Mental Health Advisory Team 9 (MHAT 9)
Operation Enduring Freedom (OEF) 2013
Afghanistan

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Office of The Surgeon General
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and

Office of the Command Surgeon
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and

Office of the Command Surgeon
US Forces Afghanistan (USFOR-A)

The results and opinions presented in this report are those of the Mental Health Advisory Team 9 (MHAT 9) members and do not necessarily represent official policy or position of the Department of Defense.

The MHAT 9 members would like to acknowledge the active involvement and in-theater support provided by the RC-South and RC-East Division Surgeons' Cells and the Task Force Medical – Afghanistan Behavioral Health Consultant. It was with their support and effort that the current report was able to examine a large sample of Soldiers from maneuver units broadly dispersed across the Afghanistan Theater of Operations.

Table of Contents

1 EXECUTIVE SUMMARY

1.1 Introduction

The Mental Health Advisory Team 9 (MHAT 9) 2013 mission to Afghanistan in support of Operation Enduring Freedom (OEF) was directed by the Chief of Staff of the Army (CSA) and was supported by the leadership of US Forces Afghanistan (USFOR-A). As in previous years, the Office of The Surgeon General of the Army took the lead in mission execution and key support was provided by the Office of the Command Surgeon, USCENTCOM, the Office of the Command Surgeon, USFOR-A, and Task Force Medical-Afghanistan.

The CSA directed the MHAT 9 to focus on the role of small unit leadership as a factor influencing the mental health and well-being of Soldiers. The CSA's focus was prompted, in part, by the Joint MHAT (J-MHAT) 8 finding of a small but significant decline in Soldiers' perceptions of small unit officer leadership. Unlike the previous two J-MHATs, MHAT 9 focused exclusively on Soldiers. The mission of MHAT 9 was twofold: 1) to provide a theater-wide assessment of behavioral health and well-being while focusing on small unit leadership by surveying Soldiers in maneuver units, and 2) to provide recommendations to optimize unit behavioral health (BH).

From 4 June to 30 June 2013, the MHAT 9 advanced party coordinated with the Division Surgeons for units in Regional Commands–South and East–to distribute surveys according to the sampling plan. Soldiers were randomly selected from maneuver units in the Afghanistan Theater of Operations (ATO) to complete the anonymous MHAT 9 survey. Surveys from 888 Soldiers from 41 Army maneuver platoons were returned and 39 platoons of the 41 platoons (95%) met the sampling plan criteria. The two platoons that did not meet sampling plan criteria differed significantly from the remaining platoons on key demographic variables and, thus, were excluded from the analysis, leaving 849 surveys in the analysis.

From 1 July to 30 July 2013, the MHAT 9 Team members (a) processed and analyzed survey data, (b) conducted focus group interviews with Soldiers, (c) conducted interviews with key behavioral health personnel, and (d) wrote the technical briefing and draft report.

The MHAT 9 survey assessed key issues from previous MHATs while placing a greater emphasis on assessing small unit leadership. The consistency in design across MHATs allows for year-to-year comparisons in order to detect trends. Additional leadership items in the MHAT 9 survey were developed in collaboration with the Center for Army Leadership (CAL). The traditional MHAT leadership items were also included and provided an opportunity to validate MHAT leadership items against the CAL leadership items and elucidate the impact of leadership on mental health and well-being.

The report contains four key sections:

1. Status of Soldiers compared to three (2009, 2010, and 2012) of the five previous OEF samples. MHAT 9 and the three prior MHATs all implemented the same sampling plan (e.g., random selection of maneuver platoons) enabling cross sample comparisons.
2. Behavioral healthcare staffing ratio and suicide prevalence.
3. Focus group summary.
4. Integrative recommendations.

1.2 Key Findings and Recommendations

Key findings show significant differences (*p<.05)* between MHAT 9 (2013) and 2012, 2010, and 2009 OEF samples. If a year is not mentioned, there was no significant difference from 2013.

1.2.1 *Well-Being Indices*

1. Morale: Significant rise in reports of individual and unit morale relative to 2012, but comparable to 2009.

2. Psychological Problems: Rates of Soldiers meeting criteria for any psychological problem (acute stress, depression, or anxiety) are significantly lower than rates reported in 2009 and 2010.

3. Suicidal Ideation: Rates of suicidal ideation are significantly lower than rates reported in 2009 and 2010.

4. Sleep Problems: Soldier concerns about sleep are significantly lower relative to 2012; however those with high concerns consistently report increased psychological problems and accidents.

> *Recommendation #1:* Continue efforts to educate leaders on importance of sleep and enforcing sleep standards; require leaders to become familiar with FM 6-22.5, Combat and Operational Stress Control Manual for Leaders and Soldiers, which provides guidance on sleep; hold leaders accountable for the sleep environment in their command.

5. Concussive Events: Self-reported rates of exposure to blast continue to decline; percent reporting evaluation by medic following blast increased. However, there still remains a relatively high proportion of Soldiers who report not receiving a medical evaluation after concussive events.

> *Recommendation #2:* Given the association between behavioral health and concussions, ensure that unit leaders fully understand the requirements for concussive care and are trained to implement the policy (i.e., Military Acute Concussion Evaluation, Blast Exposure and Concussion Incident Report).
>
> Recommendation #3: Re-evaluate the DoDI 6490.11 criteria regarding distance (50 meters) from blast.

1.2.2 *Risk Factors*

1. Combat Experiences: Level reported in 2013 significantly lower than in 2010 and 2012 but significantly higher than in 2009. Most commonly reported types of combat experiences have changed.

2. Multiple Deployments: Number of previous deployments remains a risk factor for Non-Commissioned Officers (NCO) on many well-being indices.

3. Deployment Concerns: Significantly less concern about deployment length than in 2010.

4. Relationship Problems: Quality of marriages and percentage of Soldiers planning to divorce or separate have remained stable over the last four MHATs.

1.2.3 *Protective Factors*

1. Unit Climate: Ratings of unit cohesion significantly lower than in 2012. Perceived unit readiness significantly lower than in 2010 and 2012.

2. Stigma and Barriers to Receiving Behavioral Health Care: Stigma remained stable across MHATs, whereas perceptions of barriers improved in 2013 compared to 2009.

3. Suicide Prevention and Stress Management Training: Highest proportion of Soldiers reporting they received training in 2013 compared to other MHATs. Perceived training adequacy significantly higher than 2009; stable relative to 2010 and 2012.

4. Comprehensive Soldier and Family Fitness Resilience (CSF2) Training: Soldiers who report getting resilience training before deployment also report significantly lower rates of acute stress than Soldiers who report not getting resilience training.

> *Recommendation #4:* Continue emphasis on the Vice CSA's (VCSA) Ready and Resilient Campaign plan with focus on resilience training through CSF2.

1.2.4 *Leadership*

1. Small Unit Leadership: Both company-grade officer and NCO leadership rated significantly higher than in 2012. NCO leadership also rated significantly higher than in 2009.

2. Measures of Leadership: Walter Reed Army Institute of Research (WRAIR) measures of leadership used in previous MHATS are highly consistent with measures adapted from the 2011 Center for Army Leadership Annual Survey of Army Leadership (CASAL).

3. Leadership Related to Behavioral Health, Stigma, Barriers to Care, and Unit Effectiveness: Small unit leadership correlated with behavioral health, stigma, barriers to care, and unit effectiveness indices. Soldiers who perceived their NCOs and officers as ineffective were at highest risk, whereas Soldiers who rated their NCOs and officers as effective were at lowest risk.

Recommendation # 5: Develop, validate, and integrate evidence-based training targeting the impact of leader actions on behavioral health, stigma, barriers to care, and unit effectiveness using quantifiable outcome measures.

Recommendation # 6: Integrate behavioral health and unit effectiveness indices as part of command climate surveys to gauge impact of small unit leaders on their units.

1.2.5 *Key Finding from Behavioral Healthcare System Assessment*

1. BH Staffing and Distribution: Decline in behavioral health staffing in the ATO has not paralleled decline in overall troop strength. The ratio of behavioral health staff to Soldiers is 1:567, suggesting a surplus of behavioral health resources in the ATO. Patient encounter data demonstrated that behavioral health resources were used more frequently at larger FOBs. Lower utilization at forward FOBs has led to variation in provider workload.

Recommendation # 7: Return to a behavioral health staffing ratio of between 1:700 and 1:800. The Behavioral Health Consultant in theater should periodically review behavioral health resources in theater and adjust staffing ratio in coordination with operational commanders to reflect changes in unit dispersion and behavioral health need.

1.2.6 *Mental Health Advisory Teams Support to OEF*

As the level of combat experienced by Soldiers has declined, the level of behavioral health concerns in the ATO has also decreased. With the rapid reduction of U.S. combat troops in Afghanistan, the need to conduct another MHAT in support of OEF is not likely.

Recommendation # 8: Consider use of targeted MHATs in support of units and Combatant Commands outside of OEF ATO.

Recommendation # 9: Expedite release of MHAT 9 report.

2 BACKGROUND

2.1 Mission and Background

The MHAT 9 mission was twofold: 1) to provide theater-wide assessment of behavioral health and well-being while focusing on small unit leadership by surveying Soldiers in maneuver units, and 2) to provide recommendations to optimize unit behavioral health. The MHAT 9 deployed to Afghanistan in support of Operation Enduring Freedom (OEF) from 4 June to 7 August, 2013. This report presents MHAT 9 findings from anonymous surveys, focus groups with Soldiers from combat maneuver platoons, and interviews with key behavioral health personnel. The MHAT 9 members were assigned to US Forces Afghanistan (USFOR-A), worked under the guidance of the USFOR-A Surgeon, and were provided logistical support by Task Force Medical-Afghanistan.

2.2 Sampling Strategy

The MHAT 9 report is based upon multiple sources of information (i.e., survey data, focus groups, and subject matter expert interviews). The core of the report centers on quantitative data from anonymous surveys completed by Soldiers using a cluster sample of randomly selected maneuver unit platoons. This sampling strategy was first used in the MHAT missions conducted in 2009 [MHAT 6: Operation Iraqi Freedom (OIF) and MHAT 6: OEF] and has been used in all subsequent MHAT missions in support of OEF. MHAT data collected in Afghanistan prior to 2009 used a different sampling strategy and are not presented in this report.

The random cluster-based sampling strategy has several advantages:

1. Executing the sampling plan is feasible in an operational environment using a fragmentary order (FRAGO) to identify the units and organic medical personnel in the brigades to administer and collect survey materials.

2. The use of random cluster-based sampling provides some degree of anonymity to Soldiers. As noted in the MHAT 6 OEF report (2009), the anonymity is less than that offered in MHAT I to V; however, it is substantially greater than a sampling approach that identifies specific Soldiers based on individual demographic characteristics.

3. The sampling strategy randomly selects respondents at the platoon level from Army Brigade Combat Teams (BCTs) engaged in direct combat-related tasks in order to minimize the possibility of drawing a biased sample. At a conceptual level, all maneuver platoons are considered interchangeable and the sampling plan provides a convenient way to generate a representative sample of warfighters.

4. Since maneuver unit platoons are a core component of deployed combat forces, the sampling strategy is replicable across years and contexts. Consequently, using a consistent random cluster-based sampling strategy minimizes the potential that differences across years could be due to differences in sampling strategy used rather than substantive reasons and provides a reasonable basis for year-to-year comparison.

Despite the advantages listed above, there are also limitations with using a random cluster-based sampling strategy:

1. The population of maneuver unit Soldiers represents less than half the deployed population (see McGrath (2007)). Similarly, little data is collected from officers, senior NCOs or females. Therefore, a maneuver unit sample is not representative of the entire deployed force in the ATO.

2. Since the sampling strategy provides detailed information about platoon membership, care was taken to avoid including potentially self-incriminating items in the survey. In order to address concerns raised by the Defense Manpower Database Center and human use review boards, specific items related to drug use, alcohol use and potential war crime violations were omitted from MHATs beginning with MHAT VI.

Contrasts among MHAT 9 (2013), J-MHAT 8 (2012), J-MHAT 7 (2010), and MHAT 6 (2009) provide scientifically rigorous comparisons because the same type of units (maneuver unit platoons) were randomly sampled across years. Consequently, we reduce the likelihood that any observed differences reflect sample variability (e.g., different types of units, or unintended biases in selecting easily accessible units), and we increase the likelihood that observed differences reflect fundamental changes in either the nature of the force (e.g., differences in the percentage of multiple deployers across years), changes in how the maneuver units are deployed (e.g., different troop dispersion across years), or changes in kinetic activity (e.g., differences in combat experience levels across years). Ultimately, with these contrasts it is important to control statistically for time in theater since the sampling plan was not developed in a way to ensure uniformity in this variable and time in theater has been shown repeatedly to be related to a number of outcomes in previous MHAT reports.

2.3 Comparison Groups

A key advantage of repeatedly conducting MHAT missions is that multiple iterations contribute to extensive historical databases. These databases provide a referent basis for identifying longitudinal trends and interpreting findings. The details of the comparisons are provided below.

2.3.1 Army *Sample Across Time*

MHAT 9 data are compared to Army OEF MHAT data collected in 2009, 2010, and 2012. The basic statistical model includes time (MHAT Year) as a categorical predictor using the 2013 MHAT 9 OEF sample as the referent. Graphs present sample-adjusted values based on male respondents and are adjusted for demographic differences in months deployed. Specifically, the sample-adjusted values represent 1) male, 2) junior enlisted Soldiers, who 3) were deployed for seven months. Junior enlisted Soldiers were selected as the referent for rank since junior enlisted Soldiers represent the majority of the population surveyed. Seven months was selected as the referent for months deployed to normalize time in theater. NCOs are used as the referent when examining multiple deployment effects since NCOs are the most likely Soldiers in a small unit to have had multiple deployments.

Note that because sample-adjusted values in this report are based on data combined across the last four Army MHATs, the values listed in this report may not exactly match values from previous MHAT reports. Values were adjusted based on the attributes of the combined MHAT database. Thus adding 2013 data and removing 2005 and 2007 data from the total sample produced slight changes in the sample-adjusted values. In addition, data from surveys returned after the cut-off date for the report from the previous MHAT were added to the master database. For example, in the case of the J-MHAT 7 OEF data, the 35 additional surveys added to the database after the cut-off date for inclusion in the report may produce changes in the 2010 values in the J-MHAT 7 report.

2.4 Analytical Strategy and Verification of Results

Adjusted values were estimated using a logistic regression model or a linear regression model according to the categorical or continuous nature of the variable. All analyses were conducted using the Statistical Package for the Social Sciences program (SPSS) and were replicated using the statistical language R (R Core Development Team, 2009).

2.5 Focus Groups

The MHAT 9 conducted 13 cohort-specific focus groups with a total of 78 Soldiers (43 junior enlisted Soldiers, 28 NCOs, and 7 company grade officers) at 4 locations across Regional Commands East and South. MHAT 9 also conducted 22 individual Interviews with behavioral health providers, Chaplains, and other staff officers (e.g., Theater Behavioral Health Consultant). Themes from the Soldier focus groups augment the survey-based data and are integrated into the relevant sections of the report and are summarized in Chapter 8 of this report.

Focus group questions addressed: 1) perceptions of leadership effectiveness, 2) impact of leadership on Soldier behavioral health and well-being, 3) knowledge and skills required for leaders to support behavioral health and well-being, 4) individual responsibility and actions that impact behavioral health and well-being, 5) differences in dealing with behavioral health issues in a combat environment compared to a garrison environment, and 6) how best to prepare leaders in terms of unit-level behavioral health. Based on the discussion topics, the report organizes the results into six thematic areas:

1) Caring about Soldiers
2) Teamwork / Common Objectives
3) Military Occupational Specialty (MOS) / Infantry Mission
4) Leader Maturity
5) Officer Evaluation Report (OER) Bullets
6) Selection / Screening and Authority / Responsibility

3 CONCEPTUAL OVERVIEW

The MHAT 9 OEF survey contains the core survey items used in all previous MHATs. MHAT surveys are adapted from the Land Combat Study developed by the Walter Reed Army Institute of Research (Hoge et al., 2004; Hoge, Terhakopian, Castro, Messer, & Engel, 2007; Riviere, 2008).

