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AS A TOOL FOR TALENT MANAGEMENT**

Johnson, Nolan; Baker, Jonathan C.

Monterey, CA; Naval Postgraduate School

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**NAVAL
POSTGRADUATE
SCHOOL**

MONTEREY, CALIFORNIA

THESIS

**PRESERVATION OF THE FORCE AND FAMILY AS A
TOOL FOR TALENT MANAGEMENT**

by

Nolan Johnson and Jonathan C. Baker

December 2019

Thesis Advisor:
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Robert E. Burks
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**PRESERVATION OF THE FORCE AND FAMILY AS A
TOOL FOR TALENT MANAGEMENT**

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and

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ABSTRACT

Talent management in the United States Army is a challenging and complex issue, with many factors contributing to a Soldier's decision whether to remain in military service. Preservation of the Force and Family (POTFF) is intended to increase individual resiliency among USSOCOM's service members across its four pillars of physical, psychological, spiritual, and family performance. Could the services of POTFF also increase retention? Using data from USSOCOM's annual Needs Assessment Survey, we built a model to answer that question. Using logistic regression, we chose one question from the survey to represent each pillar of POTFF against the question about Soldier's intent to remain in service until retirement. Our findings indicate that Soldiers who use Human Performance Centers and chaplain-led retreats have a higher probability of retention intention than those who do not. This could indicate that increased command emphasis on those programs would improve retention among the U.S. Army Special Operators we analyzed. Gathering useful data from the surveys on psychological and spiritual health is challenging and warrants further research.

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LIST OF ACRONYMS AND ABBREVIATIONS

ADM	Admiral (four-star)
AFSOC	Air Force Special Operations Command
ARSOF	Army Special Operations Forces
AUDIT	Alcohol Use Disorder Identification Test
BH	Behavioral Health
BRS	Brief Resiliency Scale
CSCS	Certified Strength and Conditioning Specialist
CSF	Comprehensive Soldier Fitness
DoD	Department of Defense
DSM-IV	Diagnostic and Statistical Manual of Mental Disorders
FS	Friendship Scale
GEN	General (four-star)
HPC	Human Performance Center
HPP	Human Performance Programming
HPTC	Human Performance Training Center
ISI	Insomnia Severity Index
JSOC	Joint Special Operations Command
LTG	Lieutenant General (three-star)
MARSOC	Marine Special Operations Command
NRNSS	Nonreligious Nonspiritual Scale
OIF	Operation Iraqi Freedom
OPTEMPO	Operations Tempo
PHQ-8	Personal Health Depression Scale
POTFF	Preservation of the Force and Family
PTSD	Post Traumatic Stress Disorder
THOR3	Tactical Human Optimization and Rapid Rehabilitation and Reconditioning
USASOC	United States Army Special Operations Command
USSOCOM	United States Special Operations Command
WARCOM	Naval Special Warfare Command
WHO	World Health Organization

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I. INTRODUCTION

This thesis looks at the Preservation of the Force and Family Program (POTFF) as a means to provide value in talent management to leaders throughout United States Army Special Operations Command (USASOC). Through analysis of existing data, this thesis tests whether increasing participation in POTFF could also increase a Soldier's likelihood of continuing military service.

A. PRESERVATION OF THE FORCE AND FAMILY PROGRAM

1. History of POTFF

USSOCOM's Preservation of the Force and Family program has officially existed since 2013. The genesis of an official individual resiliency program was initiated by ADM Olsen, USSOCOM Commander, in 2011, and established as a program of record in 2013 by Olsen's successor, ADM McRaven.¹ USSOCOM developed, funded, and implemented POTFF in response to the unrelenting demand for Special Operations Forces in the post 9/11 U.S. military. The length of time and effort required to combat terrorism surpassed initial planning estimates. For many Soldiers and their families, the never-ending cycle of training and deployments was proving too difficult to sustain, and many Soldiers either separated from service earlier than planned or suffered family or personal problems that affected both their ability to contribute to the force and their personal health.

The elements of POTFF generally existed before the official implementation of the program, but they were often disparate, and the quality and availability were not uniform across the force. USSOCOM leaders saw a need to house all the resiliency tools under one roof, so the idea of a centralized program was born. In addition to unit chaplains, behavioral health providers, and physical therapists, POTFF added or expanded the use of strength and conditioning coaches to both rehabilitate injured servicemembers and "prehab" healthy ones. Together, the services of POTFF represent a holistic wellness approach to caring for

¹ William McRaven, "Admiral McRaven State of SOCOM | C-SPAN.Org," www.c-span.org, July 10, 2019, <https://www.c-span.org/video/?c4364544/admiral-mcraven-state-socom>.

servicemembers and their families. These services are intended to retain talent and improve readiness in the organization, as well as ease the strain on families that results from USSOCOM's high operations tempo.²

2. POTFF Program Overview

POTFF is comprised of four domains: human performance, psychological performance, spiritual performance, and social performance. POTFF blends existing military-sponsored services with additional funding and human resources to create a purposeful resiliency set of tools to improve the short- and long-term well-being of servicemembers and their families. Servicemembers can use these services a la carte or in conjunction with one another, depending on their needs. Defense contractor KBRwyle won the most recent contract, in early 2019, for \$500 million over five years.³

The human performance section of POTFF is based around Human Performance Training Centers (HPTC), with strength and conditioning coaches, physical therapists, athletic trainers, performance dietitians, and performance psychologists all available to help servicemembers reach their potential. In 1st Special Forces Command, the largest component in USASOC and the one with which the authors are most familiar, the human performance program is known as THOR3, which stands for Tactical Human Optimization and Rapid Rehabilitation and Reconditioning. The professionals who comprise the THOR3 staff can help servicemembers improve their strength and conditioning from current levels, whether they are deconditioned due to injury, surgery, or worn down from the cycle of special operations training and deployments. The strength and conditioning coaches are required to have years of experience at the Division I college or professional level of athletics. Both military and contracted physical therapists integrate their services into the Human Performance Program so that Soldiers are thoroughly cared for throughout their treatment and rehabilitation process.

² "POTFF," [www.socom.mil](https://www.socom.mil/POTFF/Pages/default.aspx), July 10, 2019, <https://www.socom.mil/POTFF/Pages/default.aspx>.

³ PR Newswire. *KBRwyle to Improve U.S. Special Ops Resilience and Health through \$500M Contract*, November 5, 2018, <https://www.prnewswire.com/news-releases/kbrwyle-to-improve-us-special-ops-resilience-and-health-through-500m-contract-300743286.html>.

The psychological performance staff is funded by a mix of Major Force Program-2 (general military funding) and MFP-11, or Special Operations specific, funding. POTFF is an MFP-11 program, with congressional funding allocated through USSOCOM.⁴ USSOCOM has placed emphasis on behavioral health care after recognizing that many of its members suffer service-connected stress symptoms such as Posttraumatic Stress Disorder (PTSD). Looking beyond PTSD, many SOF operators have unique stress loads compared to the general population that, left untreated, can manifest themselves in unhealthy ways. By embedding psychological performance staff at the unit level, the POTFF program seeks to normalize mental health care and ensure that providers are readily available to help servicemembers keep their psychological performance in good shape.

Spiritual and family performance are separate pillars but often go hand-in-hand for servicing. Chaplain-led marriage retreats are a staple activity within POTFF care. These retreats are typically held in hotels in desirable locations within relative proximity by car to the sponsoring unit's home station. For example, many retreats for Fort Bragg-based units go to Myrtle Beach, and those at Fort Carson, Colorado, often go to a mountain town like Breckenridge, Vail, or Crested Butte. The retreats cover the cost of lodging, childcare, marriage or family enrichment training, and sometimes meals for servicemembers and their families. These getaways are often held before or after deployments, and the teaching focuses on providing couples or families practical relationship tools to handle their upcoming/recent separation. Outside of retreats, chaplains provide religious support at home station and during deployments, often traveling to austere outstations to offer encouragement to SOF personnel. On the social performance side, which focuses primarily on family relationships, POTFF funds social workers and counselors who can offer counseling services and teach coping techniques to SOF personnel and their families.

POTFF is intended to keep the force healthy and fully functioning to seamlessly provide the exquisite capabilities that the United States expects from its Special Operations

⁴ Department of Defense *Fiscal Year (FY) 2020 President's Budget Operation and Maintenance, Defense-Wide United States Special Operations Command* (Washington, DC: Department of Defense, 2019), https://comptroller.defense.gov/Portals/45/Documents/defbudget/fy2020/budget_justification/pdfs/01_Operation_and_Maintenance/O_M_VOL_1_PART_1/SOCOM_OP-5.pdf.

Forces. In addition to strengthening the force today, can POTFF impact the force next year? What about five years from now? Can POTFF be used as a tool by commanders to help manage talent within their formations? Many factors go into talent management, and POTFF is not a primary lever like promotion timelines, job satisfaction, and assignment location are. If it does impact a servicemember's decision to continue service, however, that is a significant finding for USSOCOM. Anecdotally, most members of USSOCOM will tell you that they have seen the benefits that POTFF services provide. The authors of this study want to find out if there is a way to quantitatively determine whether POTFF impacts a servicemember's decision to continue service.

B. TALENT MANAGEMENT IN USASOC

Although POTFF is a USSOCOM program, this study focuses on USASOC, because the data the authors used came from that organization. We expect that findings for USASOC are relevant across the components of USSOCOM.

