

Findings indicate mixed results. While many of the early indicators related to depression, sense of purpose, and interpersonal support were seen in the Fellowship Program, we did not see the same positive results in the launch of the platoon program among participants from pre-test to post-test. When considering the findings of this study, we acknowledge several limitations, including its overall exploratory nature and limited generaliz-ability to the Service Platoon program within the respective community it serves. All data

were self-reported and cross-sectional in nature.

Study Impact

Overall, no large, practical impact was found by Service Platoon program participants for PIL, IS, and CE. When examining depression and PTSD as a covariate for program participants in relation to PIL, IS and CE, mixed results were found. Participants with higher levels of depression during pre-test were less likely to report increased in IS and PIL. There was no impact on CE for those identified as depressed. For people who measured as having PTSD at pre-test, there was no impact on PIL, IS or CE. These results are surprising given prior work suggests that veterans who volunteer their time report lower rates of PTSD and depression and higher levels of social support (Yonkman & Bridgeland, 2009; Matthieu, et al., 2017).

When examining further, certain non-majority populations did see positive results that were not expected; however, results reinforce other data trends of program impact. One unintended result seen in the launch of the Service Platoon program was the inclusionary feel among program participants. Participants were over-represented in both gender and race when compared to the general veteran population. These over-represented populations also showed positive results in relation to certain program outcomes.

Study Impact by Gender

In the Service Platoon program, women represented nearly 34 percent of all program participants in comparison to statistics indicating that women are less than 8 percent of all U.S. veterans (U.S. Census Bureau, 2013). Analysis indicated that women who attended 7 or more events had larger increases on the interpersonal support evaluation list than their male counterparts. This result could indicate that one reason women tend to oversubscribe to the program is they perceive more support than they have found in other formal veteran networks; the more TMC events they attended, the more positive the increase in IS.

Study Impact by Race

Blacks represented over 14% in the Service Platoon program, compared to 11.3% of all U.S. Veterans (U.S. Census Bureau, 2013)—another overrepresentation. Analysis on Blacks indicated greater increases in purpose in life compared to their White counterparts. This result indicates that Blacks might be more inspired and connected to the civic service and what it means in relation to making a difference in their own lives. It might also reflect intergroup relations more analogous to those in military social environments than those participants experience in their current social environments.

CONCLUSION

The results of our study will contribute in improving the effectiveness of the Service Platoon program on veterans' outcomes. Additional program testing and development is needed. The sample in this study contained participants from large urban areas (i.e., Washington DC area, Houston area, Los Angeles area, New York City area, and the St. Louis area). Future work will include program participants from small urban and rural areas. Additionally, given that this program focuses on monthly group service projects instead of individual ones, we will work to better understand the potential influence of the group setting on interpersonal, family, and intergroup functioning. We also hope to identify and better understand the processes of community building and community engage-ment on an individual veteran's sense of purpose, emotional regulation, and positive cognitive reappraisal – all of which we believe contribute to successful and sustainable post-service reintegration.

The importance of the present study goes beyond a simple impact evaluation of one program, and it indicates a need for contemporary health educators to conduct rigorous program evaluation within social networking organizations that serve veterans. Careful analysis of program outcomes and the process, impact, and outcome evaluative levels is an important step forward for organizations working within the VSO landscape (Thomas & Plummer Taylor, 2020). We hope that additional Veteran Service Organizations, like The Mission Continues, will work to understand the effectiveness of their programs on selected outcome measures, and publish their findings. It will be through this iterative work that we will enhance transparency of our organizations and programming, while contributing to shared knowledge that might be applied to the development of programs to improve the lives of veterans.

REFERENCES

Castro, C.A., & Kintzle, S. (2014). Suicides in the military: The post-modern combat veteran and the Hemingway effect. *Current Psychiatry Reports, 16*(8), 460-469.

Cohen, S., & Wills, T.A. (1985). Stress, social support, and the buffering hypothesis. *Psychological Bulletin, 98*, 310-357.

Cronbach, L. (1951). Coefficient alpha and the internal structure of tests. *Psychomerika, 16*, 297-334.

DiCiccio, T.J., & Romano, J.P. (1988). A review of bootstrap confidence intervals. *Journal of the Royal Statistical Society, 50*(3), 338-354.

Greden, J.F., Valenstein, M., Spinner, J., Blow, A., Gorman, L.A., Dalack, G.W., & Kees, M. (2010). Buddy-to-buddy, a citizen soldier peer support program to counteract stigma, PTSD, depression, and suicide. *Annals of the New York Academy of Sciences, 1208*, 90-97.