Many of the J-MHAT 8 topics were reassessed in the MHAT 9 survey. However, as in previous years, the MHAT 9 survey included items of emergent interest to operational and medical leadership. As directed by the CSA, the MHAT 9 survey included a section of items targeting leadership in order to better understand the influence of small unit leadership on behavioral health and well-being.

In addition to the leadership items historically included in MHAT surveys, the MHAT 9 survey included items developed in collaboration with the Center for Army Leadership, based principally on the 2011 Center for Army Leadership Annual Survey of Army Leadership (CASAL): Main Findings (Riley, Conrad, Hatfield, Keller-Glaze, & Fallesen, 2012). For example, quality of leadership and leader competencies (not previously assessed in MHATs) were assessed using items selected from the 2011 CASAL survey. Several new items (not part of MHAT or CASAL surveys) were also developed. For example, items based on FM 6-22.5 (Department of the Army, 2009) were designed to assess key behaviors that leaders should demonstrate to promote behavioral health in Soldiers.

3.1 Soldier Combat and Well-Being Model

Soldier well-being indices can be viewed as outcome measures that are influenced by both risk factors and protective factors. This conceptual framework is based on the Soldier Adaptation Model (Bliese & Castro, 2003) and has been used to structure MHAT surveys and to frame the results in previous MHAT reports. Similarly, the MHAT 9 survey included: 1) Well-Being Indices (i.e., behavioral health status), 2) Risk Factors (e.g., combat experiences, deployment stressors), and 3) Protective Factors (e.g., willingness to seek care, leadership).

3.1.1 Well-Being Indices

Well-being indices provide an overview of the well-being of the deployed force. These self-reported measures are based on a standard set of behavioral health status indicators to include:

1. Individual and unit morale
2. Acute stress, depression, and anxiety
3. Suicidal ideation
4. Use of medications
5. Sleep
6. Anger

3.1.2 Risk Factors

In the Soldier Combat and Well-being Model, behavioral health rates are driven by four major classes of risk factors. The first class of factors is composed of combat-related events. Research has demonstrated that high levels of combat experiences (e.g., being attacked or ambushed, killing the enemy) are associated with higher levels of psychological problems, such as acute stress (Dohrenwend et al., 2006). The second class of factors includes relationship problems. The third class of factors includes operational tempo-related experiences such as deployment length and multiple deployments. The fourth class of factors includes deployment

concerns related to non-combat stressors such as living conditions, work concerns, and family concerns.

3.1.3 Protective Factors

In the Soldier Combat and Well-being Model, behavioral health and performance can be improved either by: (a) reducing or eliminating factors that put Soldiers at risk, or (b) strengthening protective factors and providing Soldiers with better coping skills when exposed to factors that place them at risk.

For maneuver units in a combat environment, many risk factors are unavoidable (e.g., exposure to potentially traumatic combat events) or are the direct product of National Military Strategy decisions (e.g., the size of the military requires Soldiers to deploy multiple times). For these reasons, many behavioral health interventions focus on developing and enhancing programs designed to help Soldiers cope with known risk factors in an attempt to improve resilience. The MHAT 9 report examines:

1. Unit factors such as small unit leadership, cohesion and perceived readiness
2. Stigma and willingness to seek behavioral health care
3. Perceived barriers to behavioral health care
4. Perceived adequacy of suicide and behavioral health training
5. Resilience training provided by Master Resilience Trainers (MRTs)
6. Post-deployment growth

4 RESULTS: SAMPLE CHARACTERISTICS

Table 4.1: Sample Characteristics Across MHATs Since 2009

Demographic Variable	MHAT 6 - 2009 (N=702)		J-MHAT 7[1] - 2010 (N=946)		J-MHAT 8 - 2012 (N=619)		MHAT 9 - 2013 (N=849)	
	n	Percent	n	Percent	n	Percent	n	Percent
*Age**								
18-24	442	63.0	580	61.3	374	60.4	503	59.2
25-29	171	24.4	228	24.1	165	26.7	238	28.0
30-39	77	11.0	105	11.1	71	11.5	97	11.4
39+	11	1.6	22	2.3	7	1.1	6	0.7
Unknown	1	0.1	11	1.2	2	0.3	5	0.6
Rank								
E1-E4	476	67.8	622	65.8	405	65.4	543	64.0
NCO	199	28.3	286	30.2	190	30.7	268	31.6
Officer / WO	23	3.3	34	3.6	22	3.6	34	4.0
Unknown	4	0.6	4	0.4	2	0.3	4	0.5
*Component**								
Active	700	99.7	872	92.2	522	84.3	847	99.8
Reserve	0	0.0	3	0.3	1	0.2	0	0.0
National Guard	0	0.0	69	7.3	94	15.2	0	0.0
Unknown/Other	2	0.3	2	0.2	2	0.3	2	0.0
*Marital Status**								
Single, never married	324	46.2	491	51.9	311	50.2	381	44.9
Married/Separated	328	46.7	378	40.0	240	38.8	367	43.2
Divorced	28	4.0	49	5.2	17	2.7	40	4.7
Unknown/Widowed	22	3.1	28	3.0	51	8.2	61	7.2
*Deployment History**								
First Time	471	67.1	573	60.6	357	57.7	546	64.3
Second Time	173	24.6	260	27.5	176	28.4	166	19.6
Third or More	58	8.3	113	11.9	86	13.9	137	16.1
Dwell-Time[2]*								
Less than 12 Months	21	3.0	32	3.4	12	1.9	10	1.2
12 to 24 Months	121	17.2	232	24.5	146	23.6	134	15.8
More than 24 Months	83	11.8	104	11.0	93	15.0	146	17.2
1st Deployment/Unknown	477	67.9	578	61.1	368	59.5	559	65.8
*Time in Theater**								
6 Months or Less	441	62.8	530	56.0	505	81.6	766	90.2
7 to 12 Months	236	33.6	393	41.5	76	12.3	66	7.8
More than 12 months	8	1.1	0	0.0	10	1.6	0	0.0
Unknown	17	2.4	23	2.4	28	4.5	17	2.0
*Days Outside FOB**								
15 or Less	410	58.4	460	48.6	342	55.3	429	50.5
More than 15	259	36.9	438	46.3	213	34.4	388	45.7
Unknown	33	4.7	48	5.1	64	10.3	32	3.8

* Differs Significantly Across Years

[1] 35 additional cases were added since the J-MHAT 7 report

[2] Values exclude National Guard and Reserve Soldiers

Table 4.1 provides details on selected demographic variables for the MHAT 9 maneuver unit sample compared to the previous three MHAT Army maneuver unit samples (2009, 2010, and 2012). The four samples show significant differences across the four MHATs on most key demographic variables included in Table 4.1. Specifically, the J-MHAT 7 and J-MHAT 8 samples had (a) more National Guard Soldiers, (b) fewer married/separated Soldiers, (c) more Soldiers in the 25-29 year old age category, and (d) more Soldiers with multiple deployments. For Soldiers reporting multiple deployments, dwell-time after the last deployment increased progressively with each subsequent MHAT. Finally, the J-MHAT 7 and MHAT 9 samples spent

less time in theater and outside of the unit's main Forward Operating Base (FOB) than the other samples.

The change related to time in theater reflects the change in deployment lengths from 12 months to 9 months in January 2012. As described in section 2.3.1, time in theater is controlled statistically to normalize the data.

Dwell time is only reported for active component Soldiers as policies related to dwell time are different for National Guard and Reserve Soldiers. Marital status was not statistically controlled across years since a series of models controlling for both rank and marital status found no evidence that marital status is a consistent predictor of key outcomes such as behavioral health symptoms. Several variables such as age and deployment history were not controlled for because they are strongly correlated with rank. When looking at the total MHAT database, no apparent differences in key behavioral health outcomes emerge between reserve and active component Soldiers while deployed.

5 RESULTS: WELL-BEING INDICES

Behavioral health well-being indices provide an overview of the well-being of the deployed force. This section reviews a variety of measures and compares them to OEF MHAT data collected since 2009. The standard figure used in this section provides:

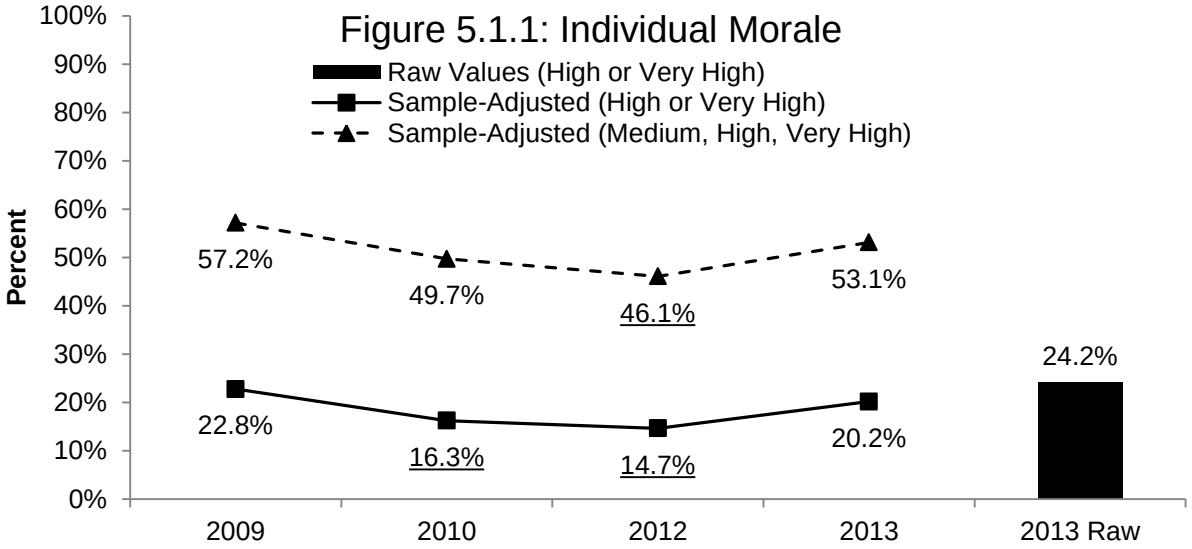
1. Across-year comparisons represent sample-adjusted maneuver unit values for each of the last three OEF MHATs compared to MHAT 9. Unless specifically noted, adjusted values represent male E1-E4 Soldiers in theater for 7 months. Junior enlisted Soldiers are the appropriate level to normalize data as they represent the majority of Soldiers in maneuver units. Values that significantly differ from MHAT 9 values are underlined. All across-year comparisons are adjusted values unless specifically noted.

2. Raw 2013 values include all maneuver unit survey responses without adjustment for rank and time in theater and allow one to compare the overall population with sample-adjusted maneuver unit values. A sample adjusted value that is lower than a raw value, for example, indicates that rank has an effect, therefore including NCOs and Officers increases the raw value compared to the adjusted value.

5.1 Morale

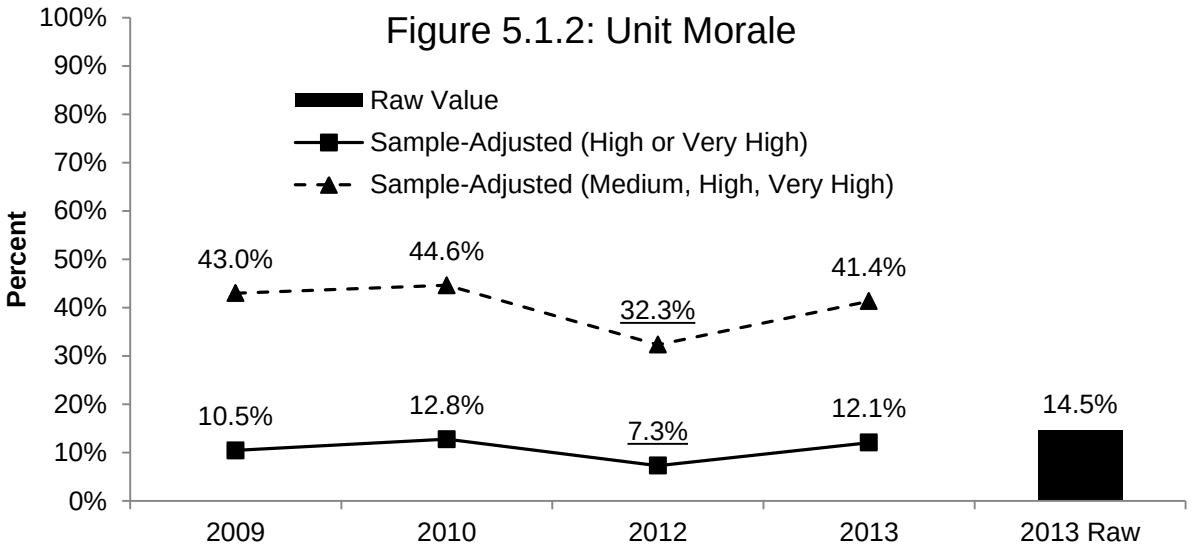
5.1.1 Individual Morale

Figure 5.1.1 provides the sample-adjusted percent of Soldiers who report (a) high or very high individual morale (■--■), and (b) medium, high and very high individual morale (▲- -▲). Individual morale in 2013 is significantly higher than the values reported in 2010 and 2012, but is similar to individual morale reported in 2009. The differences in individual morale in 2013 relative to 2010 and 2012 may reflect differences in combat experiences during those 2 years, in that those were the years with the highest combat experience levels. The raw value for high/very high individual morale in 2013 is higher than the 2013 sample-adjusted value and reflects that NCOs and Officers reported higher individual morale. The adjusted value "normalizes" their responses to that of a junior enlisted Soldier.



5.1.2 Unit Morale

Figure 5.1.2 provides the sample-adjusted percent of Soldiers who report (a) high or very high unit morale (■--■), and (b) medium, high and very high unit morale (▲- -▲). Overall, unit morale appears to be fairly stable across MHATs. The values for 2013 are significantly higher than the values reported in 2012, but are similar to the levels reported in the other MHATs. The sample-adjusted values for unit morale appear to reflect the sample-adjusted ratings of officer leadership across MHATs (see Figure 7.2a). Across focus groups, positive morale was primarily attributed to the 9-month deployment length, and to a lesser extent, quality of life during deployment.

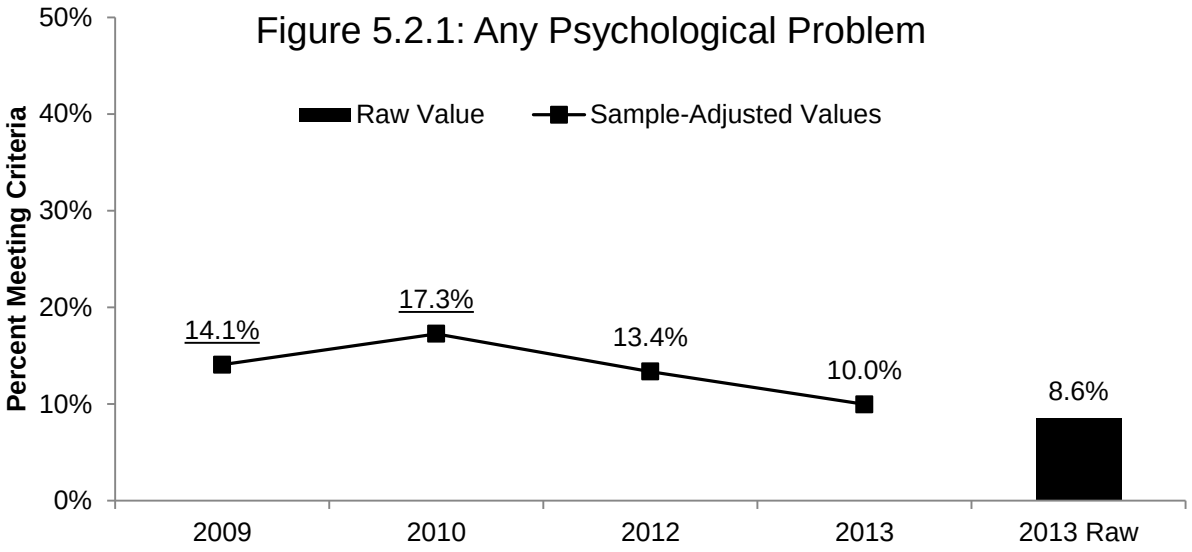


5.2 Behavioral Health: Acute Stress, Depression and Anxiety

Soldiers' ratings of depression, generalized anxiety and acute stress (i.e., symptoms of post-traumatic stress) were assessed using standardized, validated scales, including the PTSD Checklist (PCL), Patient Health Questionnaire-9 (PHQ-9) and Generalized Anxiety Disorder scale (GAD-7) (Bliese et al., 2008; Hoge et al., 2004; Spitzer, Kroenke, & Williams, 1999; Weathers, Litz, Herman, Huska, & Keane, 1993). These scales are not diagnostic, rather standardized, validated scales that measure whether a Soldier reports symptoms consistent with the DSM-IV-TR criteria (American Psychiatric Association, 2000) for each diagnosis. Additionally, for depression and anxiety, Soldiers must report impairment in their work or in ability to get along with other people at a "very difficult" level; and for acute stress Soldiers had to have a total score of ≥ 50 on the PCL. Details on scoring specific scales are available in previous MHAT reports and consistent with other research in US Soldiers (Hoge et al., 2004).