USASOC has invested heavily in finding the right way to bring talent into the organization. Special Forces Soldiers (i.e., "Green Berets"), for example, are recruited, assessed, selected, and trained over a period often exceeding two years. The Army Special Operations Forces (ARSOF) recruiters work tirelessly to attract top Soldiers from the Regular Army and the civilian world to join their ranks. The Special Forces Assessment and Selection (SFAS) course has been fine-tuned over the last three decades to sift out those with likely psychological or physical issues and those who do not work well on teams in stressful situations. If a Soldier demonstrates the required attributes to complete SFAS and get selected, he will begin the Special Forces Qualification Course (SFQC), where he will receive months of specific training to hone his skills and prepare him for his job in the operational force. Officers are required to serve a minimum of three years of service following graduation from the SFQC, and enlisted service members typically have two to four years remaining on their enlistment contracts. The cost of training a Special Forces Soldier is significant, so the organization naturally wants to keep its investment for as long as possible to maximize organizational effectiveness.

Keeping talented team members is always a challenge. At the time of this writing, the U.S. economy has been strengthening for a decade. The American stock market continues to climb in what has become the longest expansion in the country's history. Unemployment is near its lowest levels in decades.⁵ Many private companies report they have more job openings than qualified applicants. Additionally, an unintended consequence of the outsized role of Special Operations Forces in U.S. military efforts since 2001 is that many businesses value and even seek out job applicants with special operations experience. For many ARSOF Soldiers, the lure of a civilian job, where they will likely be well-compensated and not have to subject their family to months-long deployments, is an attractive off-ramp to continued service. USASOC is generally constrained to managing talent using regular Army systems. Assignments conducting special operations, gaining operational experience, serving in the SOF community, and fringe benefits like POTFF are the only advantages USASOC has. Special operators are paid and promoted by the same system as regular Army logisticians or adjutants. Because the caliber of Soldiers in USASOC is higher than that in the regular Army, ARSOF Soldiers will have increasingly attractive opportunities upon exiting the military.

The Army has a closed system for talent management; every officer year group and enlisted cohort starts with a finite number of Soldiers and slowly shrinks from there as their careers progress. No more servicemembers can be inserted into the system after initial entry training. In other words, the currently serving junior officers will become the senior leaders of tomorrow.⁶ The Army's goal, and that of USASOC, is to increase the available pool of talent remaining for Soldiers to continue their careers, eventually becoming senior leaders. The Army's workforce is shaped like a pyramid; it requires a large number of junior Soldiers and increasingly less servicemembers at higher ranks. In a perfect scenario for Army talent management, every servicemember would desire to stay, and the Army could

⁵ Department of Labor *Employment Situation Summary* November 1, 2019, https://data.bls.gov/timeseries/LNU04000000?years_option=all_years&periods_option=specific_periods&periods=Annual+Data.

⁶ War Room, "Whiteboard: How Well Does The Army Develop Strategic Leaders?," *U.S. Army War College War Room* (blog), June 25, 2018, <https://warroom.armywarcollege.edu/special-series/whiteboard/wb01-leader-development-1/>.

choose those with the most potential to continue service. Unfortunately, that does not appear to be the case. A recent survey of current Special Forces Captains conducted by researchers at the University of Colorado shows that only 7% of survey participants believe that the Special Forces Regiment is retaining the highest quality officers to become senior leaders in the future.⁷ If this sentiment is true, the results are troubling for the future of ARSOF. USASOC must find a way to keep more of the most talented Soldiers in their ranks.

The Army promotion system, characterized as an “up or out” system, is rigid. USASOC use bonuses as one incentive to get enlisted members to stay in and advanced education opportunities to entice officers to continue service. POTFF is another incentive. ARSOF’s recruiting website lists THOR3 as one of the top benefits of joining special operations.⁸ Access to world-class strength and conditioning coaches, trainers, physical therapists, performance psychologists, and family retreats does not only appeal to those outside the community, but among those already in the ARSOF community as well. POTFF as a recruiting tool is accepted as reasonable, but does it also increase retention among currently serving operators in USASOC? This research endeavors to find a quantitative answer to that question.

⁷ Dan Warner et al., “The Future of U.S. Army Special Forces Talent Management” (Designing for Defense, March 2019).

⁸ U.S. Army Special Operations Recruiting: Special Forces, accessed August 26, 2019. <https://goarmysof.com/specialforces/sfreuiting.html>.

II. PREVIOUS RESEARCH

A. RESILIENCY

During his 2017 annual testimony to the Senate Armed Services Committee, General Tony Thomas, the commander of USSOCOM, highlighted the importance of the command's Preservation of the Force and Family Program to maintain the resiliency of both the individual operator and the unit as a whole.⁹ The program focuses on the individual servicemember's resilience to ensure USSOCOM's continued and well-documented organizational resilience.

However, one metric not mentioned in the report to the Senate was how the program can be used to relieve pressure on USSOCOM's component commands force generation responsibilities. POTFF can help maintain adequate manning of and retention in the tactical units through innovative talent management. This research seeks to demonstrate recommendations for commanders at each level of command by examining the POTFF program's impact on the United States Army Special Operations Command (USASOC), the largest component of USSOCOM.

In order to frame the problem of how USSOCOM's Preservation of the Force and Family Program can be used to increase ARSOF retention, one must examine the interplay of individual resilience as a manager's tool to increase job satisfaction and how it contributes to talent remaining within organizations.

The most significant hurdle in participating in the academic dialogue about resilience is overcoming the multitude of definitions of resilience in the existing literature and understanding the differences of each one. For example, the POTFF program seeks to build physical, social, psychological, and spiritual resilience in USSOCOM operators. The holistic nature of the program requires that the academic study of the program be

⁹ Tony Thomas, "U.S. Special Operations Command Testimony to the Senate Arms Service Committee," § Senate Armed Services Committee (2017), <https://www.c-span.org/video/?427710-1/hearing-focuses-us-special-operations&start=1086>.

multidisciplinary. The psychologist's definition of resilience likely differs from that of a member of congress, human performance specialist, or military chaplain.

Sinclair and Britt attempt to remedy the definitional problem by distilling over 104 definitions of resilience from the stakeholder community and define resilience as the “demonstration of positive adaption after exposure to significant adversity.”¹⁰ This definition appears to be both broad enough to be applied to all of the four pillars of the POTFF program and universal enough for it to be scaled from the individual to the organizational levels of USSOCOM and its components.

A second problem is the lack of applicable measures of effectiveness in similar programs in the Department of Defense that can be applied from one population to another. The U.S. Army developed its resilience program, the Comprehensive Soldier Fitness (CSF) Program, during the height of Operation IRAQI FREEDOM. CSF is focused on the universal resilience of a 1.1 million-person organization. While CSF made drastic changes to how the Defense Department looked at psychological preparation and resilience, its main feedback loops are mandatory surveys that, upon closer examination, do not have much predictive value. Additionally, the CSF does not include human performance, but rather is designed to assess emotional, social, family, and spiritual fitness.¹¹ The population of ARSOF has numerous differences compared to conventional forces, from the average age of an operator to the amount of operational experience to training differences that require a more specific resiliency-building approach.

The third issue is a lack of understanding of the hierarchy of values ARSOF operators use when they decide to leave the force. However, we can observe that workers can and do choose to stay in large part because of the meaningfulness of the work and benefits that are largely focused on the individual resilience of the population. Cook highlights the four months of maternity and paternity leave at Facebook as one example.

¹⁰ Robert Sinclair and Thomas Britt, eds., *Building Psychological Resilience in Military Personnel: Theory and Practice* (Washington, DC: American Psychological Association, 2013).

¹¹ Rhonda Cornum, Michael Matthews, and Martin Seligman, “Comprehensive Soldier Fitness: Building Resilience in a Challenging Institutional Context,” *American Psychologist* Vol. 66, no. No. 1 (January 2011): 4–9.

He argues that this benefit, when coupled with the belief that what the organization is doing is meaningful, equals better retention and talent management for the organization.¹² Cook's example from Facebook provides a useful example between the motivation, individual resilience and talent management that best lends itself to how the POTFF program may affect talent management and retention in USSOCOM's component units.

In Senate testimony in 2018, LTG Tovo, then USASOC's Commander, said his organization was looking primarily at funding increases to address the projected manning shortfall in 2020.¹³ While additional funding and increased recruiting will address the manning shortfall, increasing the rate of retention of current talent can also help. POTFF is a program that can help operators and support personnel stay healthy in all four pillars, which leads to a larger pool of available talent. Although there are many reasons Soldiers decide to separate from service, poor physical health and deteriorating family relationships are often near the top. There is limited research identifying how often separating ARSOF Soldiers used POTFF resources or which programs they found most helpful. If research demonstrating whether use of POTFF programming impacts a Soldier's decision to separate from service, then commanders from Battalion-level to the top of USASOC can make more informed decisions about where to allocate their time, resources, and emphasis.

POTFF has been well funded by USSOCOM since its inception in 2013; the latest contract for providing facilities and practitioners to facilitate POTFF is \$500 million.¹⁴ Military and civilian leaders do not dispute the utility of POTFF, but its specific results are difficult to measure. If research can demonstrate a correlation, or lack thereof, between ARSOF Soldiers staying in the force and their use of POTFF programming, commanders and policy makers can more effectively array their existing resources. Both parties will

¹² Brian Cook, "Getting It Right: Revamping Army Talent Management" (Defense Analysis, Naval Postgraduate School, 2015).

¹³ Ken Tovo, "Statement of LTG Tovo, Commander, United States Army Special Operations Command," § Senate Armed Services Committee (2018), https://www.armed-services.senate.gov/imo/media/doc/Tovo_04-11-18.pdf.