Guadagnoli, E., & Velicer, W.F. (1988). Relation of sample size to the stability of component patterns. *Psychological Bulletin, 103*(2), 265-275.

Hoge, C.W. (2010). *Once a warrior, always a warrior* (1st ed.). Guilford, CT: Lyons Press.

Hoge, C.W., & Castro, C.A. (2012). Preventing suicides in US service members and veterans. *Journal of American Medical Association, 308*(7), 671-672.

Hotelling, H. (1933). Analysis of a complex of statistical variables into principal components. *Journal of Educational Psychology, 25*, 417-441.

Huber, P.J. (1981). *Robust Statistics*. New York: John Wiley and Sons.

Kaiser, H.F. (1958). The varimax criterion for analytic rotation in factor analysis. *Psychometrika, 23*, 187-200.

Koo, K.H., & Maguen, S. (2014). Military sexual trauma and mental health diagnoses in female veterans returning from Afghanistan and Iraq: Barriers and facilitators to Veterans Affairs care. *Hastings Women's Law Journal, 25*(1), 27-38.

Kroenke, K., Spitzer, R.L., & Williams, J.B. (2003). The patient health questionnaire-2: Validity of a two-item depression screener. *Medical Care, 41*(11), 1284-1892.

Malmin, M.M. (2013). Warrior culture, spirituality, and prayer. *Journal of Religion and Health, 52*(3), 740-758.

Matthieu, M.M., Lawrence, K.A., & Robertson-Blackmore, E. (2017). The impact of a civic program on biopsychosocial outcomes of post 9/11 U.S. military veterans. *Psychiatry Research, 248*, 111-116.

Matthieu, M.M., Smith, I.D., McBride, A.M., & Morrow-Howell, N. (2011). The Mission Continues: Engaging post-9/11 disabled military veterans in civic service (CSD Research Brief 11-25). St. Louis, MO: Washington University, Center for Social Development. http://csd.wustl.edu/Publications/Documents/RB11-25.pdf

Matthieu, M.M., Smith, I.D., McBride, A.M., & Morrow-Howell, N. (2013). Impacts of The Mission Continues Fellowship Program on post-9/11 disabled military veterans, their families, and their communities (CSD Research Brief 13-20). St. Louis, MO: Washington University. http://csd.wustl.edu/Publications/Documents/RB13-20.pdf.

Matthieu, M.M., Scheinberg, A.J., Morrow-Howell, N., & McBride, A.M. (2013). Reexamining Impacts of The Mission Continues Fellowship Program on Post-9/11 Veterans, Their Families, and Their Communities. *Center for Social Development Research Brief, 13*(20), 1-6. From http://csd.wustl.edu/Publications/Documents/RB13-23.pdf.

Prins, A., Bovin, M.J., Smolenski, D.J., Marx, B.P., Kimerling, R., Jenkins-Guarnieri, M.A., Kaloupek, D.G., Schnurr, P.P., Kaiser, A.P., Leyva, Y.E., & Tiet, Q.Q. (2016). The primary care PTSD screen for DSM-5 (PC-PTSD-5): Development and evaluation within a veteran primary care sample. *Journal of General Internal Medicine, 31*(10), 1206-1211.

Ryff, C. (1989). Happiness is everything, or is it: Explorations on the meaning of psychological well-being. *Journal of Personality and Social Psychology, 57*, 1069-1081. doi:10.1037/00223514.57.6.1069

Shorack, G.R. (1982). Bootstrapping robust regression. *Communications in Statistics: Theory and Methods, 11*(9), 961-972.

Thomas, K.H., & Plummer Taylor, S. (2020). *Stopping military suicides: Veteran voices to help prevent deaths.* Santa Barbara, CA: ABC-CLIO/Praeger Publishing.

Thomas, K.H., & Plummer Taylor, S. (2015). Bulletproofing the psyche: Mindfulness interventions in the training environment to improve resilience in the military and veteran communities. *Advances in Social Work, 16*(2), 312-322.

Thomas, K.H., Plummer Taylor, S., Hamner, K., Glazer, J., & Kaufman, E. (2015). Multi-site programming offered to promote resilience in military veterans: A process evaluation of the Just Roll with it Bootcamps. *Californian Journal of Health Promotion, 13*(2), 15-24.