5.2.1 Behavioral Health: Any Psychological Problem

The percent of Soldiers meeting criteria for any psychological problem (acute stress, depression or anxiety) in 2013 is the lowest reported in the ATO since the random cluster-based sampling strategy was implemented and is significantly lower than in 2009 and 2010 (see Figure 5.2.1).



5.2.2 Acute Stress, Depression and Anxiety

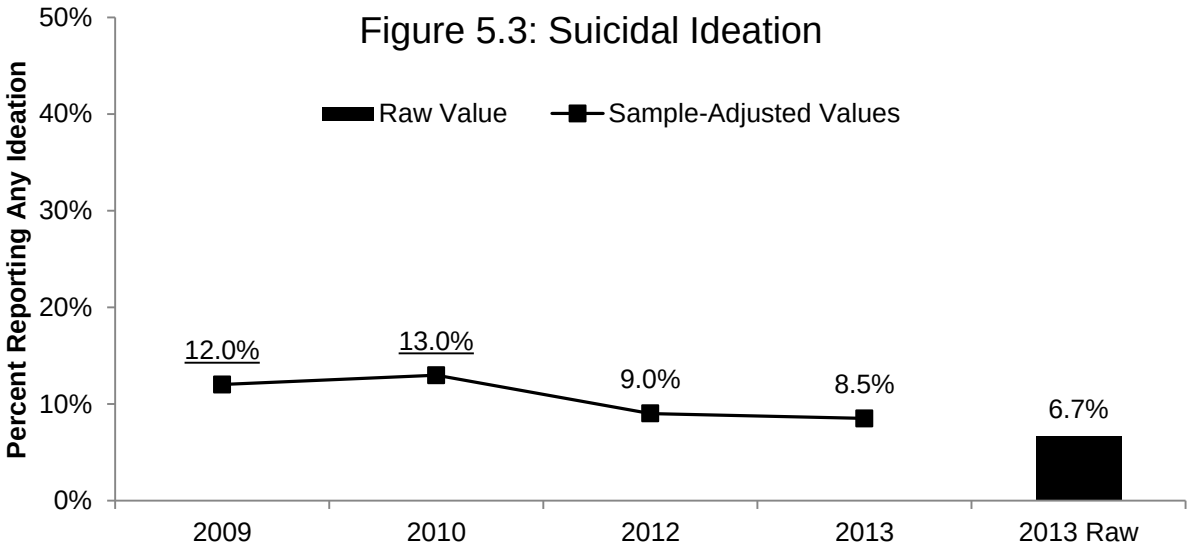
The prevalence rates of meeting criteria for acute stress, depression and anxiety are provided in Table 5.2.2. The rates for all three mental health indicators are at the lowest levels seen across all four MHATs. The rates of meeting criteria for acute stress, depression, and anxiety seen in 2013 differ significantly from the rates seen in 2010.

Table 5.2.2 Raw Values and Sample-Adjusted Values for Male, E1-E4 Soldiers in Theater 7 Months

	Sample-Adjusted Percent Meeting Criteria				Raw Value
Mental Health Indicator	MHAT 6 2009	J-MHAT 7 2010	J-MHAT 8 2012	MHAT 9 2013	2013
Acute Stress	11.4%	14.9%	11.2%	8.5%	7.6%
Depression	5.0%	6.5%	3.8%	3.1%	2.2%
Anxiety	4.9%	7.0%	5.5%	3.3%	2.2%

5.3 Suicidal Ideation

Suicidal ideation was assessed using a single item in the depression scale on the MHAT 9 OEF survey. This item [item 9 of the Patient Health Questionnaire (Spitzer et al., 1999)] asked Soldiers if they have been bothered by thoughts "that they would be better off dead or of hurting themselves in some way" over the last four weeks. For the purposes of this report, any response other than "Not at all" was considered a positive response. Figure 5.3 shows that the 2013 rate of Soldiers reporting suicidal ideation is the lowest ever measured in the ATO and differs significantly from the rates reported in 2009 and 2010.



5.4 Medications for Mental Health Problems

In the four MHATs reported here, respondents were asked "Have you taken any medication for a mental health or combat stress problem during this deployment?" For MHAT 9, 2.6% of the Soldiers who responded to the survey indicated that they have taken medication for a mental health or combat stress problem during this deployment, compared to 1.8% in 2012, 3.5% in 2010, and 2.6% in 2009 (a non-significant difference). As a point of reference, Olfson and Marcus (2009) reported rates of antidepressant medications use from nationally representative probability samples collected in 1996 and 2005. Based on those data, the rate of antidepressant use for (a) 21-34 year old (b) males who were (c) employed with (d) health insurance was 2.28% in 1996 and 4.59% in 2005. The values reported in the last four MHATs (2009, 2010, 2012, and 2013) fall well within the national estimates for this demographic group.

5.5 Anger

Soldiers' ratings of anger are reflected in questions about anger directed towards others in the unit. The percentages of Soldiers who report a) yelling or shouting at others, b) kicking/ smashing/slamming/punching inanimate objects, c) threatening others with violence, and d) getting into fights at least once in the past month are presented in Table 5.5.

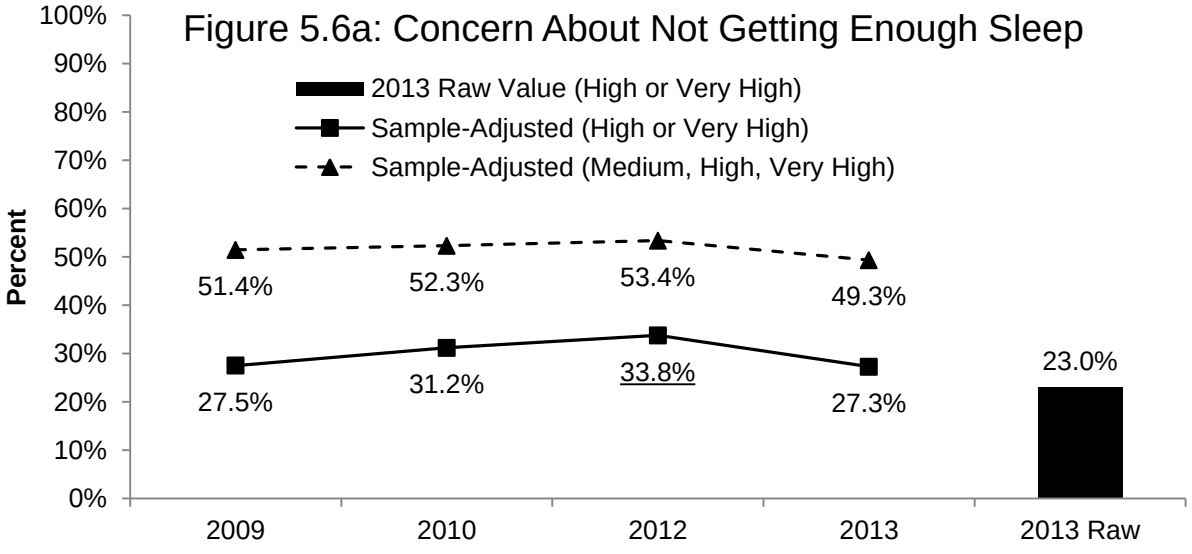
In general, the levels of anger reported by Soldiers in 2013 were the lowest reported across the four MHATs. Soldiers were significantly less likely to threaten someone in their unit with physical violence than in all previous years. Similarly, Soldiers in 2013 reported the lowest levels of getting angry with someone in their unit leading to yelling or shouting at someone when compared to 2009 and 2010. Finally, Soldiers in 2013 reported the lowest levels of getting into a fight with and hitting someone in their unit across MHATs. The difference was only significant when comparing 2013 to 2009.

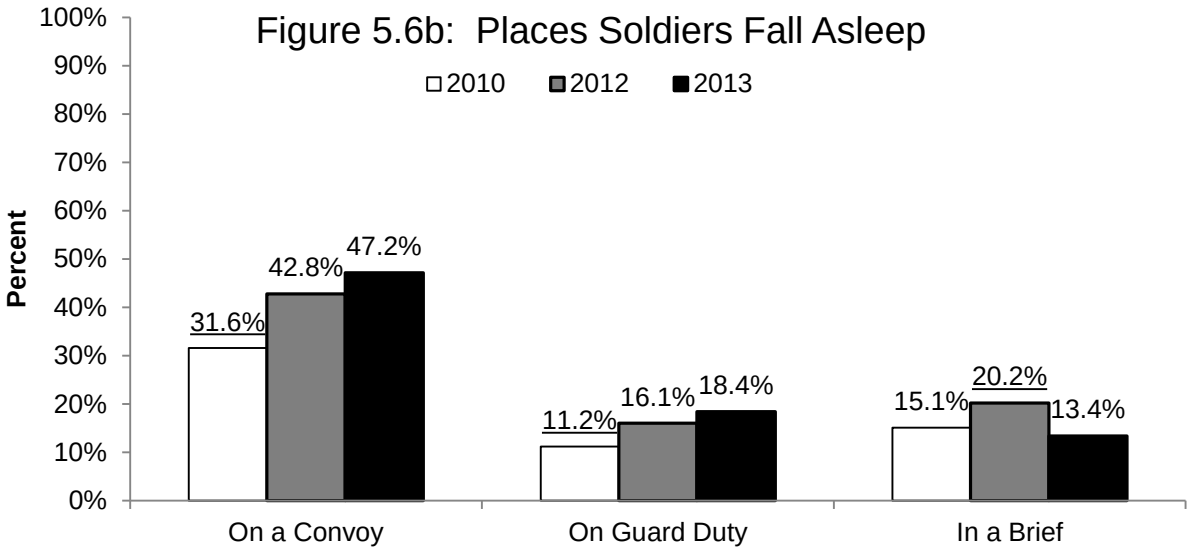
Table 5.5: Raw Values and Sample-Adjusted Percents for Male, E1-E4 Soldiers in Theater 7 Months

Survey Item	Percent reporting at least once in the past month across MHATs				Raw Value
	MHAT 6 2009	J-MHAT 7 2010	J-MHAT 8 2012	MHAT 9 2013	2013
Get angry at someone in your unit and yell or shout at them	70.2%	66.9%	63.2%	60.4%	63.8%
Get angry with someone in your unit and kick or smash something, slam the door, punch the wall, etc.	35.6%	36.2%	31.2%	32.8%	30.5%
Threaten someone in your unit with physical violence	36.6%	31.8%	26.2%	21.4%	18.8%
Get into a fight with someone in your unit and hit the person	9.8%	8.3%	8.3%	6.7%	4.9%

5.6 Sleep

Not getting enough sleep remains one of the most commonly reported concerns in 2013 for Soldiers during deployment (see Table 6.4). Nearly 25% of Soldiers reported being concerned about not getting enough sleep in 2013. The rate, however, is the lowest seen in the last four MHATs and is significantly lower than the rates reported in 2012 (see Figure 5.6a). Nevertheless, 13.4% of Soldiers still reported falling asleep sitting in briefings, 18.4% reported falling asleep on guard duty, and 47.2% reported falling asleep riding in convoys (see Figure 5.6b).





5.6.1 Factors Impacting Sleep

Table 5.6.1 shows the sample-adjusted percentage of Soldiers who reported that their sleep was disturbed more than half of the last 30 nights by a variety of factors. This item was not included in MHAT 6, so comparisons are only made between J-MHAT 7 and J-MHAT 8.

Table 5.6.1: Raw Values and Sample-Adjusted Percents for Male, E1-E4 Soldiers in Theater 7 Months

Factors Impacting Sleep	Percent reporting more than half the nights in the past 30 nights		
	J-MHAT 7 2010	J-MHAT 8 2012	MHAT 9 2013
Nighttime duties	32.6%	39.7%	31.8%
Poor sleep environment	34.5%	31.0%	26.7%
High OPTEMPO	15.4%	21.7%	16.0%
Stress related to personal life and problems	12.4%	12.5%	14.4%
Other	10.5%	12.4%	8.8%
Stress related to combat	10.0%	9.0%	8.7%
Off-duty leisure activities	4.9%	6.2%	5.0%
Illness	2.5%	3.8%	3.0%

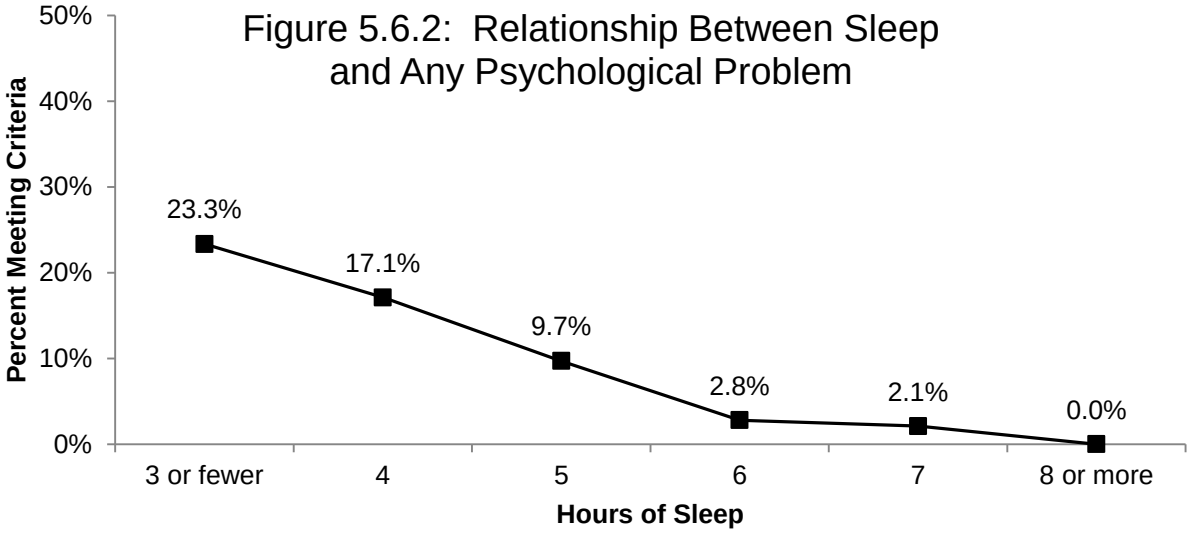
The most frequently reported causes of sleep disturbances continue to be related to nighttime duties, poor sleep environment, and high Operations Tempo (OPTEMPO). The levels reported for MHAT 9, however, are significantly lower than the levels reported in J-MHAT 8 for nighttime duties and high OPTEMPO. Stress related to personal life and problems continues to interfere with sleep (14.4%) at a higher rate than stress related to combat (8.7%). This finding underscores the degree to which concerns about family and other aspects of a Soldier's

personal life impact deployed Soldiers and may reflect a mature theater with excellent communication resources. This finding is consistent with comments made by behavioral health providers who reported seeing many problems attributable to noncombat, personal life issues.