¹⁴ KBR Inc "KBRwyle to improve to work with U.S. Special Ops Resilience and Health through \$500M contract" 5 November 2018 <https://www.prnewswire.com/news-releases/kbrwyle-to-improve-us-special-ops-resilience-and-health-through-500m-contract-300743286.html>

have data to back up their arguments to support or oppose POTFF in the future. If there is a positive relationship between POTFF use and retention, this can help inform commander's decisions on generating a larger pool of Soldiers able to continue service if they wish.

B. TALENT MANAGEMENT

Gabarro finds in his research summarized in “The Dynamics of Taking Charge” one of the most effective ways to manage talent is to give people longer in the job.¹⁵ Two and a half to three years is the length of time managers in his study took to go through the five stages of taking charge in their new leadership position. William Krebs, in his master's thesis, after interviewing numerous four-star SOF officers, coaches from elite basketball programs, the HR guru at Google, more specifically concludes that Special Forces Majors should remain company commanders for two years.¹⁶ The timeline for U.S. Army officers on track for senior leadership positions typically keeps them in jobs for a year or less. The logic behind this is to give the officer a greater breadth of experiences to prepare him for leading complex organizations. Spending a year or less in each job is likely to stay a part of life for Special Forces officers seeking the command track, so USASOC should consider offering incentives that it can control.

One of the biggest challenges for many organizations is managing their personnel. Keeping employees is significantly more cost effective than training new ones. Most organizations want their upper management to have experience at varying levels and across different departments to ensure that they appreciate the challenges that their subordinates face and they make more informed decisions for the company. Employee turnover is expensive: it cost American business \$600 billion in 2018.¹⁷ In a closed system such as the U.S. military, the cost is not only monetary but impacts long-term effectiveness of the organization. If the top talent decides to separate from service, then future senior leaders

¹⁵ John Gabarro, *The Dynamics of Taking Charge* (Boston, MA: Harvard Business School Press, n.d.).

¹⁶ William K. Krebs, “Depth vs. Breadth: Talent Management for Special Warfare” (Thesis, Monterey, California: Naval Postgraduate School, 2016), <https://calhoun.nps.edu/handle/10945/51560>.

¹⁷ Fox, Chastity “Work Institute releases National Employee Retention Report” May 1, 2018. <https://workinstitute.com/about-us/news-events/articleid/2259/2018%20retention%20report>

are not the best leaders that have served in the organization but simply the ones who survived.

Talent management is a popular topic right now among senior Army leaders. Secretary of Defense Mark Esper, when he was the Secretary of the Army earlier in 2019, named reforming the personnel system his top priority for 2020.¹⁸ The 2018 National Defense Strategy calls for a broad revision of Talent Management in the Army.¹⁹ Making changes to the current U.S. Army human resources construct is underway. As the military adjusts promotions, evaluations, and determining which jobs are key and developmental, among other initiatives, other sources of talent retention are important to address also. What other benefits do servicemembers enjoy? Monetary compensation, healthcare, and family services play an important role in whether a servicemember continues to serve, but those are big issues that congress and the service chiefs will have to tackle. Command climate is important, but that cannot be dictated by policy or official decree. The Army should find those programs that are already operating and determine how effective they are, and whether they affect retention rates. The programs that seem to be providing “bang for the buck” should continue to be funded—or even expanded. Programs such as POTFF.

We started this research to study POTFF from a talent management perspective. Most ARSOF leaders understand that POTFF can and does improve readiness by increasing individual resiliency, but can the program incentivize Soldiers to stay in the military? Can we build a model with existing data to demonstrate whether POTFF has an effect on the probability that an operator will continue service to USASOC?

C. POTFF RESEARCH AND THE NEEDS ASSESSMENT SURVEY

The vast majority of POTFF research has focused on answering whether or not the POTFF program is working (e.g., building increased resilience in the entire special operations force). The USSOCOM J-7 Staff Directorate, which is responsible for

¹⁸ Sydney Freedburg, “Army Secretary Says That Talent Reform Is Top Priority in 2020,” *BreakingDefense.Com*, January 25, 2019.

¹⁹ Department of Defense, “Summary of the National Defense Strategy” (Washington, D.C., 2017), <https://dod.defense.gov/Portals/1/Documents/pubs/2018-National-Defense-Strategy-Summary.pdf>.

administering POTFF, designed the Annual Needs Survey as the instrument to answer this question. The survey collects force-wide demographic data, psychodynamic assessments on the force, and measures usage of programs specific to the pillars of POTFF. For example, the Wave V survey contained seven psychodynamic scales: the PTSD checklist (PCL-5), the Alcohol Use Disorders Identification Test (AUDIT), the Personal Health Questionnaire Depression Scale (PHQ-8), the Brief Resilience Scale (BRS), the Friendship Scale (FS), Insomnia Severity Index (ISI), and the Nonreligious Nonspiritual Scale (NRNSS). The J-7 Directorate compares the reported reliability coefficients of each scale with the reliability coefficients observed in their annual survey. This method is common practice in the psychological research community. Observing or testing an individual multiple times may show scores that do not agree, even when testing something with minimal variation, such as math skills in a high school student. Current stress levels, tiredness, recent nutrition can cause the score of one tracked individual to vary considerably from test to test. For the Needs Assessment Survey, where servicemembers are inputting qualitative data such as their opinion on care received, answers may change significantly based on outside life events for the Soldier. Reliability coefficients help to “quantify the consistency among the multiple measurements on a scale from 0 to 1.”²⁰

When we assessed the scales in the Needs Assessment Survey, we found that they are both internally consistent and use industry standards for assessing what they seek to measure. The Wave V Needs Assessment Report defines each scale and compares the observed reliability coefficient to the industry-standard reliability coefficients of each scale. This demonstrates the efficacy of the scales and their utility as decision-making tools. The PCL-5 is “a 20-item self-report measure that assesses the presence and severity of PTSD symptoms.”²¹ The PCL-5 corresponds with the Diagnostic and Statistical Manual of Mental Disorders (DSM-5) criteria for PTSD. The PCL-5 can be used to quantify and monitor symptoms over time, to screen individuals for PTSD, and to assist in making a

²⁰ Norren M. Webb, Richard J. Shavelson, and Edward H. Haertel, “Reliability Coefficients and Generalizability Theory,” *Handbook of Statistics* 26 (2006), [https://doi.org/DOI: 10.1016/S0169-7161\(06\)26004-8](https://doi.org/DOI: 10.1016/S0169-7161(06)26004-8).

²¹ “PTSD Checklist for DSM-5 (PCL-5)” (US Department of Veterans Affairs, 2019), <https://www.ptsd.va.gov/professional/assessment/adult-sr/ptsd-checklist.asp>.

provisional or temporary diagnosis of PTSD. “The Wave V assessment report illustrates the efficacy and consistency of this scale, citing a higher reliability coefficient than other peer-reviewed published studies (Cronbach’s α of .97 versus .94).²² In short, it is a useful tool for measuring self-reported PTSD symptoms as long as those reporting the information are open and honest about the symptoms they experience.

The AUDIT is “a 10-item screening tool developed by the World Health Organization (WHO) to assess alcohol consumption, drinking behaviors, and alcohol-related problems.”²³ The Wave V report reports that the assessment produced a reliability coefficient of .83 which is the median of all AUDIT screening since 2002. A coefficient consistent with the body of research using the AUDIT screening tool is compelling evidence for it as a useful tool for assessing self-reported alcohol use outside of a clinical environment.²⁴

The PHQ-8 is “an eight-item scale that assesses the prevalence and severity of depression, and consists of eight of the nine criteria of which the DSM-IV diagnosis of the depression disorders is based.”²⁵ J-7 POTFF again demonstrates the PHQ-8 is an effective tool for gauging depression and reports a higher reliability coefficient than similar types of depression research.²⁶ Of note, the USSOCOM J-7 POTFF cannot expand the PHQ-8 to the PHQ-9 in the Needs Assessment Survey. Question 9 of the PHQ-9 reads “thoughts of that you would be better off dead or of hurting yourself in some way” and must be administered in the presence of a clinician.²⁷ Not administering this question reduces the assessment to gauge suicidal ideations in the force.

²² J-7 POTFF, USSOCOM, “Preservation of the Force and Family Wave V Needs Assessment & Program Evaluation” (Tampa, FL, 2017).

²³ “Alcohol Use Disorder Identification Test (AUDIT)” (National Institute on Drug Abuse, 2019), <https://www.drugabuse.gov/sites/default/files/files/AUDIT.pdf>.

²⁴ J-7 POTFF, USSOCOM, “Preservation of the Force and Family Wave V Needs Assessment & Program Evaluation.”

²⁵ J-7 POTFF, USSOCOM, 7.

²⁶ J-7 POTFF, USSOCOM, “Preservation of the Force and Family Wave V Needs Assessment & Program Evaluation.”

²⁷ “The Patient Health Questionnaire (PHQ-9) - Overview” (Center for Quality Assessment and Improved Mental Health, 2019), http://www.cqaimh.org/pdf/tool_phq9.pdf.

The Behavioral Resilience Scale (BRS) is a six-question scale developed to assess an individual's ability to recover from adversity.²⁸ J-7 POTFF did not report an industry standard reliability coefficient for the BRS and reported a coefficient of .86 for the Wave V assessment. Given that the scale was published in 2008, more evidence on the reliability of the BRS may be required to compare USSOCOM's population and other populations.