United States Census Bureau. (2013). *American Community Survey*. https://factfinder.census.gov/faces/nav/jsf/pages/searchresults.xhtml?refresh=t

Yonkman, M.M., & Bridgeland, J.M. (2009). All volunteer force: From military to civilian service. Civic Enterprises. https://files.eric.ed.gov/fulltext/ED513458.pdf.

Table 1. Demographic characteristics of the study participants		
	N	**%**
Age		
22 to 25	7	3.6
26 to 30	47	24.1
31 to 35	42	21.5
36 to 40	30	15.4
41 to 45	20	10.3
46 to 50	17	8.7
50 to 55	21	10.8
55 +	11	5.6
Gender		
Male	127	66.1
Female	65	33.9
Hispanic		
No	148	76.3
Yes	46	23.7
Race		
White	123	64.0
Black	27	14.1
Other[a]	42	21.9
Military Status		
Active Duty, National Guard, Reserve	24	12.4
Veteran	169	87.6
Deployed		
No	179	91.8
Yes	16	8.2
Region		
Washington DC	40	20.8
Houston	37	19.3
Los Angeles	39	20.3
New York City	41	21.4
St. Louis	35	18.2
Events Attended		
0	111	56.9
1 to 3	33	16.9
4 to 6	14	7.2
7 +	37	19.0
PHQ-2 Baseline (M, SD)	3.36	1.38
PC-PTSD Baseline (M, SD)	5.56	1.64
[a] Other = Asian, Pacific Islander, Native American, Alaskan Native, Biracial		

Table 2. Average pre-test and post-test scores on PIL, IS, and CE by event participation and gender

		PIL		IS		CE	
Events Attended	Gender	Pre M (SD)	Post M (SD)	Pre M (SD)	Post M (SD)	Pre M (SD)	Post M (SD)
0	Male	32.78	32.57	37.05	38.09	18.91	19.03
		(6.98)	(6.91)	(8.44)	(8.30)	(4.19)	(3.93)
	Female	33.03	33.63	36.88	35.89	18.27	19.06
		(6.32)	(6.35)	(7.22)	(8.93)	(3.27)	(3.98)
1 to 3	Male	34.95	35.35	38.10	39.00	19.30	19.85
		(5.70)	(5.32)	(8.40)	(7.79)	(2.60)	(3.34)
	Female	35.08	36.08	39.83	39.67	18.42	18.67
		(4.94)	(3.78)	(5.02)	(5.88)	(2.61)	(2.57)
4 to 6	Male	35.50	36.30	40.80	41.60	21.00	21.00
		(6.36)	(6.50)	(5.99)	(4.90)	(2.54)	(2.94)
	Female	35.50	36.75	41.25	39.50	18.00	19.00
		(4.44)	(4.57)	(12.18)	(13.08)	(4.83)	(4.08)
7 +	Male	34.57	35.33	37.05	36.81	20.48	20.81
		(6.49)	(6.20)	(7.57)	(8.19)	(3.01)	(2.99)
	Female	36.69	36.06	36.13	37.63	19.69	19.94
		(5.67)	(6.12)	(9.19)	(10.24)	(3.40)	(3.04)

Table 3. Effect of platoon event participation on changes in PIL pre-test to post-test scores

				95% CI	
Variable	B	(SE)	*p*	Lower	Upper
Intercept	15.79	3.60	< 0.001	8.66	22.91
PIL Pre-Test	-0.39	0.06	< 0.001	-0.51	-0.27
Age	0.01	0.17	0.97	-0.33	0.34
Female	0.51	0.95	0.59	-1.37	2.39
Hispanic	-0.23	0.83	0.78	-1.88	1.42
Race: Black (Ref: White)	2.62	1.02	0.01	0.59	4.65
Race: Other (Ref: White)	1.32	0.84	0.12	-0.35	2.99
Veteran	0.11	0.96	0.90	-1.79	2.01
Deployed	0.66	0.76	0.38	-0.83	2.16
Disabled	0.25	1.21	0.83	-2.13	2.64
PC-PTSD Baseline	-0.17	0.26	0.51	-0.68	0.34
PHQ-2 Baseline	-0.76	0.31	0.01	-1.39	-0.14
1 to 3 Events (Ref: 0)	1.21	2.66	0.64	-4.04	6.47
4 to 6 Events (Ref: 0)	1.32	3.97	0.74	-6.53	9.18
7 + Events (Ref: 0)	2.79	2.43	0.25	-2.01	7.59
Region: DC (Ref: LA)	-0.94	1.01	0.35	-2.95	1.06
Region: Houston (Ref: LA)	0.39	0.98	0.69	-1.54	2.33
Region: NYC (Ref: LA)	-0.82	0.99	0.40	-2.79	1.13
Region: St. Louis (Ref: LA)	0.02	1.05	0.98	-2.05	2.09
Interaction Terms					
Gender * 1 to 3 Events	-0.35	1.82	0.84	-3.95	3.24
Gender * 4 to 6 Events	-0.18	2.95	0.95	-6.01	5.64
Gender * 7 + Events	-1.47	1.63	0.37	-4.71	1.76