5.6.2 Relationship of Sleep to Behavioral Health

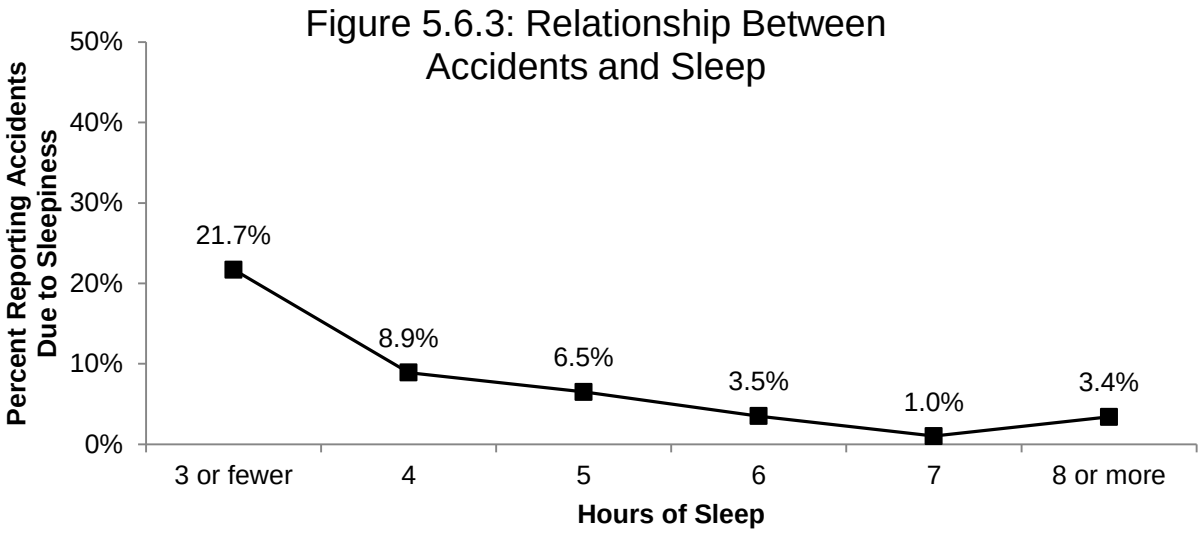
Soldiers who had high or very high concern about not getting enough sleep also reported getting significantly fewer hours of sleep (4-5 hours per day) than Soldiers who were less concerned about not getting enough sleep (5-6 hours per day). These two groups did not differ in terms of the number of hours of sleep they reported needing per day in order to feel well-rested (6-7 hours per day).

Soldiers who had high or very high concern about not getting enough sleep were significantly more likely (21%) to meet criteria for any psychological problem (acute stress, depression, or anxiety) than Soldiers who were less concerned about getting enough sleep (5%). A significant linear relationship exists between hours of sleep reported per day and the likelihood of meeting screening criteria for any psychological problem (see Figure 5.6.2). The same pattern exists for hours of sleep reported and ratings of overall health and are consistent with recent data demonstrating that very short sleep duration and poor sleep quality are associated with increased odds of behavioral health issues (Swinkels et al., 2013).



5.6.3 Relationship of Sleep to Accidents and Mistakes

The percentage of Soldiers who reported making a mistake or having an accident due to sleepiness has remained fairly stable since 2009. In 2013, approximately 12.5% of the Soldiers who responded to the MHAT survey reported having had an accident or making a mistake that affected the mission. More than half of the Soldiers who reported making a mistake or having an accident during this deployment attributed it to sleepiness. A significant linear relationship exists between hours of sleep reported per day and the likelihood of making a mistake or having an accident during deployment (see Figure 5.6.3). These findings suggest that lack of sleep remains a concern in theater that impacts both behavioral health and performance.



5.7 Medications for Sleep Problems

In the four MHATs reported here, respondents were asked "Have you taken any medication for a sleep problem during this deployment?" For MHAT 9, 11.4% of the Soldiers who responded to the survey indicated that they have taken medication for a sleep problem during this deployment compared to 6.4% in 2012, 11.3% in 2010, and 9.6% in 2009 (2012 is significantly lower than 2010, but no other differences are significant). In 2013, less than 20% of the Soldiers who had high or very high concern caused by not getting enough sleep reported taking medication for a sleep problem during this deployment. As a point of reference, the National Sleep Foundation 2011 Sleep in America poll found that roughly ten percent of Americans use sleep medication as a sleeping aid (National Sleep Foundation, 2011).

5.8 Concussion Evaluation

Concussions and blast events continue to be a relevant threat for Soldiers in Afghanistan. The threat of blast exposure is a combat related stressor that can influence behavioral health. Given the strong association between blast exposure, concussions, high return-to-duty rates following concussion, and behavioral health symptoms, the frequency of concussion evaluation was assessed in MHAT 9.

The rates of exposure to a variety of blast-related events are presented in Table 5.8. Exposure rates are lower in 2013 than in 2012, but only "within 50 meters…" and "physically moved…" are significantly less frequent in 2013. Table 5.8 also shows the percent of Soldiers who reported being evaluated for a traumatic brain injury (TBI) or concussion by a medic/corpsman among those Soldiers who reported exposure. For example, among the 5.7% of Soldiers who reported being knocked out at least once during deployment, 75.0% of these reported receiving an evaluation. The overall percent of Soldiers who reported being evaluated for a TBI or concussion increased from 2012 to 2013, but was statistically significant only for those reporting "within 50 meters…" and "physically moved…".

According to the Department of Defense Instruction 6490.11 (2012), when a blast exposure occurs, medical evaluation for mTBI should occur as close to the time of injury as possible. Ideally, the initial assessment would be made by the unit's medic, unless the Soldier had more serious injuries requiring immediate medical evacuation.

Table 5.8: Percent Exposure to Blast-Related Events and Percent Reporting Being Evaluated By A Medic/Corpsman

Blast-Related Event During This Deployment	J-MHAT 8		MHAT 9	
	Percent Exposed	Percent Evaluated	Percent Exposed	Percent Evaluated
Within 50 meters of blast while dismounted	42.8%	20.2%	35.9%	29.2%
Physically moved or knocked over by explosion	20.2%	40.0%	15.6%	55.7%
Injury involving being dazed, confused, or "seeing stars"	9.2%	62.5%	10.6%	63.4%
Inside vehicle damaged in a blast	11.2%	60.7%	8.2%	73.4%
Knocked out (lost consciousness)	4.3%	73.9%	5.7%	75.0%
Injury involving losing consciousness	3.5%	77.8%	3.6%	92.9%

It is important to note, that when the blast-related events in Table 5.8 reflect closer proximity to a blast (e.g. "Inside a vehicle damaged by blast" or "knocked out…"), the more likely Soldiers were to report being evaluated by a medic. Events more distal to a blast (e.g., "within 50 meters of a blast …") were reported more frequently, but Soldiers were also less likely to report being evaluated by a medic. This suggests that the evaluation criteria regarding distance from blast should be refined as this standard may be overly conservative and may not be feasible at the point of injury for a medic who may be dealing with more life-threatening injuries.

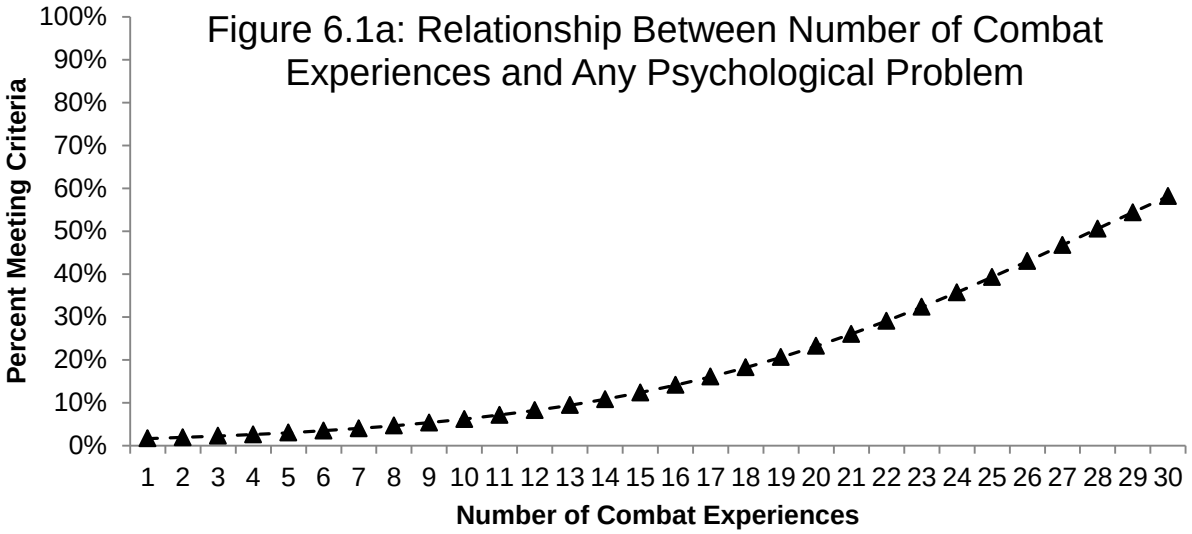
6 RESULTS: RISK FACTORS

It is useful to categorize Soldier risk factors into four broad classes: combat-related risk factors, OPTEMPO-related risk factors, deployment concerns, and relationship problems. Changes in behavioral health indices are associated with changes in these four risk factor categories.

6.1 Combat Experiences

Exposure to potentially traumatic experiences is one of the principal risk factors for behavioral health problems in combat settings (Fontana & Rosenheck, 1998). Thirty combat experience items have been consistently assessed across MHATs. As would be expected, there is a dose-dependent relationship between levels of combat experiences and well-being indices. For MHAT 9, this relationship is clearly demonstrated for the percentage of Soldiers meeting screening criteria for any psychological problem (see Figure 6.1a).

Figure 6.1a: Relationship Between Number of Combat Experiences and Any Psychological Problem



A total combat experience score is calculated by summing the number of items a Soldier experienced at least once and provides an efficient way to measure changes in combat experiences across years. Figure 6.1b provides a comparison of the sample-adjusted mean number of combat experiences from 2009 to 2013. The overall level of combat experiences reported by Soldiers in 2013 is significantly lower than the levels reported in 2010 and 2012, but significantly higher than the level reported in 2009.

Fontana and Rosenheck (1998) suggest that it is useful to categorize combat experiences into five dimensions: 1) fighting, 2) killing, 3) threat to oneself, 4) death/injury of others, and 5) atrocities. Wilk and colleagues (2010) showed that combat items such as those asked on the MHAT survey can be reliably categorized into the five dimensions and that these dimensions are useful in terms of predicting behavioral health outcomes.

Figure 6.1b: Total Combat Experiences
Average Sum Scores Across Years

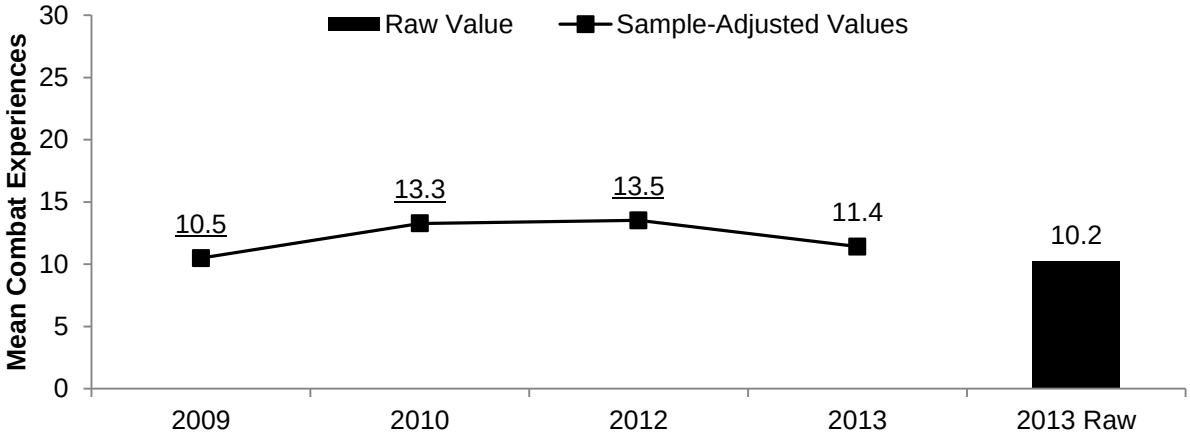


Table 6.1a provides a representative item from four of the five dimensions identified by Fontana and Rosenheck (1998) across time. For Threat, the percentage of Soldiers experiencing the dimension at least once was significantly lower than in 2012, but significantly higher than 2009. For Fighting, the percentage of Soldiers who reported experiencing these dimensions at least once was significantly lower than in 2010 and 2012 and had returned to levels comparable to the levels seen in 2009. For Killing, the percentage of Soldiers experiencing the dimension at least once was significantly lower than in 2009 and 2010, but comparable to the levels seen in 2012. Finally, for Death, the percentage of Soldiers experiencing the dimension at least once was significantly lower than in 2010 and 2012, but significantly higher than 2009.

The types of combat experiences reported also have changed across MHATs, reflecting the change in roles from combat to advise and assist. The five most frequently reported combat experiences across MHATs are presented in Table 6.1b.