The Friendship Scale is "a six-item instrument designed to measure perceived social isolation and emotional loneliness."²⁹ The Wave V assessment reports a higher reliability coefficient (.83) than the industry standard coefficient of .76. Additionally, the Needs Assessment Survey includes the ISI which measures difficulties related to sleep with both high validity and reliability and the NRSS which is a measure of personal religiousness and spirituality.³⁰

Given the survey-monkey methodology of the Needs Assessment Survey, these scales provide an excellent snapshot of the health of the force as it relates to resilience, psychological, spiritual, and physical health. While the survey is designed to inform the commander on the health of the force, it is not designed to inform him on talent management and retention outside of reporting descriptive statistics on the retention intention variable. Our research seeks to use data from the Needs Assessment Surveys to assess the predictive capacity of this data set as it relates to a critical problem for the force: talent management and retention. This study will address the gap in research in the predictive ability of POTFF programming on retention in USASOC.

²⁸ "Brief Resilience Scale," 2019, <https://ogg.osu.edu/media/documents/MB%20Stream/Brief%20Resilience%20Scale.pdf>.

²⁹ J-7 POTFF, USSOCOM, "Preservation of the Force and Family Wave V Needs Assessment & Program Evaluation," 7.

³⁰ J-7 POTFF, USSOCOM, "Preservation of the Force and Family Wave V Needs Assessment & Program Evaluation."

III. MEASURING THE IMPACT OF THE PRESERVATION OF THE FORCE AND FAMILY PROGRAM (POTFF) ON USASOC RETENTION AND FORCE READINESS

A. UNITED STATES SPECIAL OPERATIONS COMMAND POTFF NEEDS ASSESSMENT SURVEYS

The primary purpose of this paper's research is to assess the impact usage of programs related to the pillars of POTFF have on the likelihood of USASOC Soldiers indicating they intend to remain in service until retirement. To measure the efficacy of the program over its life from 2012 to present, USSOCOM has fielded a Needs Assessment Survey on an annual basis. The POTFF team has administered five "waves" of the survey, which reaches every email inbox in the USSOCOM population. In 2013, USSOCOM fielded Wave I while from 2014–16 saw Waves II-IV. The command did not survey the force in 2017 due to survey saturation. Wave V in 2018 concludes the data used for this research study.

The wave surveys are robust, comprised of over 100 questions ranging from sleep, exercise, and alcohol patterns to marital status, time deployed, years of service, and other classifying and descriptive variables associated with each surveyed Soldier. Most importantly, the surveys contained questions regarding each servicemember's use of the POTFF resources, which fall under one of the four pillars. In each wave, the questions changed slightly due to the maturation of the program and granularity of USSOCOM's understanding of POTFF's impact on the force. Additionally, in each survey, the Soldier was asked about their intention to remain in service until they reach retirement eligibility.

For this study, we used the R programming language to create six models to analyze the effect of the POTFF program: one model for each annual wave survey and another for all five surveys combined. We chose to use a logistic regression model for this research because of the dichotomous nature of our dependent variable (i.e., a servicemember could either indicate "yes" or "no" to the question of whether they intended to remain until retirement).

B. LIMITATIONS OF THE DATA

Although the wave surveys capture over a hundred data points per response, there are limitations to the dataset. Each response is dependent on the Soldier answering the question correctly, which leaves room for error. The length of the online survey may contribute to fatigue, which could impact the quality of answers, especially for the questions near the end of the survey. Additionally, many Soldiers who use POTFF-related services may not know the funding source of a given program. For instance, Soldiers may receive behavioral health treatment from regular Army sources, or from multiple different unit-embedded sources. They may consider meeting with a Military Family Life Consultant to be counseling or they may consider it a mental health-related visit. Response bias is a factor when considering the veracity of our findings.

Another limitation is that survey-takers may not answer each question truthfully or correctly. One reason could be that despite the anonymous nature of the survey (no names are collected), Soldiers do not want to reveal their injury or behavioral health history for fear that it could negatively impact their career. Although these fears are unfounded, and the surveys are never used to identify individual respondents, purposeful omission of information would impact the data.

POTFF is a four-pillared program and we want to measure each pillar's impact on retention intention. Unfortunately, the data for every pillar but human performance is somewhat limited. The data regarding psychological, family and spiritual performance pillars that the survey provides is limited in nature. We found one aspect of the family pillar, chaplain-led marriage retreats, that seems to impact intention retention. We do not believe that the data from the surveys that we use in this report fully represents the psychological and spiritual performance pillars of POTFF.

Finally, the data could be skewed by Soldiers purposefully misrepresenting the truth in their answers. Most ARSOF Soldiers know that POTFF is a SOF-specific program and that funding is not guaranteed. The authors can say from experience that some well-intentioned individuals have encouraged their teammates to exaggerate how frequently they use POTFF resources in an effort to demonstrate that the programs are well used and

effective. This data is likely not impacted significantly by purposeful over-reporting, but readers should be aware of this limitation.

C. LIMITATIONS OF THE MODEL

In addition to data, our model is also limited by the number of non-responses to questions as seen in the “NA” responses in our R file. If a servicemember failed to answer a question for a given variable, he or she was removed from the data set. While in our final model $n > 29,000$ responses, over 14,000 individual responses were removed due to missingness or the absence of data. This means that nearly half of the survey respondents did not answer one of the questions that we chose to analyze the data. We assume that missingness is random and uniform throughout the data set as a product of the sampling method. Furthermore, we conclude that our data set is substantially large enough to construct our models and begin hypothesis testing. Additionally, as we will discuss in our dependent variable section, our model cannot consider a third response of “Undecided.” Wave III, uniquely, does not allow for an “Undecided” response to the question while the other waves do. Given these conditions, we settled on a dichotomous dependent variable and logistic regression model.

D. HYPOTHESIS

Do programs related to the pillars of the POTFF program affect ARSOF Soldiers’ decision to continue their military service?

Our null hypothesis: When all else is held constant, the use of POTFF programs and treatments will not have a significant effect on the ARSOF Soldier’s likelihood to indicate an intent to remain in service.

Our alternative hypothesis: When all else held constant, the use of POTFF programs and treatments will have a significant effect on the ARSOF Soldier’s likelihood to indicate an intent to remain in service.

E. CLASSIFICATION AND LOGISTIC REGRESSION MODELING WITH DICHOTOMOUS QUALITATIVE PREDICTORS

To answer our research question, model the effect of program participation on ARSOF Soldiers' indication for continued service, and to test our alternative hypothesis, we constructed a log-odds (logit) model using the R programming language. We could not use multiple linear regression because our dependent variable is categorical or qualitative. A surveyed Soldier could either respond "Yes" or "No" or decline to answer the question in the various waves of the Needs Assessment Survey. In effect, we are classifying a respondent into two categories; and thus, our research question is a traditional classification problem. Rather than modeling for a predictive response in Y (quantitative dependent variable), "logistic regression models the log transformation of the probability that Y belongs to a particular category."³¹ Equation 1.1 is an example of a multiple logit regression model.

$$\log\left(\frac{p(x)}{1-p(x)}\right) = \beta_0 + \beta_1 X_1 + \dots + \beta_p X_p \quad 1.1 \square$$

The left side of the model is the log-odds ratio or logit. This model differs from multiple linear regression because a one-unit increase of X does not coincide with a unit increase or decrease in the dependent variable, but rather the strength of the positive or negative effect on the probability of the classifier.³² This is because the model is fit using the maximum likelihood method, vice least squares in multiple linear regression. The interpretation of the logit regression coefficients indicates only an estimated positive or negative effect on the odds ratio.³³

Our model incorporates dichotomous (dummy) variables for each of the control and independent variables, with the exception of our deployment variable which is express in

³¹ James Gareth et al., *An Introduction to Statistical Learning with Application in R* (New York: Springer, 2017), 130–31.

³² 132–133 Gareth et al., *An Introduction to Statistical Learning with Application in R*.

³³ Gareth et al., 133.

time deployed in months. Prediction of a probability forecast is possible by substituting the “Yes” variable coefficient and Beta naught into the following equation.

$$P(\text{Intend to Remain} == \text{Yes} \mid \text{Program Use} == \text{Yes}) = \frac{e^{\beta_0 + \beta_p x(1)}}{1 + e^{\beta_0 + \beta_p x(1)}} = \text{Probability between 0 and 1} \quad 1.2$$

$$P(\text{Intend to Remain} == \text{Yes} \mid \text{Program Use} == \text{No}) = \frac{e^{\beta_0 + \beta_p x(0)}}{1 + e^{\beta_0 + \beta_p x(0)}} = \text{Probability between 0 and 1}$$

The result yields the probability of an outcome. In the case of our model, we find the probability of a servicemember’s intent to remain on active duty status until retirement given a qualitative condition (e.g., use of particular service related to the POTFF program). For the purposes of our research, we modeled each wave of the longitudinal study. We found it necessary to model each wave due to the developing nature, maturation, and increasing granularity of the study over time. We also wanted to compare trends over time, if they were present. As we discuss each variable, we will discuss how it was incorporated in the model and to what extent it varied from year to year. Models 1–5 represent each of the five wave surveys. Model 6 represents the common independent and control variables over the life of the program.

F. DEPENDENT VARIABLE

The dependent variable for our research was the surveyed Soldiers’ response to the question “Do you intend to remain (in military service) until retirement?” For a “Yes” response we assigned a “1” value to our vector. For a “No” response we assigned a “0.” Most of the wave surveys, but not all, allowed for a third response of “Undecided.” We assigned these values an “NA” in the models as we are concerned with classifying the respondents into two groups to compute the sensitivity of the probability ratio of a response to POTFF program usage into one group or the other given an indication of intent to remain. This variable remained constant throughout the longitudinal study.