Table 4. Effect of platoon event participation on changes in IS pre-test to post-test scores

				95% CI	
Variable	b	(SE)	*p*	Lower	Upper
Intercept	9.94	4.87	0.04	0.31	19.57
IS Pre-Test	-0.23	0.06	0.01	-0.36	-0.09
Age	0.33	0.21	0.12	-0.09	0.76
Female	-2.93	1.22	0.01	-5.34	-0.52
Hispanic	1.08	1.07	0.31	-1.03	3.19
Race: Black (Ref: White)	2.12	1.30	0.10	-0.45	4.71
Race: Other (Ref: White)	-1.42	1.08	0.19	-3.56	0.72
Veteran	2.19	1.23	0.07	-0.23	4.62
Deployed	-0.02	0.97	0.97	-1.95	1.90
Disabled	0.49	1.56	0.75	-2.60	3.59
PC-PTSD Baseline	0.55	0.34	0.11	-0.12	1.24
PHQ-2 Baseline	-1.44	0.39	< 0.001	-2.22	-0.66
1 to 3 Events (Ref: 0)	-0.85	3.40	0.80	-7.57	5.86
4 to 6 Events (Ref: 0)	-1.37	5.07	0.78	-11.41	8.65
7 + Events (Ref: 0)	-6.09	3.09	0.05	-12.21	0.03
Region: DC (Ref: LA)	-0.63	1.30	0.62	-3.20	1.93
Region: Houston (Ref: LA)	-1.22	1.25	0.33	-3.70	1.25
Region: NYC (Ref: LA)	-0.22	1.26	0.85	-2.73	2.27
Region: St. Louis (Ref: LA)	-0.15	1.34	0.91	-2.80	2.49
Interaction Terms					
Gender * 1 to 3 Events	2.38	2.32	0.30	-2.20	6.98
Gender * 4 to 6 Events	1.14	3.76	0.76	-6.29	8.59
Gender * 7 + Events	4.56	2.08	0.03	0.44	8.68

Table 5. Effect of platoon event participation on changes in CE pre-test to post-test scores

				95% CI	
Variable	b	(SE)	*p*	Lower	Upper
Intercept	2.17	2.13	0.31	-2.05	6.40
CE Pre-Test	-0.25	0.06	< 0.001	-0.37	-0.13
Age	0.07	0.10	0.46	-0.13	0.28
Female	0.53	0.58	0.36	-0.61	1.68
Hispanic	0.58	0.50	0.25	-0.41	1.58
Race: Black (Ref: White)	0.98	0.62	0.11	-0.24	2.21
Race: Other (Ref: White)	0.32	0.51	0.52	-0.69	1.34
Veteran	-0.18	0.58	0.76	-1.338	0.97
Deployed	0.22	0.46	0.62	-0.69	1.13
Disabled	1.28	0.73	0.08	-0.16	2.74
PC-PTSD Baseline	0.17	0.15	0.28	-0.14	0.48
PHQ-2 Baseline	-0.22	0.18	0.23	-0.59	0.14
1 to 3 Events (Ref: 0)	1.49	1.61	0.35	-1.70	4.69
4 to 6 Events (Ref: 0)	-0.71	2.42	0.77	-5.50	4.08
7 + Events (Ref: 0)	1.68	1.47	0.25	-1.23	4.60
Region: DC (Ref: LA)	0.61	0.62	0.32	-0.61	1.84
Region: Houston (Ref: LA)	0.95	0.60	0.11	-0.23	2.14
Region: NYC (Ref: LA)	0.78	0.61	0.20	-0.42	1.98
Region: St. Louis (Ref: LA)	1.09	0.64	0.08	-0.16	2.36
Interaction Terms					
Gender * 1 to 3 Events	-0.73	1.10	0.50	-2.92	1.45
Gender * 4 to 6 Events	0.74	1.79	0.67	-2.80	4.29
Gender * 7 + Events	-0.93	0.99	0.35	-2.89	1.03