Table 6.1a: Sample-Adjusted Percents for Male, E1-E4 Soldiers in Theater 7 Months for Representative Combat Experiences

Combat Experience	MHAT 6 2009	J-MHAT 7 2010	J-MHAT 8 2012	MHAT 9 2013
Threat: IED Exploded Near You	39.3%	52.6%	64.7%	53.4%
Fighting: Shooting at Enemy	48.5%	70.1%	55.6%	48.7%
Killing: Responsible for Death of Combatant	25.3%	37.7%	23.5%	19.8%
Death: Member of Unit Became Casualty	50.1%	61.8%	65.9%	56.0%

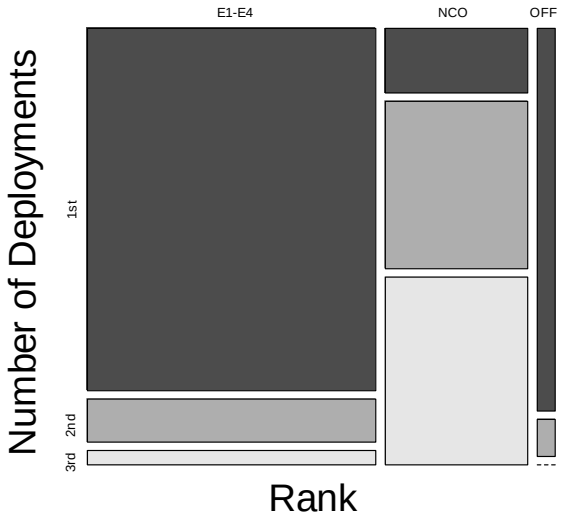
Table 6.1b: Rank Relative to MHAT 9 (Percent Experienced) of Most Frequent Combat Experiences Across MHATs

Combat Experience	MHAT 6 2009	J-MHAT 7 2010	J-MHAT 8 2012	MHAT 9 2013
	Rank (%)	Rank (%)	Rank (%)	Rank (%)
Working in areas that were mined or had IEDs	2 (63%)	2 (81%)	1 (87%)	**1** (85%)
Receiving small arms fire	5 (50%)	4 (77%)	5 (67%)	**2** (68%)
Knowing someone seriously injured or killed	4 (54%)	5 (73%)	3 (74%)	**3** (66%)
Being attacked or ambushed	3 (60%)	3 (78%)	4 (68%)	**4** (66%)
Receiving incoming artillery, rocket, or mortar fire	1 (82%)	1 (85%)	2 (75%)	**5** (65%)

6.2 OPTEMPO Factors: Multiple Deployments

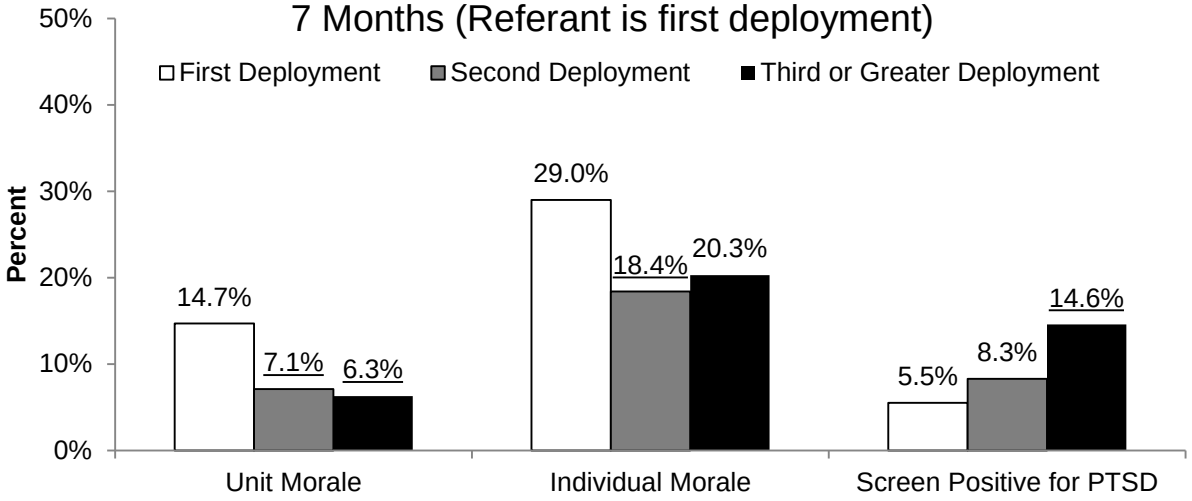
Table 4.1 in section 4 provides a breakdown of the 2013 sample of Soldiers in terms of rank and multiple deployments status. The percentage of first-time deployers seen in 2013 (64.3%) is significantly larger than in 2012 (57.7%). As with previous years, however, Soldiers in the multiple-deployer group are predominately NCOs. Specifically, NCOs constitute 7.7% of the first-time deployer group, 63.9% of those on their second deployment and 86.3% of those on their third or fourth deployment.

Figure 6.2a is a mosaic plot showing deployment status (first deployment, second deployment and third or more deployments) by rank. Notice that there are relatively few first time deployers among the NCO group and a relatively large number of first-time deployers among the other groups.



Previous MHATs identified multiple deployments as a risk factor for a variety of well-being indices. For NCOs, there is a significant relationship for multiple deployments on individual morale, unit morale, and meeting screening criteria for PTSD. Specifically, NCOs with multiple deployments have significantly lower morale and are significantly more likely to meet the screening criteria for PTSD than NCOs on their first deployment.

Figure 6.2b: Sample-Adjusted Values for NCOs in Theater 7 Months (Referant is first deployment)



6.3 OPTEMPO: Months Deployed

Previous MHAT reports have consistently shown that months deployed are related to a variety of risk factors and behavioral health indices. In MHAT 9, the mean number of months deployed was approximately 5 months. As would be expected, there was a significant, positive correlation between number of months deployed and combat exposure. Similarly, there was a significant, positive correlation between number of months deployed and meeting screening criteria for any psychological problem. Conversely, there was a significant, negative correlation between morale and months deployed. As noted in section 2.3.1, time in theater and rank are used as predictors throughout the analyses to provide a means of estimating adjusted values and normalizing raw data to that expected for E1-E4 with 7 months time in theater.

6.4 Deployment Concerns

Combat experiences are intense events that put Soldiers at risk. Other less traumatic stresses occur in the operational environment that can also adversely impact behavioral health (Thomas, Britt, Odle-Dusseau, & Bliese, 2011). Historically, MHAT surveys assess the core set of 11 deployment concerns listed in Table 6.4. The rates of concern expressed in 2013 are significantly lower than in previous MHATs for all of the items with the exception of “boring and repetitive work,” “lack of privacy/personal space,” and “illness or problems back home.” It is particularly noteworthy that the percentage of Soldiers highly or very highly concerned about deployment length has dropped to approximately 6%, reflecting the benefit of reducing deployment length to 9 months. Soldiers in focus groups universally pointed to deployment length as the primary reason for the rise in morale.

MHAT 9 also evaluated a concern raised during focus groups conducted in 2012. During J-MHAT 8, Soldiers expressed concern about working with Afghan National Security Forces (ANSF). In MHAT 9, 26.6% of Soldiers surveyed were highly or very highly concerned about "working with Afghan National Security Forces" (ANSF). As would be expected, Soldiers who rated their immediate supervisor and company officers as effective or very effective at interacting with the local Afghan population also reported significantly less concern about working with the ANSF.

Table 6.4: Sample-Adjusted Percents for E1-E4 Soldiers in Theater 7 Months.

Trouble or Concern Caused By	MHAT 6 2009	J-MHAT 7 2010	J-MHAT 8 2012	MHAT 9 2013
Boring and repetitive work.	32.7%	36.3%	31.4%	31.6%
Uncertain redeployment date.	26.6%	25.2%	38.6%	28.7%
Lack of time off, for personal time.	36.1%	34.1%	37.8%	28.6%
Lack of privacy or personal space.	35.8%	37.9%	26.4%	28.0%
Not getting enough sleep.	27.5%	31.2%	33.8%	27.3%
Continuous operations.	26.6%	26.6%	32.6%	25.3%
Being separated from family.	30.4%	31.5%	30.5%	22.7%
Not having the right equipment or repair parts.	23.9%	24.1%	30.8%	19.5%
Illness or problems back home.	13.1%	15.1%	17.7%	13.5%
Difficulties communicating back home.	18.8%	23.7%	17.4%	11.3%
Long deployment length.	24.4%	26.3%	12.0%	6.4%
Working with Afghan National Security Forces.	-----	-----	-----	26.6%

Soldiers also reported concern about working with the ANSF during focus groups in 2013. With few exceptions, "working with" the ANSF was described more as working in proximity to rather than in full partnership with the ANSF. The concern was described as only having a minor impact on morale as units had incorporated techniques, tactics, and procedures for force protection in regards to green on blue incidents.

6.5 Relationship Problems

Relationship problems with spouses comprise a second major risk factor for a variety of behavioral health issues. The MHAT 9 reports two single item indices of relationship problems: 1) the percent of married Soldiers who report they are considering a divorce or separation and 2) the percent of Soldiers who endorse "yes" or "unsure" to the question of whether infidelity is a problem in their marriage. Figure 6.5a shows that the values reported in 2013 for intent to divorce (■--■) and concern about infidelity (▲- -▲) are not statistically different from the previous three years. It is important to note that the MHAT 9 survey did not assess the strength of other inter-personal relationships.

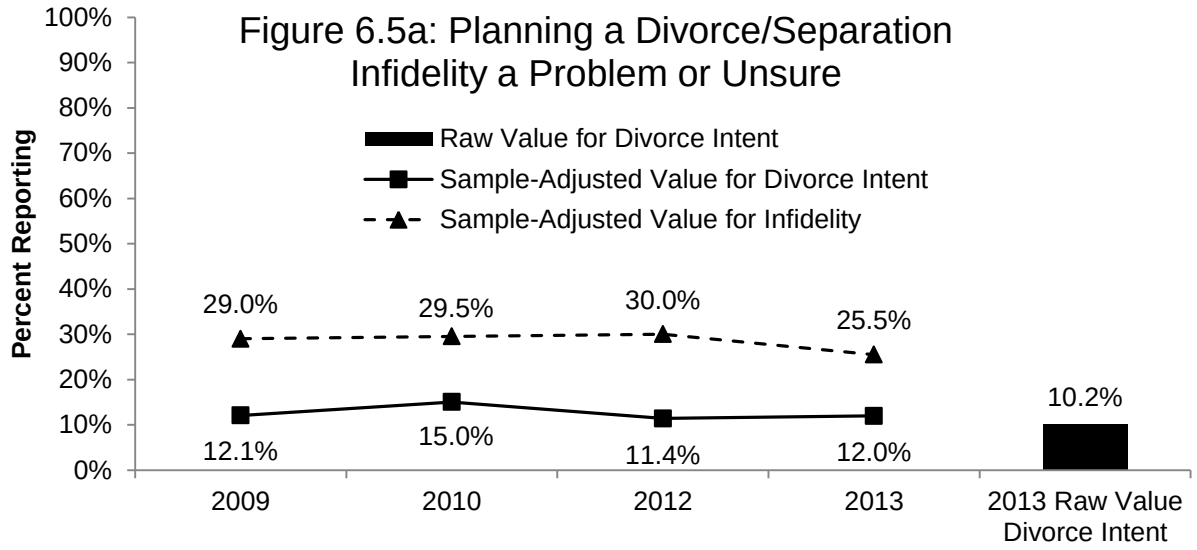
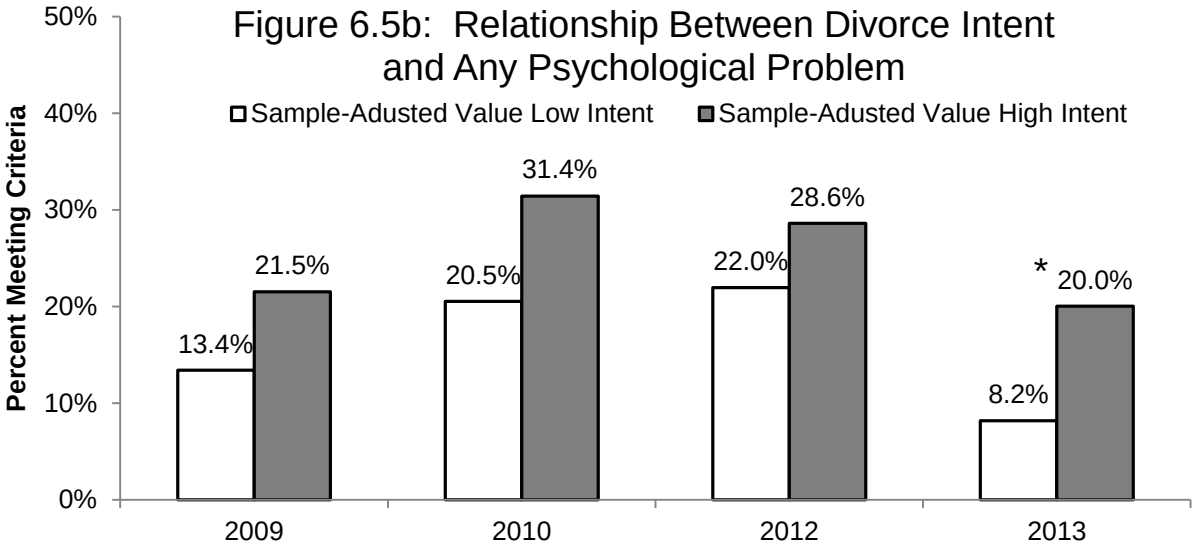


Figure 6.5b demonstrates that in 2013, Soldiers reporting a high intent to divorce or separate from their spouse also are significantly more likely to meet screening criteria for any psychological problem. Intent to divorce or separate and concern about infidelity are more extreme instances of marital relationship problems; consequently, they may not be as sensitive to changes as would less extreme questions about marital relationships.



Marital quality was assessed using three items from the Quality of Marriage Index (Norton, 1983): "I have a good marriage," "My relationship with my spouse is very stable," and "I really feel like a part of a team with my spouse" (see Figure 6.5c). Over the past four MHATs, the Quality of Marriage Index appears to be on the rise with Soldiers in MHAT 9 reporting significantly higher quality of marriage indices than in 2010. The results seen over the past four MHATs appear slightly lower than the percentages of high quality marriages seen by Riviere and colleagues (2012) in Soldiers surveyed 3 to 6 months after returning from deployment to Iraq and Afghanistan from 2003 – 2009 (ranging from 24%–37%) and demonstrate the strain of deployment on marriages.

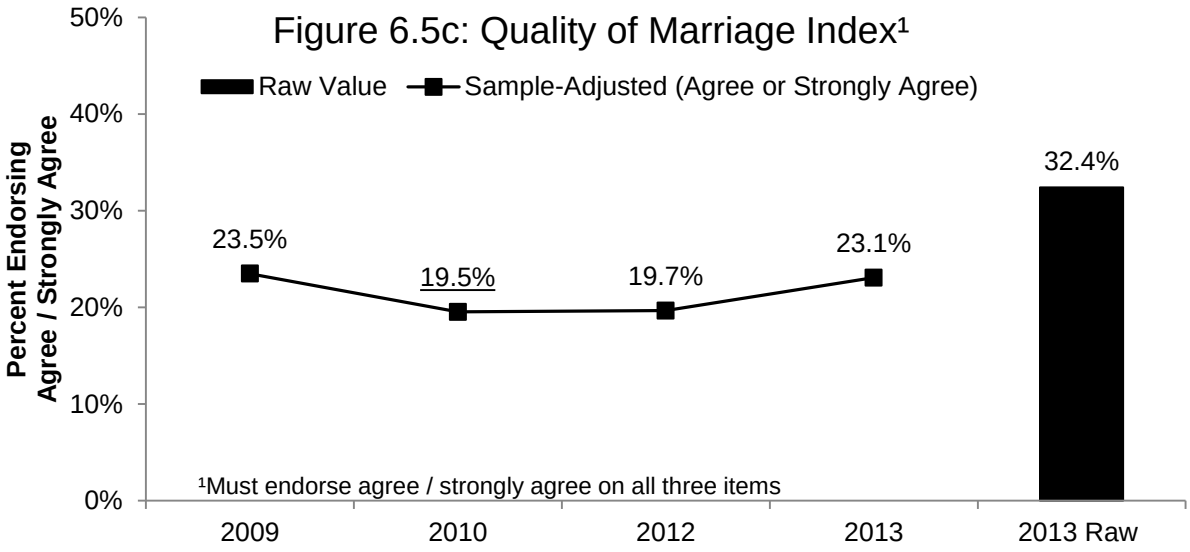


Figure 6.5c: Quality of Marriage Index[1]
Raw Value
Sample-Adjusted (Agree or Strongly Agree)
Percent Endorsing Agree / Strongly Agree
50%
40%
30%
20%
10%
0%
23.5%
19.5%
19.7%
23.1%
32.4%
[1]Must endorse agree / strongly agree on all three items
2009
2010
2012
2013
2013 Raw

7 RESULTS: PROTECTIVE FACTORS

Protective factors are the third category of variables in the Soldier Combat and Well-being Model. Protective factors contribute to resilience or the ability to persist in the face of challenges and to bounce back in the face of adversity (Reivich, Seligman, & McBride, 2011). Resilience may be associated with a number of factors to include, small unit leadership, unit climate, the willingness and ability to seek behavioral healthcare, behavioral health training, resilience training, and benefit finding.

7.1 Leadership

As directed by the CSA, the primary focus of MHAT 9 was to assess the impact of leaders on the behavioral health and well-being of deployed Soldiers. In order to augment the WRAIR leadership scales traditionally used in MHAT surveys, we collaborated with the Center for Army Leadership (CAL) to identify and include variables that reflect leadership competencies and attributes. The WRAIR leadership scales reflect small unit leadership in terms of command climate, whereas the CAL Annual Survey of Army Leadership (CASAL) leadership items reflect the quality of leadership in terms of the Leadership Requirements Model competencies and attributes. Given the impact general leadership behaviors have on unit climate and culture, we expected these measures of leadership to be highly correlated and share similar relationships with organizational effectiveness and well-being indices (Dvir, Eden, Avolio, & Shamir, 2002; Kuenzi & Schminke, 2009; Zohar & Luria, 2010).