G. CONTROL VARIABLES

Our model incorporates six control variables, five dichotomous indicator variables and one continuous variable - Years of Service Indicator [Less than 10 years], Operator Indicator [Yes], a Parental Status Indicator [Yes], Prior Divorce Indicator [Yes], Marital

Status Indicator [Yes] and a continuous variable representing the respondent's estimation of the number of months he or she has been deployed in the last 10 years.

We used bounded rationality and our experience as mid-career ARSOF officers to inform our decision on which control variables to include in our models. We found variables that were common to all wave surveys and that we understand anecdotally to impact our fellow ARSOF Soldiers' decisions to separate from service before retirement.

Our research question examines the POTFF related programs as they affect ARSOF retention and the related talent management pool, so we weighted the years of service variable in our models. The survey asks the respondents to classify themselves in one of 17 categories of years of service, from zero to 15 + years of service. However, we understand as military servicemembers ourselves that once a servicemember reaches ten years of service, the probability that he or she will be classified in the "intend to remain" group substantially increases. The ten-year mark is colloquially referred to as "the hump" in DoD parlance because it is the halfway point to 20 years, at which point a servicemember becomes fully retirement eligible. To control for this phenomenon, we assigned all service members with zero to nine years of service a "1" value and all servicemembers with 10 or more years of service a value of "0." Reference 3.2, the respondents who would likely remain because of their position in the DoD retirement system would not affect the years of service coefficient and its positive or negative impact on the logit. Of note, due to the closed nature of the DoD personnel system, controlling for years of service over the ten-year mark has the added benefit of incorporating other demographic factors such as respondents' age.

Our next control variable in all six models is the operator versus support indicator. Our research question is centered around POTFF's effect on ARSOF operators, comprised of Green Berets, Rangers, Civil Affairs, Psychological Operations, and Special Mission Unit operators, *not* support Soldiers assigned to the command from other parts of the U.S. Army. Compared to operators, the average support Soldier is younger and has served less time in special operations units. All wave surveys required Soldiers to classify themselves as either operator or support, so our classification was simple. We are most interested in gathering data regarding operators because our research is focused on operator retention

and talent management. In order to control for this aspect of this variable, we assigned a “1” value to those who indicated they were an operator on the survey and a “0” value for the support indicator. All five surveys ask the same classification question about whether or not the respondent is an operator or a support Soldier.

Our third control variable is a parental status indicator. According to USSOCOM’s POTFF Wave V assessment report, parental status has the greatest effect on the Special Operations Community indication to remain until retirement writ large. For this reason, we included it as a dichotomous control variable with a “Yes” response equaling a “1” and a “No” response equaling a “0.” All five wave surveys ask the same question regarding to parental status.

Our fourth control variable is a divorce indicator. This question asks whether or not the respondent has had a divorce. It is the same for all surveys. If the respondent had a divorce, the Yes response equals a “1” input, if not a “0.” The question remained unchanged in each wave of the POTFF surveys.

The fifth control variable we input into our model is months deployed. The survey question asked Soldiers to estimate their total number of months deployed in the last ten years. This control is a continuous variable, the only one in our model. Accounting for time deployed allows the model to account for stress on the force due to operational tempo. There is a correlation between time spent in the Army and months deployed, but adding this variable controls for increased variance in retention intention due to time deployed.

Lastly, we added a marital status indicator. This control variable is important because we assess that married Soldiers have a higher probability of intention retention than single Soldiers.

H. INDEPENDENT VARIABLES

Each of our six models incorporated four dichotomous independent variables that indicated whether or not the surveyed Soldier used POTFF services. USSOCOM created the POTFF Needs Assessment Survey to gather data on the program and measure the resiliency of the force over time. It was not created to answer our research question, but we

did our best to choose one question that best represented each pillar in the program to measure its effect on intention retention.

Our first independent variable is the Human Performance Program, known in most of USASOC as THOR3. Waves I, IV, and V require the respondent to indicate the level of which he or she used THOR3 in the last year. The survey indicates a 0–5 response, with “0” representing no THOR3 usage and “5” representing five uses per week. We transformed this variable into a dichotomous variable with 0 representing “Less than one time per week” and 1 representing the one or more uses per week of the THOR3 program. Notably, for Wave II and III, the survey question changed from a 0–5 scale to a binary response or “Yes” or “No” regarding Soldiers’ use of HPP. Additionally, while not encompassed in the survey question we chose, we make a critical assumption about the human performance program. HPP includes not only strength and conditioning programming and coaching, but also working with the other professionals who work out of the HPC. Human performance centers often have physical therapists, performance dieticians, and performance psychologist co-located in the same space, so Soldiers that frequently use the HPC for strength and conditioning training are likely to use facets other than strength and conditioning offered by the HPC as well. For Soldiers wanting to add lean muscle mass, for instance, the strength coaches will often point them toward the performance dietician. For those who are injured during training, whether during tactical training, strength training, or elsewhere, the CSCS will point the affected Soldier to physical therapy for assessment and treatment as appropriate.

Our next independent variable represents the psychological and cognitive performance aspects of the POTFF program. Waves I-V all have a mental or behavioral health usage question. The respondent can answer either “Yes” or “No” to whether they used this service in the preceding 12 months. We created a dichotomous variable with a value of “1” if the respondent used mental or behavioral health services and a “0” value if they did not. As mentioned at the beginning of this chapter, measuring the impact of behavioral health from POTFF services is very difficult. We place the least emphasis on results from this pillar due to the challenge of accurately assessing the impact of mental health programs and the numerous touchpoints that can affect one’s mental health.

Our third independent variable is the use of chaplain programs. Chaplain programs constitute the full spectrum of individual to family spiritual counseling, so this question is quite broad. Like mental health, measuring spiritual health based on interactions with professionals in the field is inexact at best. For this reason, we do not think that our model provides reliable insight into the spiritual pillar of POTFF and its effect on intention retention. For the spiritual variable, if the respondent indicated that he or she used chaplain services in the last 12 months, we assigned a value of “1.” If they did not, we assigned a value of “0.”

The final independent variable is the use of pre-deployment and post-deployment family or marriage retreats. While some retreats are funded by POTFF (USSOCOM money) and others are service-funded, there is no way to delineate based on survey results. Many Soldiers are unsure which funding stream paid for their retreat, as unit chaplains lead similar retreats regardless of funding source. Because of the recognized importance of marriage and family retreats, we included this data in our research to represent the family performance pillar. This variable was awarded a value of “1” if the respondent indicated that they had attended a retreat and a “0” if they had not. This question about chaplain-led marriage retreats changed slightly from survey to survey. For example, Wave II has pre-deployment and post-deployment retreats usage broken down into two questions. Later surveys combined them into a single question. We captured usage in a dichotomous “Yes” or “No” variable in all phases while to represent those families that had attended a retreat in the preceding 12 months. Given this control and independent variables, the final LOGIT model is

$$\log\left(\frac{p(X)}{1-p(X)}\right) = B_1(\text{THOR}) + B_2(\text{OPERATOR}) + B_3(\text{YOS}) + B_4(\text{DIVORCE}) + B_5(\text{MARRIAGE}) + B_6(\text{PARENT}) + B_7(\text{CHAP PROGRAMS}) + B_8(\text{MENTAL HEALTH}) + B_9(\text{RETREATS}) + B_{10}(\text{DEPLOYMENTS}) + \text{ERROR} \quad 1.3$$

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IV. FINDINGS: PROGRAM USAGE AFFECTS THE PROBABILITY OF ARSOF SOLDIERS' INDICATION TO REMAIN

A. STATISTICAL SIGNIFICANCE

We used six logit regression models used to examine the predictive relationship between the log-odds ratio of ARSOF Soldiers' intent to remain in military service until retirement and their participation in POTFF programs. The first five models represent the first five wave surveys. The sixth model combines the data from all five models and scales the data to produce a program-long logit that informs the probability of ARSOF Soldiers' intent to remain in service from its implementation in 2012 through 2018.

Table 1 shows the strength of our six control variables and our four independent variables as snapshots described in by Models 1 through 5 and for the life of the program in Model 6. Additionally, Table 1 shows both the effect size on the logit of the DV intent to remain by the relative size of the coefficient and how certain we are that the effect is either positive or negative, indicated by the sign of the coefficient and corresponding p-value. Figure 2 is a graphical representation of Table 1 with the added benefit of visually depicting the confidence interval of each coefficient. From Figure 1, we can interpret that the effects of the controls and independent variables have changed very little throughout the life of the program and that when scaled to include the larger data set of Model 6, our confidence level of the effect on the logit increased significantly.

Table 1. Stargazer Summary of Finding

	<i>Dependent variable:</i>					
	intend_to_remain					
	(1)	(2)	(3)	(4)	(5)	(6)
thor	0.573*** (0.138)	0.584*** (0.199)	0.254* (0.148)	0.388*** (0.107)	0.611*** (0.156)	0.465*** (0.060)
op_supp	-0.332*** (0.126)	-0.734*** (0.193)	-0.809*** (0.152)	-0.474*** (0.108)	-0.347** (0.163)	-0.506*** (0.061)
yos	-2.072*** (0.173)	-2.284*** (0.246)	-2.119*** (0.207)	-2.601*** (0.153)	-2.330*** (0.217)	-2.309*** (0.084)
mental_health	-0.409** (0.171)	-0.965*** (0.245)	-0.767*** (0.198)	-0.527*** (0.156)	-0.607*** (0.194)	-0.603*** (0.083)
chap_programs	-0.004 (0.144)	0.386 (0.284)	-0.325 (0.224)	0.186 (0.166)	0.068 (0.154)	0.108 (0.073)
parental_status	0.776*** (0.139)	0.666*** (0.216)	0.778*** (0.173)	0.599*** (0.122)	0.847*** (0.175)	0.713*** (0.069)
divorce_indicator	0.418** (0.163)	0.722*** (0.258)	0.208 (0.207)	0.664*** (0.152)	0.655*** (0.232)	0.517*** (0.084)
retreats	0.244 (0.224)	-0.131 (0.344)	0.406* (0.210)	0.479*** (0.169)	0.561** (0.250)	0.364*** (0.097)
marital_status	0.735*** (0.140)	0.784*** (0.224)	0.762*** (0.170)	0.711*** (0.125)	0.506*** (0.182)	0.695*** (0.070)
deployments	0.039*** (0.006)	0.023** (0.009)	0.037*** (0.008)	0.023*** (0.006)	0.018** (0.008)	0.029*** (0.003)
Constant	1.314*** (0.239)	2.139*** (0.354)	1.948*** (0.296)	2.124*** (0.210)	2.066*** (0.326)	1.872*** (0.119)

Note:

* p<0.1; ** p<0.05; *** p<0.01

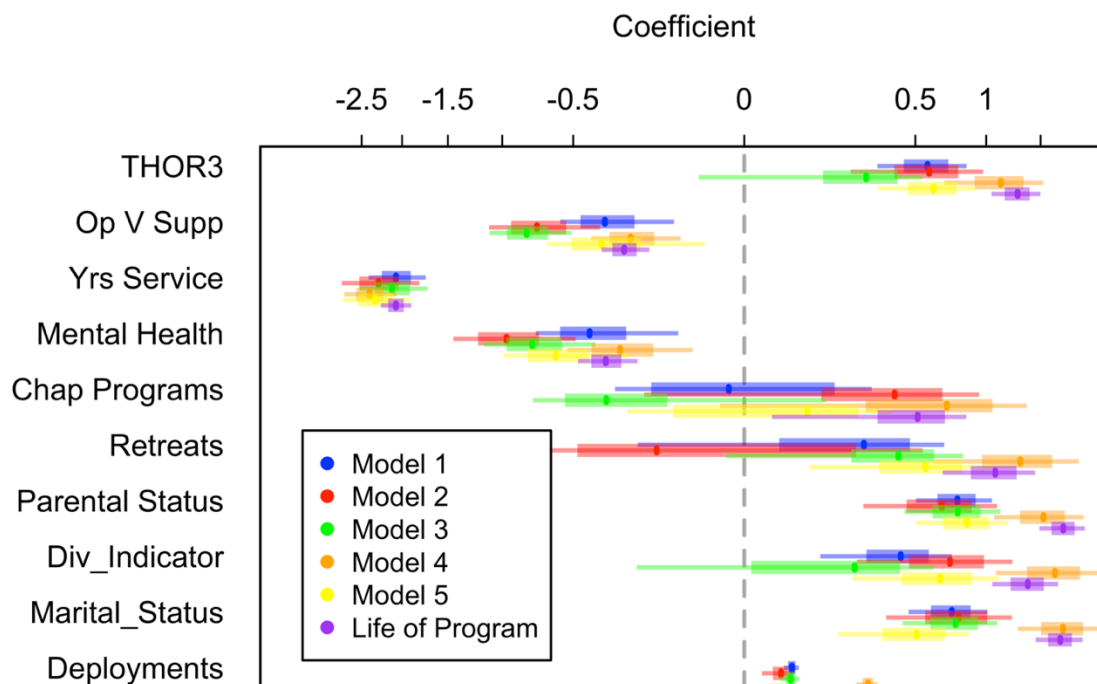


Figure 1. Coefficient Overlay Models 1–6

B. PROGRAM USAGE AND CONTROL VARIABLES DESCRIPTIVE STATISTICS

It is important to highlight the statistical means of all variables used in the model over the life of the POTFF program in order to frame our finding. In referencing Table 2, readers should note that 86% of ARSOF Soldiers indicated an intent to remain until retirement over the five wave surveys when “undecideds” are removed from the model.

Table 2. Model Variables Mean Responses

Program Life Variable Mean Responses	
<i>Dependent Variable</i>	
Intent to Remain	86.21%
<i>Independent Variables</i>	
HPP Usage	51.44%
Chaplain Program Usage	25.31%
Pre-Post Deployment Retreat Usage	16.45%
Behavioral Health Usage	16.89%
<i>Control Variables</i>	
Less than 10 years of Service Indicator	47.16%
Prior Divorce Indicator	23.50%
Marital Status-Yes	75.47%
Parental Status-Yes	60.47%
Deployments in Months	23.68
Operator versus Support	50.94%

C. NOTEWORTHY FINDINGS FROM THE CONTROL VARIABLES

All six of our control variables provided a statistically significant effect on the logit of our dependent variable consistently through all five waves of the program’s measurement and in the combined longitudinal model, model 6. In line with USSOCOM’s unpublished report on Wave V, we found parental status and marital status “yes” indicators had the largest coefficients and subsequently the largest effect on the probability a servicemember will intend to remain through retirement. The statistical significance of our control variables additionally confirms our hypothesis as midcareer ARSOF officers in constructing a model using bounded rationality that explains the variation in the retention intention.

Figures 2 and 3 demonstrate the predictive strengths of marriage and parental status on the probability a servicemember will indicate intent to remain. The strength of these relationship informs our understanding of our model apart from our independent POTFF related variables specifically. However, while being married and a parent are independent of the POTFF program, the sensitivity of our model to these control variables speaks to the importance of the social pillar of POTFF in servicemember longevity. Given that 75% of the ARSOF force is married and over 60% are parents, Figures 2 and 3 show that all things held the same in model 6, the shift of marriage and parental status would increase the probability of a servicemember's intent to remain from .93 to .96.

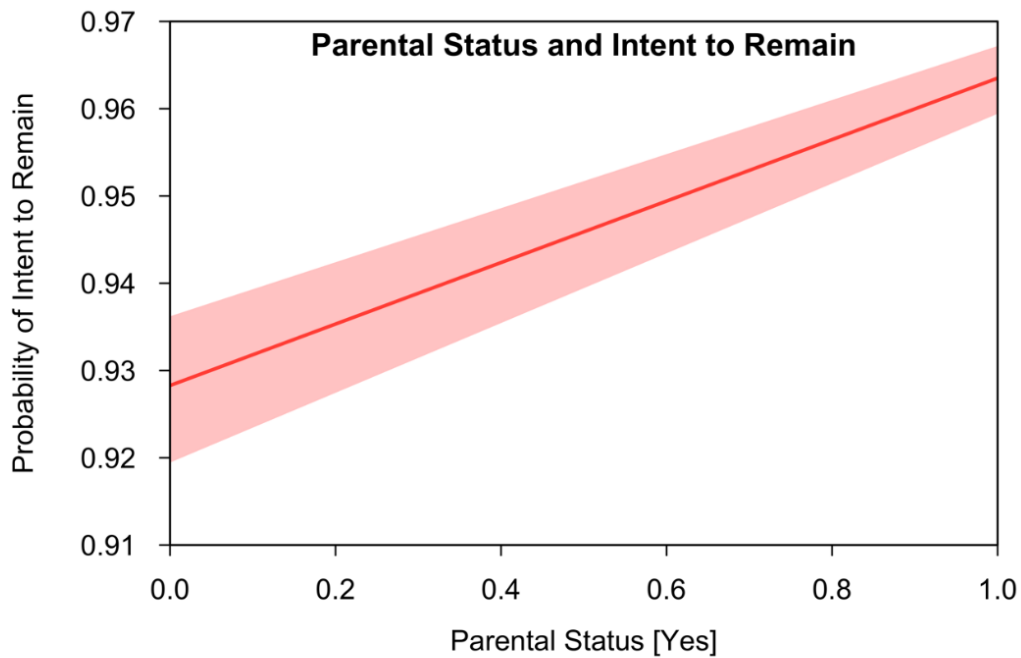


Figure 2. Parental Status Effects Plot

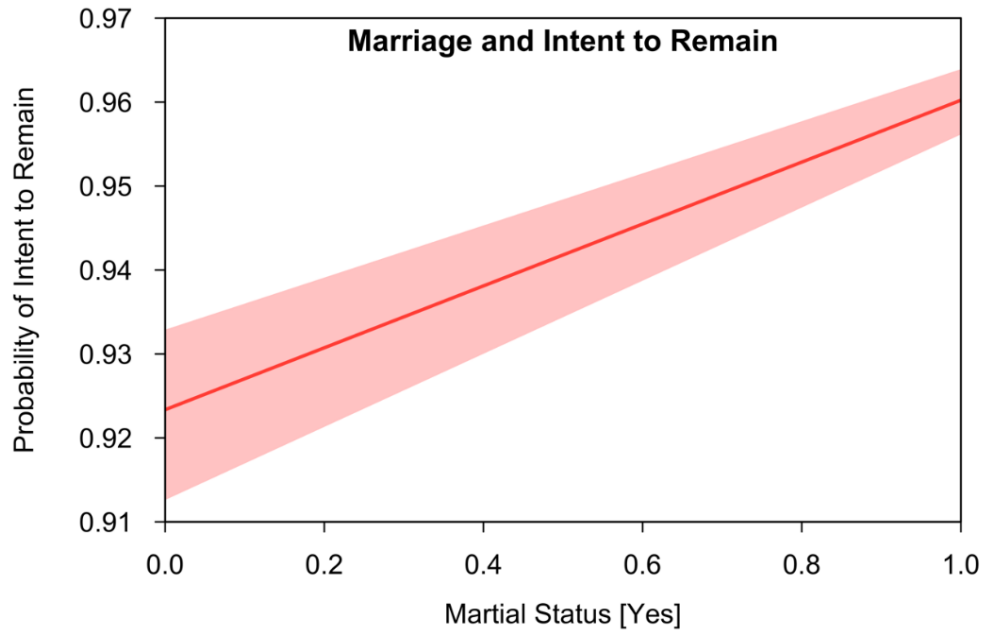


Figure 3. Marriage Effect on Intent to Remain Logit

D. INDEPENDENT VARIABLES AND SUBSTANTIVE SIGNIFICANCE

Of our four independent variables representing the usage of the four pillars of the POTFF program, three were both statistically and substantively significant: THOR3 usage, pre-deployment and post-deployment retreat participation, and behavioral health usage. A major caveat is that although behavioral health usage was negatively significant, there are many factors outside the scope of this research to help explain why. First, those who seek behavioral health admittedly want treatment for a medical issue, similar to those who seek dental care for tooth pain. Next, the profile of Soldiers who receive behavioral health is younger, less resilient, and demonstrates higher levels of PTS than the average SOF operator. In the Wave V Needs Assessment Report, 87% of users reported that unit behavioral health support helped them cope more effectively with stress.³⁴ In a complicated field of medicine such as behavioral health, the qualitative response from users

³⁴ USSOCOM J-7 Preservation of the Force and Family Wave V Needs Assessment & Program Evaluation. 2017.

should be taken into account when attempting to quantify results. In this case, POTFF-supported behavioral health care appears to be helping the force.