Although there are fundamental differences in the demographics of the populations studied using the CASAL (primarily leaders ranking from E5 - O6) and the MHAT surveys (primarily E1-O3), the perspective of both populations is important for understanding the impact of leadership across a variety of outcome variables, to include organizational effectiveness (e.g., morale, unit cohesion, readiness, and career intentions) and well-being (e.g., behavioral health, sleep, and anger) indices.

We evaluated leadership at the immediate superior and company officer levels. Since the majority of the MHAT 9 sample consisted of junior enlisted Soldiers, their immediate superiors were NCOs. This is supported by the finding that the correlation between the CAL item “My immediate superior is an effective leader” and a leader competence scale created from other 2011 CASAL items was .653 at the immediate superior level. The rating of the immediate superior and the competence scale at the company officer level was .379. The difference between correlations suggests that the responses to the competence scales at the immediate superior level should approximate ratings on the WRAIR NCO Leadership scale for junior enlisted Soldiers. Focus groups with junior enlisted Soldiers confirmed that they primarily interacted with their NCOs and had little to no direct contact with company grade officers.

7.1.1 Comparison of Leadership Assessments

To assess leadership, we compiled a battery of leadership measures in collaboration with the CAL. These measures included three WRAIR leadership scales used in previous MHATs (officer effectiveness, NCO effectiveness, NCO actions to support sleep) and individual CAL scales adapted from the 2011 CASAL survey (toxic leadership, leader competence, unit effectiveness, cultural effectiveness, and expectations of Army leadership – “Be, Know, Do”). We also developed a scale based on FM 6-22.5 (Department of the Army, 2009) to address actions that NCOs should engage in to manage combat operational stress. Leader actions to support behavioral health and sleep discipline are referred to as “behavioral health leadership” and “sleep leadership” for simplicity in this report. Although the terms do not align with the

Army's definition of leadership ("leadership is the process of influencing people by providing purpose, direction, and motivation to accomplish the mission and improve the organization"), the specific leader actions enable people to accomplish the mission and improve the organization. The specific CAL and WRAIR leadership scales used in the MHAT 9 survey and a more detailed explanation of how validity was tested is presented in Appendix A.

As expected, the assessments of leadership at the immediate superior level using CAL and WRAIR items were significantly related (see Table 7.1.1a) and in the expected directions. Notably, the WRAIR NCO and combat and operational stress control (COSC) Leadership scales and the Leader Competence scale share the strongest and most consistent relationships when comparing scales at the immediate superior / NCO level.

Table 7.1.1a: Relationships Between Leadership Scales - Immediate Superior/NCO

Leadership Scales*	WRAIR Leadership Scales		
Immediate Superior	NCO Leadership	NCO Sleep Leadership	COSC Leadership
Army Leader Expectations	.466**	.338**	.472**
Leader Cultural Competency	.415**	.285**	.434**
Leader Competence	.556**	.452**	.610**
Toxic Leadership	-.454**	-.358**	-.420**

* Adapted from the 2011 CASAL items
**Correlations significant at the 0.01 level (2-tailed).

At the company officer level, the strongest and most consistent relationship seen using MHAT 9 data was between the WRAIR Officer Leadership scale and the Leader Competence scale (see Table 7.1.1b). It is also important to note that the WRAIR Officer Leadership scale was robustly related to all other leadership scales used in the survey. Overall, the WRAIR Leadership scales appear to be highly valid measures of leadership at both the Officer and NCO level when compared to the 2011 CASAL Report. The 2012 CASAL report findings were not available for inclusion when this report was written.

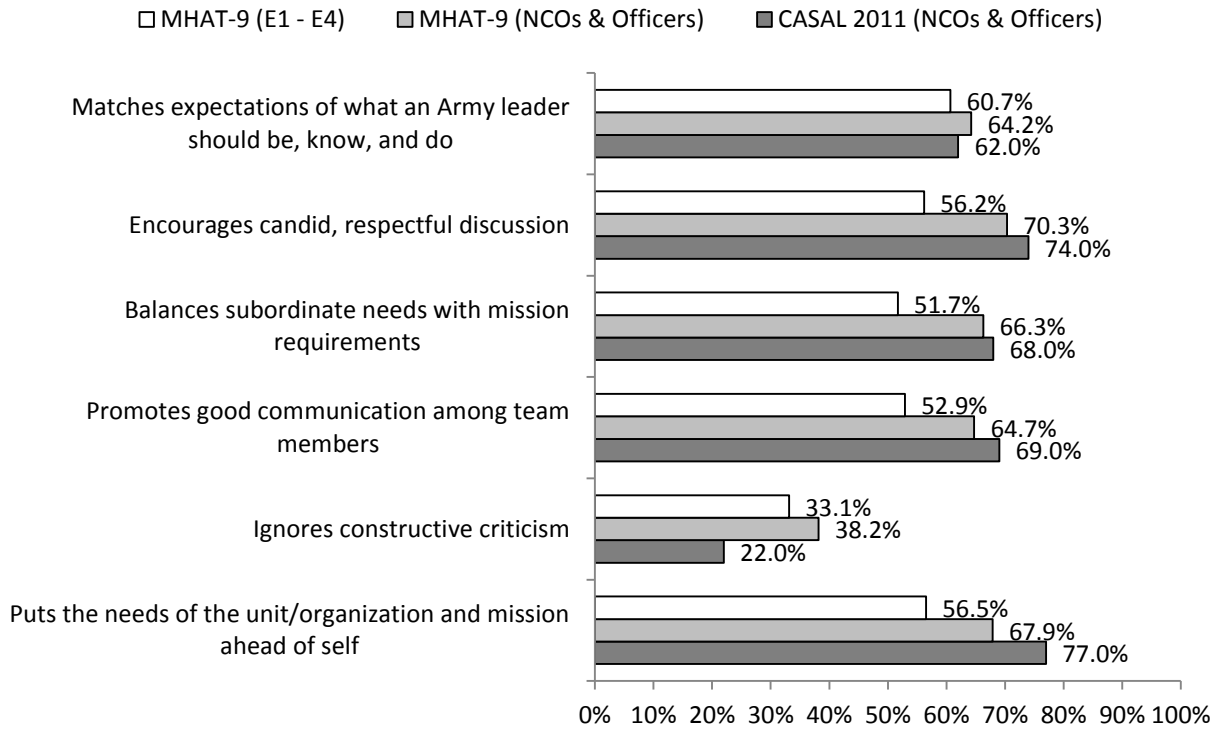
Table 7.1.1b: Relationships Between Leadership Scales - Company Officers

CAL Leadership Scales	WRAIR Leadership Scales
Company Officers	Officer Leadership
Army Leader Expectations	.575**
Leader Cultural Competency	.497**
Leader Competence	.612**
Toxic Leadership	-.599**
COSC Organizational Support	.463**

**Correlations significant at the 0.01 level (2-tailed).

At the individual item level, the levels of leadership effectiveness seen in MHAT 9 were comparable to those reported in the 2011 CASAL Report (see Figure 7.1.1). Given rank differences in the populations surveyed, the data in Figure 7.1.1 are striated to reflect the impact of including or excluding leadership ratings by junior enlisted Soldiers. When comparing the frequencies of responses from overlapping populations, the frequencies were similar, but may reflect differences in deployed versus garrison settings. Junior enlisted Soldier ratings of their immediate supervisor are generally lower than NCO and officer ratings of their immediate supervisors. Since over 65% of the MHAT 9 sample consisted of junior enlisted Soldiers, subsequent discussions of leadership include all ranks. In cases where the WRAIR Leadership scales are presented, sample-adjusted values used the junior enlisted Soldiers as the referent group.

Figure 7.1.1: Relationships Between Leadership Items (Ratings of Immediate Superior)



7.1.2 Relationships Between Leadership Scales and Outcomes

Relationships between the leadership scales and indices of organizational effectiveness reveal several patterns. All of the correlations reflected in the heat maps below (Figures 7.1.2a and b) are significant (depict strength, but not direction of correlations), with the weakest correlation being .274 between the WRAIR Officer Leadership scale and unit readiness. Conversely, the strongest correlation of .522 exists between the WRAIR NCO Leadership scale and unit cohesion. In general, all of the leadership scales were significant predictors of the organizational effectiveness indices.

Similarly, the relationships between the leadership scales and well-being indices were consistently significant and in the expected direction. When looking at the heat map in Figure 7.1.2b, the weakest correlation was .123 between the NCO Competence scale and meeting criteria for PTSD. Conversely, the strongest correlation was .339 between the Officer Competence scale and stigma related to behavioral health. Consistent with the predictive validity of the leadership scales for organizational effectiveness indices, all of the leadership scales depicted in Figure 7.1.2b were significant predictors of the well-being indices.

Figure 7.1.2a: Organizational Effectiveness Indices

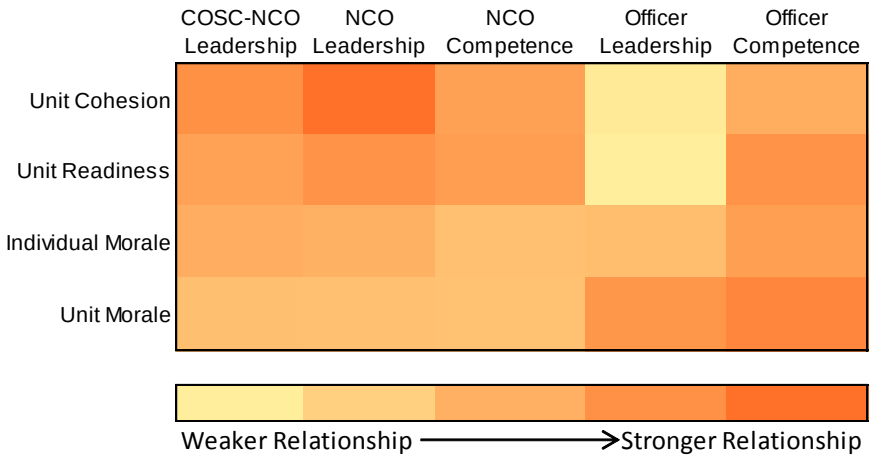
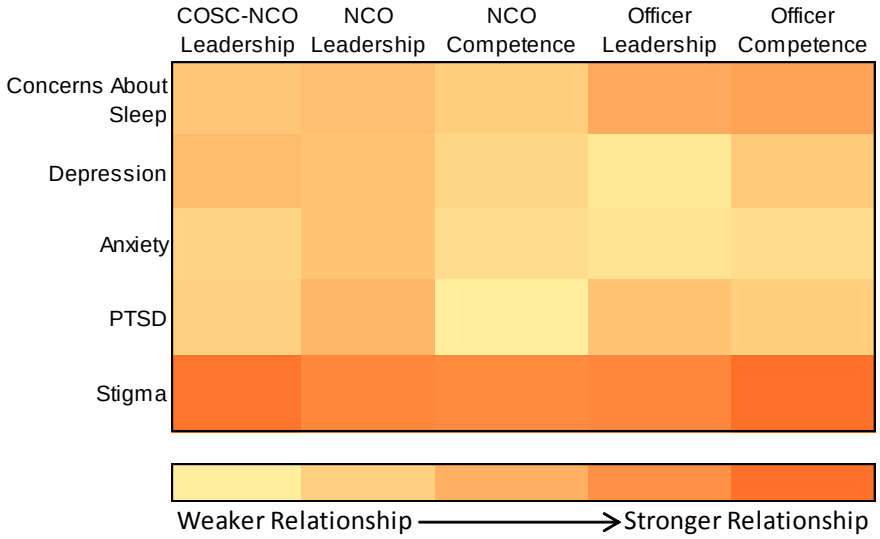


Figure 7.1.2b: Well-Being Indices



Given the robust and parallel relationships seen, all five leadership scales are presented in analyses looking at the association of small unit leadership and organizational effectiveness and well-being indices. When comparing trends over time, however, only data collected over the past four MHATs using the WRAIR NCO and Officer Leadership sales are presented.

7.2 Trends in Unit Climate

Unit factors such as small unit leadership, unit cohesion, and perceived readiness are directly related to unit well-being and often play a role in attenuating the link between deployment stressors and behavioral health outcomes (Bliese, 2006; Bliese & Castro, 2003). Figure 7.2a provides ratings for small unit leadership using the WRAIR Leadership scales. Ratings of officer leadership in 2013 were significantly higher than those seen in J-MHAT 8. Ratings of NCO leadership in 2013 were significantly higher than those seen in both MHAT 6 and J-MHAT 8.

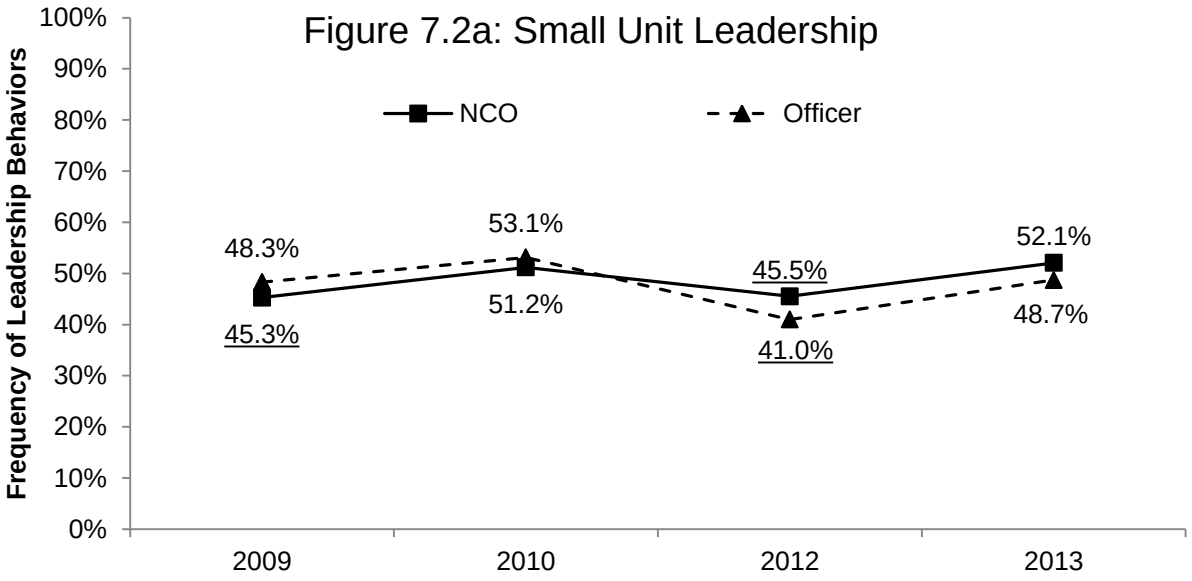
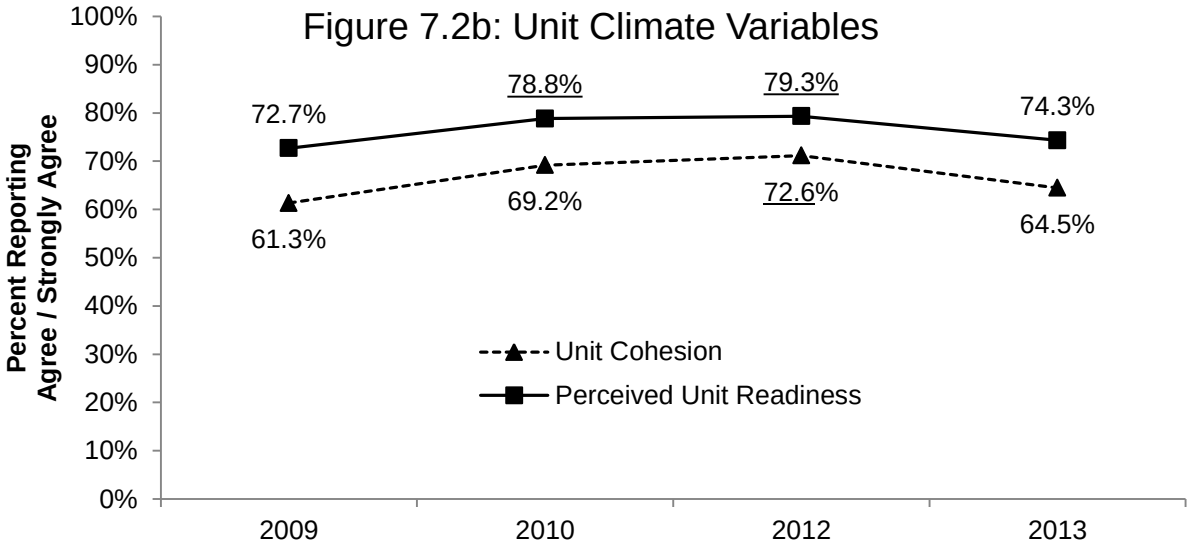


Figure 7.2b contrasts the sample-adjusted values of the two key unit factor variables (cohesion and perceived unit readiness) across years for Soldiers who agree or strongly agree with items measuring cohesion and unit readiness (e.g. platoon members stand up for each other, level of training in the platoon is high). Unit cohesion was significantly lower in 2013 than in the previous MHAT, whereas perceived unit readiness was significantly lower than in the prior two MHATs.