HPP usage proved to be the POTFF-related variable with the largest positive effect on the log odds ratio of ARSOF Soldiers intent to remain until retirement. Pre-deployment and post-deployment chaplain-led marriage and family retreats also had a positive effect on the probability that a Soldier would indicate their intent to remain in service until retirement. Figures 4 and 5 show the positive relationship HPP usage and retreat usage has on the logit. However, Figure 6 shows that mental health usage had a substantively significant negative effect on the intent to remain logit, showing a negative 3% shift in the likelihood an ARSOF Soldier will indicate their intent to remain until retirement. We believe that there are commitment forces affecting this negative relationship, as many other factors can indicate whether or not a servicemember seeks mental health services. More research would have to be completed to investigate how the POTFF programs unit embedded psychologists affect the relationship between mental health usage and a servicemember's indication to remain until retirement. Bounded rationality suggests that the slope would be greater without the POTFF program; however, it is impossible to prove given our current data set and understanding of the relationship.

Given the strong relationship between indication to remain and marital and parental status, we expected to see a significant relationship between chaplain programs and indication to remain. However, our model does not support such a conclusion. Chaplain programs, as a measure of usage of the programs related to the social pillar, were statistically insignificant, as shown in Table 1 and Figure 7.

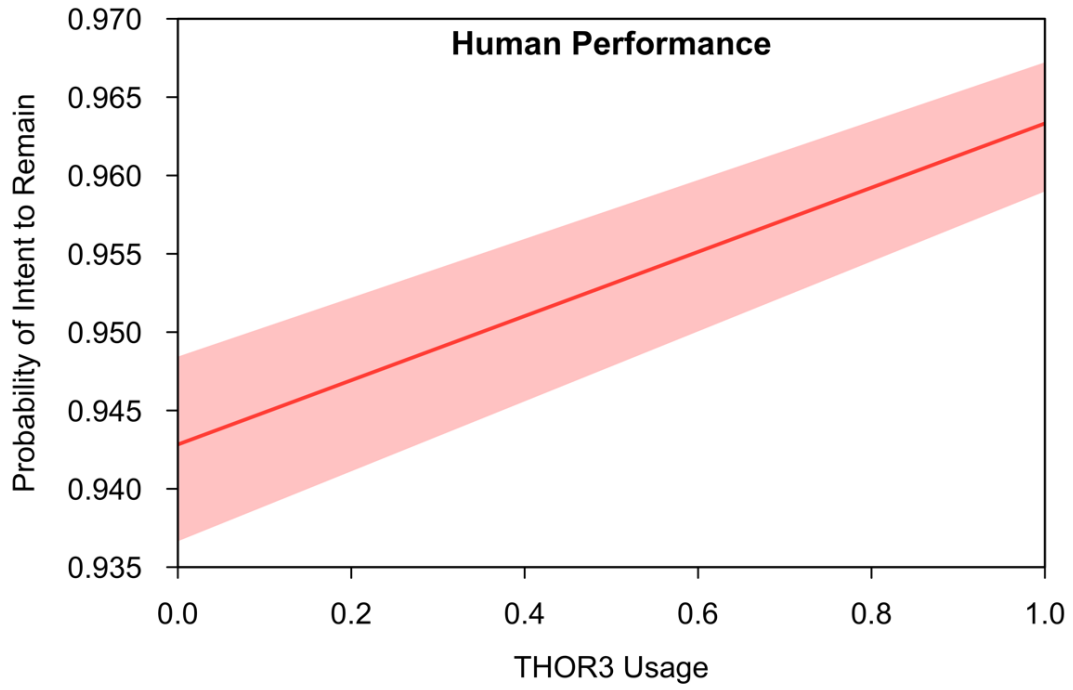


Figure 4. THOR3 Usage and Intent to Remain

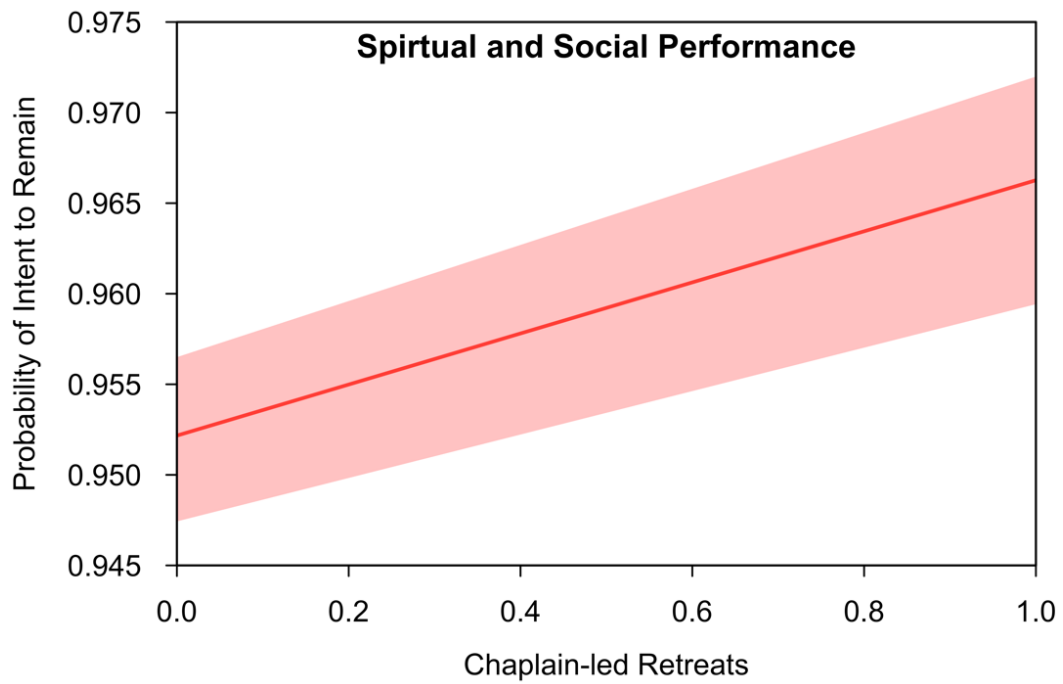


Figure 5. Retreats Effect Plot

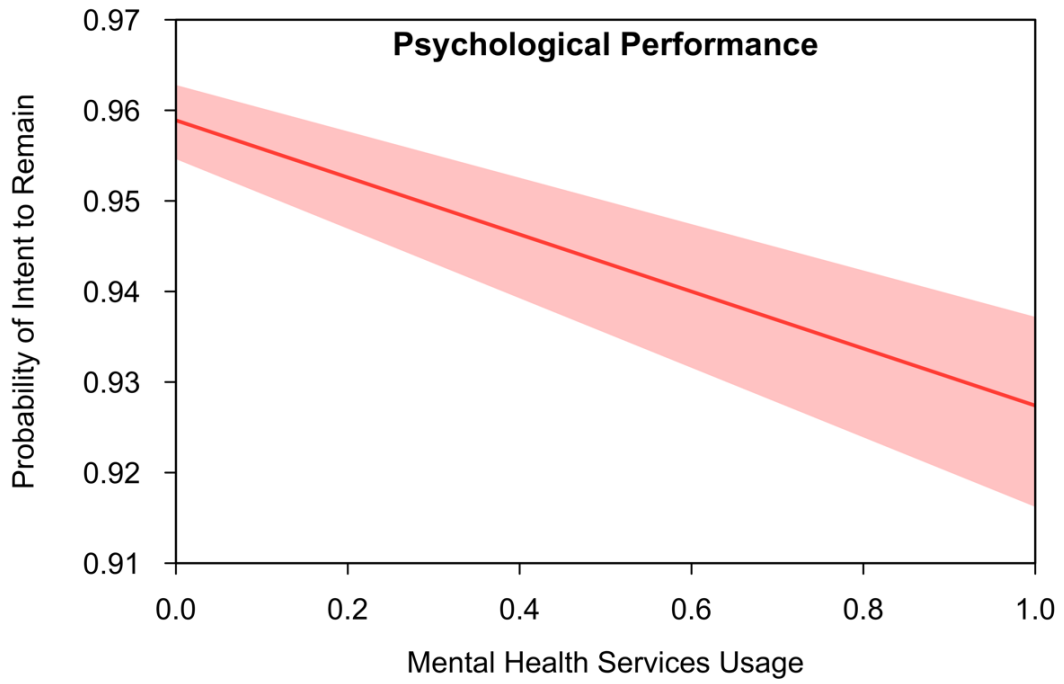


Figure 6. Behavioral Health Services Usage Effect Plot

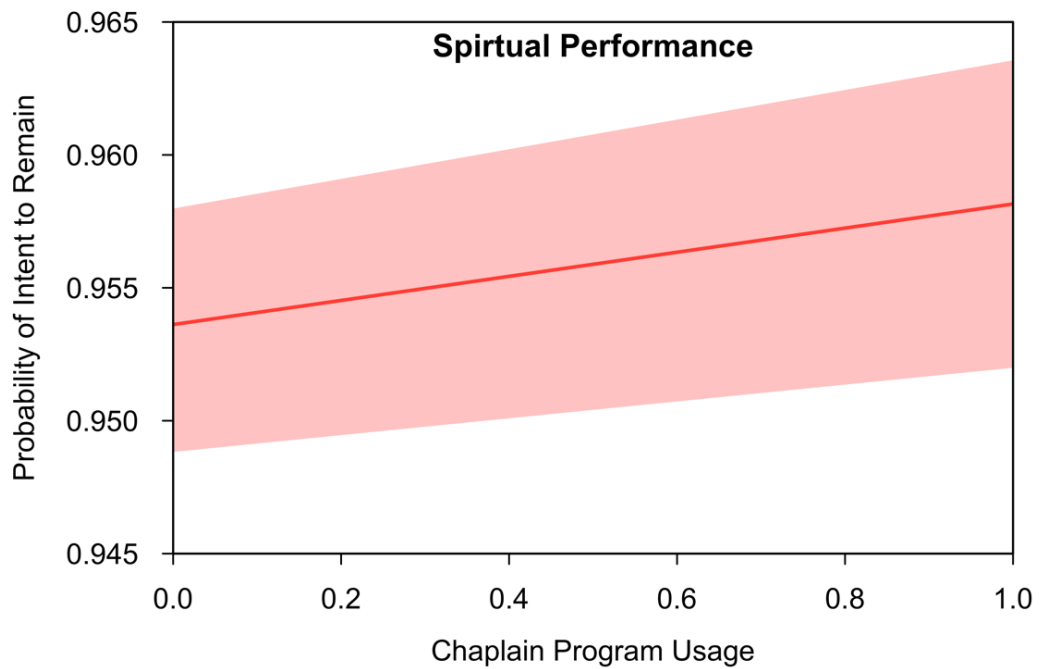


Figure 7. Chaplain Program Usage Effects Plot

E. DEGREE OF SUPPORT TO ALTERNATIVE HYPOTHESIS

The shift in the HPC usage and retreat participation shows a 3% and 2% respective shift in the probability of the intent-to-remain logit. These shifts indicate support to our alternative hypothesis that participation in the POTFF program has a positive effect on the likelihood that a USASOC service member will indicate an intention to remain in service until retirement. With approximately 32,000 personnel in USASOC, the savings to human capital could equate to approximately 1,000 additional servicemembers indicating that they intend to remain in service until retirement. These savings would be magnified by the closed nature of the DoD manning system and the upfront sunk costs of human capital at the front end of a USASOC Soldiers’ career. See Table 3 for a summary of our results.

Table 3. Summary of Findings

Independent Variable	Predicative Effect on Likelihood of Intent to Remain	Results	Statistical Significance (P-value)	Substantive Significance
THOR3 Usage	Positive	Increase	<.001	103%
Retreat Usage	Positive	Increase	<.001	102%
Chaplain Program Usage	Positive	No Statistically Significant Finding	NA	NA
Mental Health Usage	Decrease	Decrease	<.001	-103%

V. CONCLUSION

A. RESULTS

The results of our research show that the use of POTFF resources may increase the probability that a Soldier will continue to serve the Army until retirement. However, given the finiteness of our model and the limitations of our data set, continued studies with more rigorous clinical methodologies will be necessary to definitively answer the research question in this study.

B. REPLICATION BY SISTER COMPONENTS AND AT ECHELON

Our study could easily be replicated for other component commands of USSOCOM. We used data from USASOC components, but USSOCOM has data for WARCOM, AFSOC, MARSOC, and JSOC as well. Reproducing our research for other components would give unit leaders more specific insight into their organizations and efficiencies/inefficiencies of their POTFF programs. This research can be replicated down to the O-6 level component commands to measure the program's effectiveness with granularity to inform similar questions by commanders at various echelons. Providing commanders with the most relevant information for their formations is important for any future research. The numbers will likely shift over time, so repeating this research when new data is available would benefit the force.

C. MAXIMIZING HPC AND RETREATS

Across the life of POTFF, 51% of ARSOF Soldiers indicated that they use the HPC regularly (once a week or more). 16% of survey respondents, on average, attended a pre or post-deployment chaplain-led marriage retreat each year. Our research suggests that if participation rates for these two programs were 100%, then retention intention could increase by 5%. This represents half of the ARSOF Soldiers who indicated they do not intend to remain until retirement. While neither HPCs nor chaplain-led retreats can take on massive increases in participation with their current limitations on space and staff, this is an area to ponder for senior leaders considering expansions to POTFF.

Another interesting area for further research of HPP is the ratio of strength coaches to athletes in an HPC. Our study does not address this. While our findings show that more HPP participation would increase retention, at some point, more staff and possibly bigger or additional HPCs will be needed to accommodate more athletes. Adding additional strength and conditioning coaches, available to create workout plans and work with athletes or teams, would increase capacity for HPCs. Determining whether more staff would increase participation would be useful for POTFF directors and commanders who have the ability to determine how their resources are used.

The POTFF cell in the J7 at USSSOCOM, who administers the Needs Assessment Survey upon which we based our research, also creates a report from the data. The Wave V report, which the POTFF cell provided to us during our research, is a thorough and enlightening look at resiliency across the force. It identifies trends in usage and examines individual resiliency factors that impact USSSOCOM. Chapter II of this thesis provides a brief overview of the analysis of Wave V. USSSOCOM's official report should be provided to commanders in the organization down to the O-6 level, with trends for USSSOCOM, component commands, and components subordinate commands/units provided on an individual basis. The POTFF cell should also provide the data from the report, so data analysts at each command can comb through and dig into any areas of interest to their specific command.

The social performance pillar of POTFF is challenging to assess. As discussed in Chapter III, we used the survey question about participation in pre and post-deployment retreats to measure the social performance pillar. Keeping Soldiers socially connected is important, and POTFF has many programs to help. The military offers many non-POTFF family-based programs as well, and most families find non-military social activities they enjoy, such as church, outdoor recreation, or neighborhood social groups. Determining how to invest resources to strengthen families is the million-dollar question many commanders ask. What keeps families content when OPTEMPO is high? What programs are worth investing in? What will improve resiliency or retention, and what will simply be an insignificant perk for servicemembers? Further research, including getting opinions from servicemembers and commanders, will help provide an answer to this question.

D. DATA ACQUISITION TO STUDY POTFF

The data from the Needs Assessment Survey is rich, but it is inherently limited by self-reporting bias, survey fatigue, and being “tasked” to complete it. If USSOCOM could gather data and share that with its components for their research, this would enable more analysis of the efficiency of programs and trends within POTFF. HPCs gather data to input into SPEAR, but methods of gathering are not universal across the board. Implementing a reliable, functional system to count how many Soldiers use each service of POTFF accurately, and then sending that information to a central repository at USSOCOM for analysis and distribution would be tremendously valuable. Rather than an annual survey, commands could get a monthly or quarterly snapshot of their units’ use of POTFF services. Data analysts could compare reported numbers to existing data from the wave surveys. Medical and dental readiness is tracked closely at every echelon of command, and POTFF should be no different.

Other than HPP, gathering data for POTFF programs in the other pillars would present challenges. Some behavioral health appointments are recorded, but some providers specifically do not record personally identifiable information from appointments to encourage servicemembers to seek treatment without prejudice for their careers. Chaplains also balance confidentiality with formal reporting, and once they have established a relationship with a servicemember, they may speak to them frequently, whether walking around the compound, between meetings, or at a separate event. Those chance interactions are necessary to help normalize chaplain services, but they make data collection imprecise. Creative solutions, with input from all stakeholders, will help inform a way forward for data collection.

E. THE CHICKEN OR THE EGG?

There is a credible counter-argument against the findings in our research. If a servicemember has already decided to commit to pursuing a military career until retirement, he or she may then decide to use POTFF services to maximize their longevity in support of this goal. In other words, servicemembers may use POTFF more after they have decided to continue service until they are retirement eligible, not the other way

around. Further research should investigate whether the relationships behave differently using different methodologies. A starting point should be the Wave V Assessment Report, where USSOCOM J-7 POTFF hypothesizes on the linkages between HPCs and marriage retreats and their impact on the social connectedness scale mentioned in Chapter II of this work.

F. CONCLUSION

Preserving the force and family is a mission that every commander in USSOCOM believes in. Across the organization, nearly everyone has seen the benefits POTFF provides to individuals' physical, mental, social, and spiritual health. From supporting ODAs returning from combat deployments to helping a young Soldier and their family feel welcome in the unit, POTFF has countless success stories. Understanding how to best leverage and nurture the program to maximize its benefits to individual resiliency and unit readiness has been the focus of SOF leaders for years. Those leaders can now add talent retention to the list of POTFF benefits and continue to encourage participation, knowing that it benefits both their individual servicemembers and their organization.

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