7.3 Leadership Linked to Behavioral Health and Organizational Effectiveness

Previous MHATs have shown the relationship between NCO leadership and Soldier well-being. As expected, ratings of leadership in 2013 were significantly correlated with unit cohesion and meeting criteria for any psychological problem (e.g., NCO leadership was significantly correlated with unit cohesion and any psychological problem (*r=.522, p <.0001* and *r=-.233, p<.0001,* respectively). In this report, we provide an alternative way to visualize the association between leadership and behavioral health and organizational effectiveness using the WRAIR NCO and Officer Leadership scales, the CAL NCO and Officer Competence scales, and the new WRAIR COSC Leadership scale (see Figures 7.3a and 7.3b) based on how leaders were rated (effective, ineffective, or neither ineffective nor effective). For example, when leaders were rated as "very ineffective" or "ineffective" leadership was categorized as ineffective. Conversely, when leaders were rated as "effective" or "very effective" leadership was categorized as effective. When leaders were rated as "neither effective nor ineffective" leadership was categorized as such. Responses of "no basis to assess" were excluded from the analysis.

Figure 7.3a: Association Between Any Psychological Problem and Leadership Effectiveness

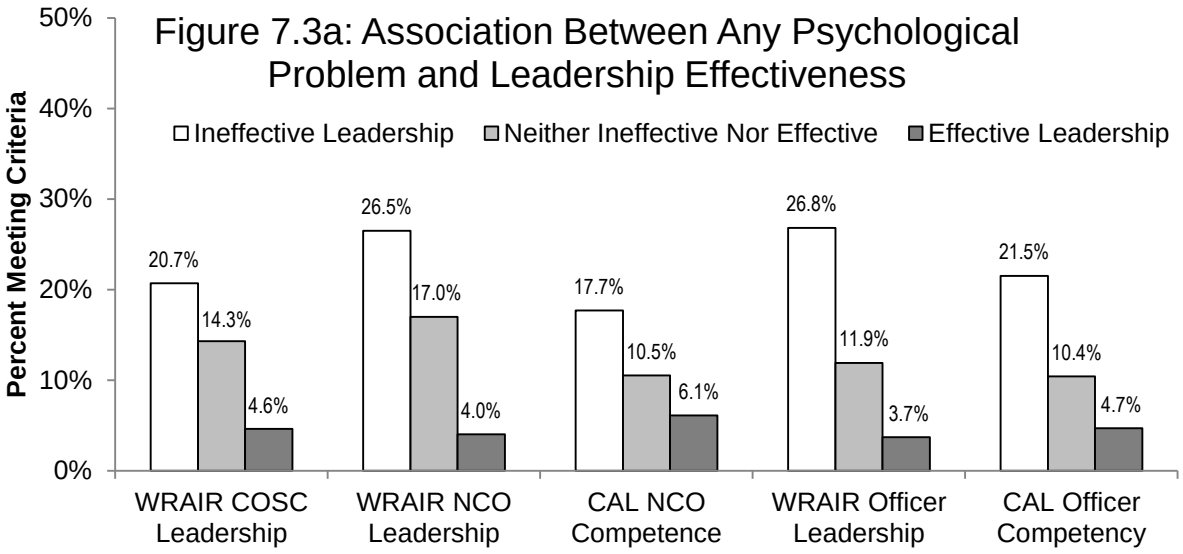
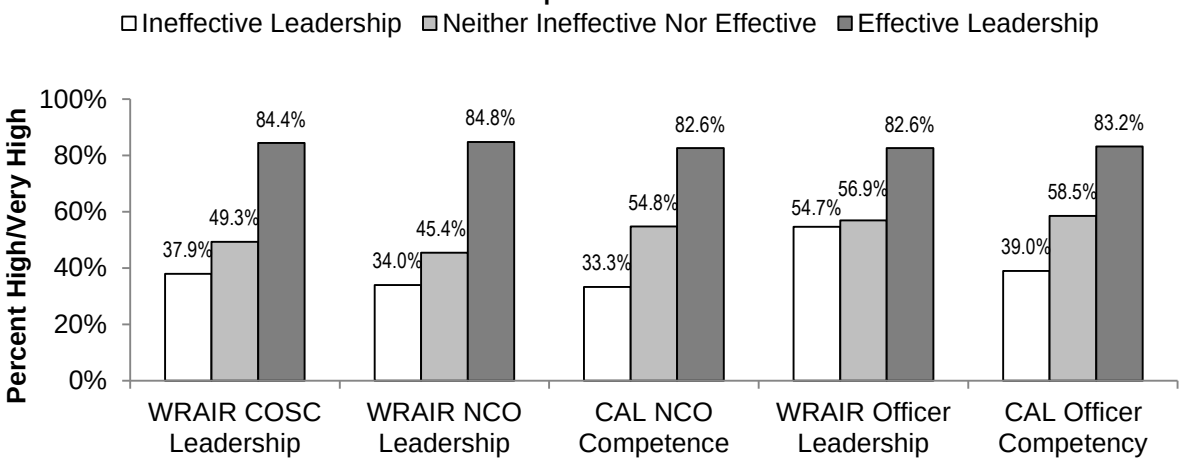


Figure 7.3.b: Association Between Unit Cohesion and Leadership Effectiveness



The association between leadership and the majority of the behavioral health and organizational effectiveness indices measured in MHAT 9 was consistent and as expected. The pattern of results is demonstrated in Figure 7.3.1 for any psychological problem (acute stress, anxiety, or depression). In general, having ineffective leadership is associated with significantly lower ratings of behavioral health and organizational effectiveness. Conversely, effective leadership is associated with improved behavioral health and organizational effectiveness. Neutral leadership results in outcomes that fall in between effective and ineffective leadership. It is important to remember that correlations do not imply causality. While ineffective leaders may exacerbate psychological symptoms, it may be the case that having psychological symptoms changes one's perceptions of leaders.

7.3.1 Additive Effects of Leadership: Behavioral Health

We examined the predicted sample-adjusted values for Soldiers meeting criteria for any psychological problem based on their ratings of their NCOs and officers using the WRAIR NCO and Officer Leadership scales. Soldiers were categorized into four groups based on their ratings of their leadership (Effective vs Ineffective X Officer vs NCO). We examined whether Soldiers who rated both their NCOs and officers as effective would report fewer behavioral health symptoms than 1) Soldiers who rated both their NCOs and officers as ineffective; or 2) Soldiers who rated their NCOs as ineffective and their officers as effective; or 3) Soldiers who rated their officers as ineffective and their NCOs as effective (see Figure 7.3.1).

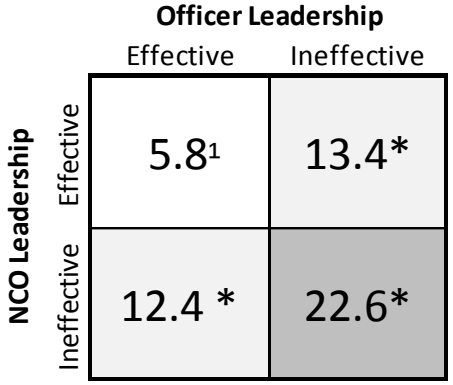


Figure 7.3.1: Percent Meeting Screening Criterion for Any Psychological Problem

*significantly different from referent[1], p<.05

When both NCOs and officers were rated as negative, the percent meeting criterion for any psychological problem was significantly higher than in any other combination of leadership ratings. When either NCOs or officers were rated as positive, there were no differences in the percent meeting criteria for any psychological problem. These findings clearly demonstrate the protective value of positive leadership on behavioral health and the behavioral health consequences of having two negative leaders. This pattern also holds true for other behavioral health and organizational effectiveness indices.

7.4 Stigma and Barriers to Receiving Behavioral Health Care

At the organizational level, one way to enhance resilience is to encourage Soldiers to seek behavioral health care before problems escalate. Stigma and organizational barriers to receiving

behavioral health care may prevent Soldiers from getting needed help. From this perspective, low levels of stigma are considered a protective factor.

A key contributor to seeking behavioral health care is overcoming a stigma associated with behavioral health care. One of the challenges is that stigma is strongest among individuals who screen positive for psychological problems (Hoge et al., 2004). Therefore, when looking at changes in rates of perceived stigma, it is informative to examine both Soldiers who *do* and *do not* screen positive for psychological problems (acute stress, depression or anxiety). MHAT 9 assessed stigma and barriers to care by asking Soldiers whether they agreed with items that would affect their decision to seek mental health counseling if they had a problem during the deployment.

Table 7.4a provides the sample-adjusted rates of endorsing stigma-related items across MHATs conducted between 2009 and 2013 for (a) Soldiers who *do* screen positive for mental health problems, and (b) Soldiers who *do not* screen positive for mental health problems. The percent of Soldiers who endorsed these items has remained fairly stable across the four MHATs reported here, with the exception that the percentage of Soldiers who endorsed "it would be too embarrassing" and "it would harm my career" is significantly higher in MHAT 9 than in MHAT 6 and J-MHAT 7.

Table 7.4a: Sample-Adjusted Stigma Percents for E1-E4 Soldiers in Theater 7 Months who Screen Positive and Who Do Not Screen Positive for Any Mental Health Problems

	Percent Agree or Strongly Agree							
	MHAT 6 OEF 2009		J-MHAT 7 OEF 2010		J-MHAT 8 OEF 2012		MHAT 9 OEF 2013	
Factors that affect your decision to receive mental health services	Screen Positive	Do Not Screen Positive	Screen Positive	Do Not Screen Positive	Screen Positive	Do Not Screen Positive	Screen Positive	Do Not Screen Positive
It would be too embarrassing.	30.2%	13.2%	31.1%	13.6%	37.4%	17.3%	37.6%	17.4%
It would harm my career.	31.3%	14.3%	32.7%	15.1%	38.2%	18.5%	38.4%	18.6%
Members of my unit might have less confidence in me.	40.1%	20.6%	44.6%	23.7%	43.1%	22.6%	44.8%	23.8%
My unit leadership might treat me differently.	45.3%	22.1%	47.1%	23.5%	46.8%	23.2%	45.2%	22.1%
My leaders would blame me for the problem.	34.4%	14.1%	32.3%	12.9%	35.7%	14.7%	39.3%	16.8%
I would be seen as weak.	49.0%	24.2%	50.8%	25.5%	49.2%	24.3%	48.8%	24.0%

Table 7.4b provides a similar snapshot of the sample-adjusted rates of endorsing barriers to receiving behavioral health care across MHATs conducted between 2009 and 2013 for (a) Soldiers who **do** screen positive for mental health problems, and (b) Soldiers who **do not** screen positive for mental health problems on barrier-related items. The percent of Soldiers who endorsed these items has remained fairly stable across the four MHATs reported here. It is important to note, however, that the percent of Soldiers endorsing the items "mental health services aren't available" and "it is too difficult to get to the location where the mental health specialist is" have both dropped significantly since MHAT 6 and reflect the changes in behavioral health staffing since 2009. The availability of behavioral health resources is consistent with feedback from focus groups. Focus groups also endorsed that their leadership support the use of behavioral health services.

Table 7.4b: Sample-Adjusted Barriers Percents for E1-E4 Soldiers in Theater 7 Months who Screen Positive and Who Do Not Screen Positive for Any Mental Health Problems

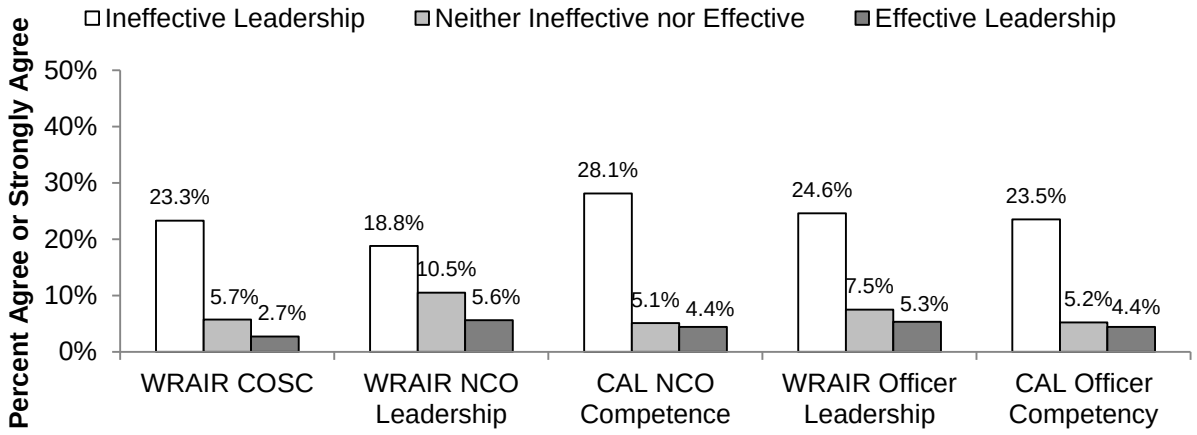
	Percent Agree or Strongly Agree							
	MHAT 6 OEF 2009		J-MHAT 7 OEF 2010		J-MHAT 8 OEF 2012		MHAT 9 OEF 2013	
Factors that affect your decision to receive mental health services	Screen Positive	Do Not Screen Positive	Screen Positive	Do Not Screen Positive	Screen Positive	Do Not Screen Positive	Screen Positive	Do Not Screen Positive
Mental health services aren't available.	35.1%	15.1%	27.1%	10.9%	14.6%	5.3%	11.7%	4.2%
I don't know where to get help.	20.2%	6.5%	15.7%	4.9%	22.6%	7.4%	20.1%	6.5%
It is difficult to get an appointment.	31.1%	12.0%	26.3%	9.8%	28.2%	10.6%	26.2%	9.8%
There would be difficulty getting time off work for treatment.	50.2%	20.7%	45.0%	17.5%	47.7%	19.1%	45.6%	17.8%
It's too difficult to get to the location where the mental health specialist is.	41.5%	18.8%	31.0%	12.8%	27.3%	11.0%	26.9%	10.8%
My leaders discourage the use of mental health services.	20.8%	6.6%	16.1%	4.9%	16.2%	4.9%	15.6%	4.7%

7.4.1 Leadership Linked to Stigma

In section 7.3, we demonstrated that ratings of effective leadership (for both NCOs and officers) were associated with more desirable behavioral health and organizational outcomes. In this section, we examined the association between leadership and stigma. An overall stigma score was calculated by summing responses to the individual stigma items and dividing by the number of items, resulting in a mean stigma score. Soldiers with mean stigma scores corresponding with "agree" or "strongly agree" were categorized as endorsing stigma-related items and were included in contrasts based on leadership as described in section 7.3.

As in section 7.3, ratings of leaders were categorized as effective, neither effective nor ineffective, or ineffective based on how they were rated for each of the WRAIR and CAL leadership scales included on the MHAT 9 survey. As seen with the behavioral health and organizational effectiveness indices, ratings of ineffective leadership were associated with significantly greater endorsement of stigma-related items, regardless of which leadership scale was used (see Figure 7.4.1).

Figure 7.4.1: Association Between Overall Stigma and Leadership Effictiveness



7.4.2 Additive Effects of Leadership: Stigma

We examined the predicted sample-adjusted values of Soldiers endorsing stigma-related items based on their ratings of their NCOs and officers using the WRAIR NCO and officer Leadership scales. Soldiers were categorized into four groups based on their ratings (Effective vs Ineffective X Officer vs NCO). We evaluated whether Soldiers who rated both their NCOs and Officers as effective would endorse stigma-related items less than 1) Soldiers who rated both of their NCOs and Officers as ineffective, or 2) Soldiers who rated their NCOs as ineffective and their Officers as effective, or 3) Soldiers who rated their Officers as ineffective and their NCOs as effective (see Figure 7.4.2).

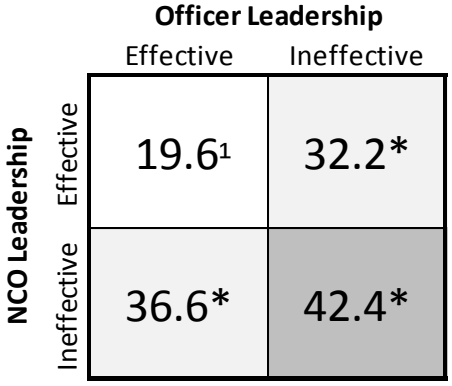


Figure 7.4.2: Stigma: Professional Impact Subscale

*significantly different from referent[1], p<.05

When both NCOs and Officers were rated as effective, the percentage of Soldiers endorsing stigma-related items was significantly lower than in all other combinations of leadership. When both NCOs and Officers were rated as ineffective, the highest level of endorsing stigma-related items was reported. Rating officers as ineffective and NCOs as effective was related to significantly fewer Soldiers endorsing stigma-related items than having both leaders rated as ineffective. Although rating NCOs as ineffective and officers as effective resulted in a lower percentage of Soldiers endorsing stigma-related items than when both officers and NCOs were rated as ineffective, the difference was not significant. Rating NCOs as effective appeared to have a greater impact on stigma than rating Officers as effective. Nevertheless, effective leadership at both levels may play a role in helping to reduce stigma. A similar pattern emerged when measuring barriers to care.

7.5 Training

The next section on protective factors focuses on Soldiers' reports of whether they received Suicide Prevention Training, Stress Training, and Resilience/Mental Health Training and whether the training they received is perceived to have been effective.

7.5.1 Suicide Prevention and Stress Training

Table 7.5.1a shows the percentages of Soldiers across MHATs who reported that they: 1) received suicide prevention training in the past year, 2) received training to manage the stress of deployment and/or combat prior to this deployment, 3) reported assisting another Service Member with a mental health problem in the past year, and 4) helped a Service Member who

had a behavioral health problem get behavioral health help. Overall, Soldiers in 2013 reported the highest levels of receiving either type of training across the four MHATs. In addition, significantly more Soldiers in 2013 reported assisting another Service Member with a mental health problem in the past year than in 2012. Similarly, the percentage of Soldiers in 2013 who helped another Service Member who had a mental health problem get professional help increased significantly compared to 2012.

Table 7.5.1a: Sample-Adjusted Percents for Male, E1-E4 Soldiers in Theater 7 Months.

	Percent "Yes"			
Suicide Prevention and Stress Training / Use	MHAT 6 2009	J-MHAT 7 2010	J-MHAT 8 2012	MHAT 9 2013
I have received suicide prevention training in the past year.	87.9%	82.8%	87.8%	89.2%
I have received training in managing the stress of deployment and/or combat prior to this deployment.	82.4%	79.0%	78.1%	85.0%
I have assisted one or more fellow Service Members with a mental health problem in the past year.	35.2%	32.3%	26.6%	34.6%
I helped a Service Member who had a mental health problem get professional help.	25.7%	24.0%	18.0%	22.1%

Table 7.5.1b depicts perceptions of the adequacy of suicide prevention and stress training across the four MHATs. The percentage of Soldiers who “agree” or “strongly agree” in 2013 is significantly higher than in 2009, but remains fairly stable across the other MHATs. The only exception is that the perception of the adequacy of managing the stress of deployment and/or combat was significantly higher in 2013 than in 2012. Taken together, these two tables suggest that the percentage of Soldiers who reported receiving suicide prevention and stress training in 2013 is at an all time high and perceptions of the adequacy of that training has increased significantly compared to 2009.

Table 7.5.1b: Sample-Adjusted Percents for Male, E1-E4 Soldiers in Theater 7 Months.

	Percent Agree or Strongly Agree			
Adequacy of Suicide Prevention and Stress Training	MHAT 6 2009	J-MHAT 7 2010	J-MHAT 8 2012	MHAT 9 2013
I am confident in my ability to help Service Members get mental health assistance.	54.0%	69.8%	67.3%	68.1%
I am confident in my ability to identify Service Members at risk for suicide.	52.7%	61.3%	62.1%	63.3%
The training for identifying Service Members at risk for suicide was sufficient.	51.1%	60.3%	58.6%	60.4%
The training in managing the stress of deployment and/or combat was adequate.	45.6%	55.3%	48.1%	55.2%

7.5.2 Resilience Training

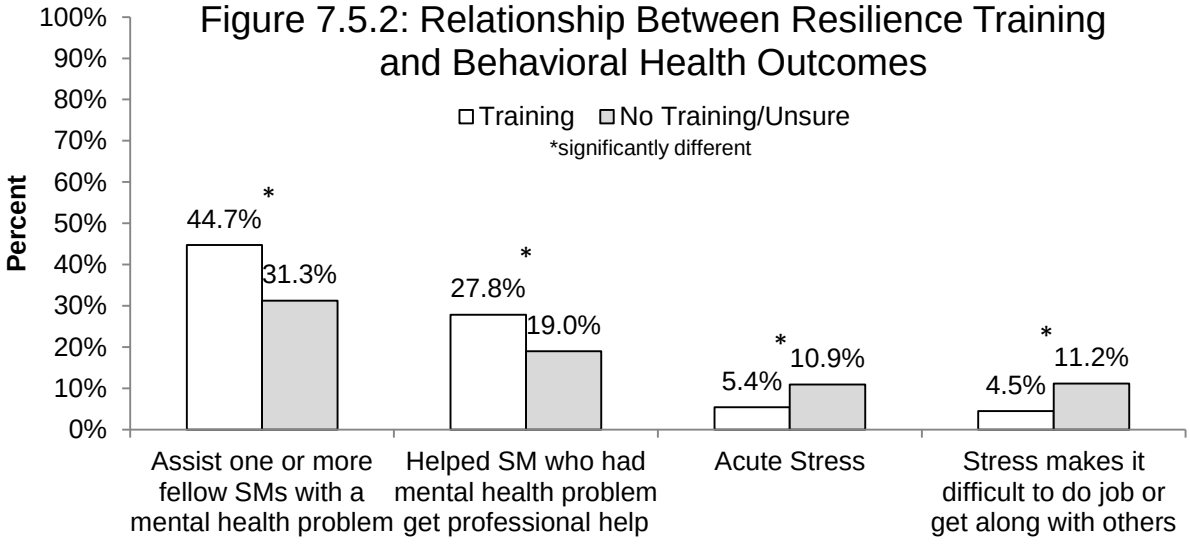
The MHAT 9 survey asked Solders a series of questions related to resilience training. In all cases, the percentages of Soldiers responding favorably to the questions in 2013 increased significantly compared to 2012 (see Table 7.5.2). It is also encouraging to see that the most commonly reported level with an MRT is now the company level (39%) compared to the battalion level in 2012 (18.6%).

Table 7.5.2: Frequency of Endorsing Resilience Training-Related Questions

Question	J-MHAT 8 2012	MHAT 9 2013
Do you have a Master Resilience Trainer (MRT) in your unit?	37.2%	52.3%
If you have an MRT in your unit, do you know his/her name?	13.1%	36.2%
Before the deployment did you receive any resilience training?	25.9%	54.9%
Before the deployment did you receive any pre-deployment resilience training?	32.0%	56.4%
During the deployment, have you received any resilience training?	7.0%	20.3%

Soldiers who reported receiving resilience training from a MRT before deployment or who reported *getting* Pre-Deployment Resiliency Training for Soldiers (Trained Soldiers) were compared to Soldiers who reported *not getting* or *were unsure about getting* the training (Untrained Soldiers) across a variety of measures. In all cases, Trained Soldiers had significantly better outcomes than Untrained Soldiers (see Figure 7.5.2).

Rates of meeting criteria for acute stress were significantly lower in Trained Soldiers than in Untrained Soldiers. Trained Soldiers who met criteria for acute stress were significantly less likely to report that the "stress made it difficult to do their job or get along with others" than Untrained Soldiers. Trained Soldiers were significantly more likely to report having "assisted a fellow Service Member with a mental health problem themselves" or "having helped a fellow Service Member with a mental health problem get professional help" than Untrained Soldiers.



7.6 Use of Behavioral Health (BH) Services

The next section on protective factors focuses on Soldiers' reports of whether they received behavioral health services during the deployment. Overall, 18.0% of Soldiers report at least one visit for counseling/mental health services from a chaplain, member of their unit, combat stress control professional, a medic/corpsman, a mental health professional, or a general medical doctor during this deployment. Table 7.6 shows the sample-adjusted percent of Soldiers who reported at least one visit for a mental health problem categorized by the source of support. For the first time, Soldiers in 2013 report that they received the most help for a stress, emotional, alcohol, or family problem from their Medic/Corpsman and another Soldier in their unit than the other sources of support. This may reflect that fewer Soldiers met criteria for a psychological problem in 2013 compared to the previous three MHATs.

Table 7.6: Source of Behavioral Health Care Use Reported During Deployment

Source	MHAT 6 2009	J-MHAT 7 2010	J-MHAT 8 2012	MHAT 9 2013
Medic/Corpsman	9.4%	12.0%	8.2%	11.3%
Another Soldier in Unit	11.0%	13.8%	8.4%	9.2%
General Medical Doctor	5.3%	8.0%	4.3%	7.3%
Military Chaplain	12.2%	13.1%	12.9%	7.2%
CSC Professional	8.7%	10.2%	8.7%	7.0%
Mental Health Professional	7.2%	10.0%	6.3%	6.8%

7.7 Positive Impact of Deployment

The concept of psychological resilience includes at least two positive responses to adverse circumstances: being able to maintain baseline psychological health and/or have positive psychological growth. Several questions included on the MHAT survey address whether the experience of deployment resulted in positive changes in Soldiers' confidence, pride, and ability to manage stressful circumstances. Figure 7.7 indicates that in 2013 the percentage of Soldiers who agreed with the statements "I feel pride from my accomplishments during this deployment" and "this deployment has made me more confident in my abilities" was at an all time high in OEF. "I deal with stress better because of this deployment" has remained relatively stable since 2009.

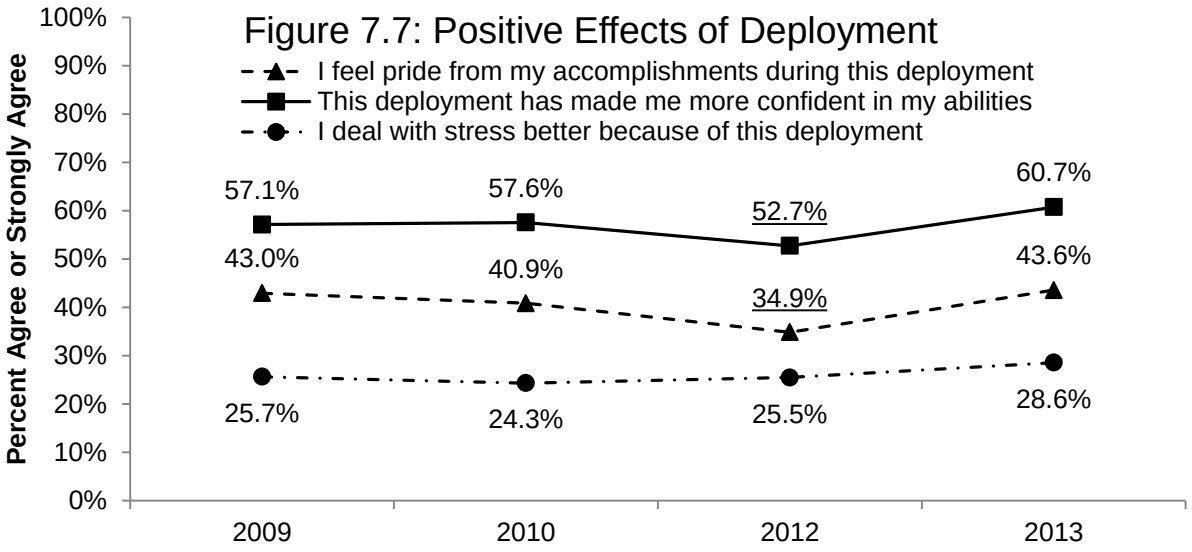


Figure 7.7: Positive Effects of Deployment
I feel pride from my accomplishments during this deployment
This deployment has made me more confident in my abilities
I deal with stress better because of this deployment
Percent Agree or Strongly Agree
100%
90%
80%
70%
60%
50%
40%
30%
20%
10%
0%
57.1%
57.6%
52.7%
60.7%
43.0%
40.9%
34.9%
43.6%
25.7%
24.3%
25.5%
28.6%
2009
2010
2012
2013

8 SOLDIER FOCUS GROUP SUMMARY

Soldier focus groups addressed leadership and behavioral health. Six themes emerged as a result of the discussions. Based on interactions with Soldiers in the focus groups, mature interactions combined with face-to-face engagement form the cornerstone for effective leadership. There was also an overarching impression that traditional Infantry units were challenged by the current retrograde operations in a low intensity, counterinsurgency conflict. In regard to interpersonal skills in leader-subordinate interactions, there was evidence of an ongoing shift, with leadership styles gradually being recognized as more mature, with the consensus suggesting that it, *"…seems like we have one foot in new model and one foot in old mode… and that we have a ways to go."* Each of these overarching impressions has a direct bearing on Soldier perceptions of leadership.

8.1 Methods

The MHAT 9 OEF team conducted 13 focus groups with a total of 78 Soldiers [five focus groups with junior enlisted (E3 to E4, n=43); five focus groups with NCOs (E5 to E7, n=28), and three focus groups with junior officers (O2 to O3, n=7)] at multiple posts in RC-South and RC-East. With 5 exceptions, junior enlisted and junior officers were on their first military deployment and NCOs reported at least 1 previous deployment.

Each Soldier was asked, *"Over this deployment, what has your unit been doing? What have you been doing?"* They reported deployment activity consistent with the current retrograde nature of the OEF mission (e.g., packing equipment for shipment) as well as continued enemy engagement [e.g., quick reaction force (QRF), security force (SECFOR)]. These two types of deployment experiences played a role in the type of feedback provided during focus group sessions.

Focus group sessions were conducted separately for junior enlisted Soldiers, NCOs, and junior officers. Participants were informed of the confidential nature of the focus groups and that individual and unit identities would not be recorded. Focus group sessions ended with a two-part leadership evaluation task. Sessions ranged in duration from 30 minutes to one hour.

8.2 Soldier Focus Group Results: Thematic Areas of Narratives

8.2.1 Caring About Soldiers

Of the six themes that emerged from focus group feedback, the predominant theme across all three rank categories (i.e., junior enlisted, NCO, junior officer) was the importance of leaders demonstrating an interest in Soldiers. *"Caring about Soldiers"* accounted for 44% of feedback overall. The responsibility and expectation for leaders to *"know Soldiers"* tended to fall on the role of the NCO. Face-to-face engagement with Soldiers was broadly cited as a positive aspect of leadership behavior, even amongst peers.

Many Soldiers described an interest in having leaders spend time with them and demonstrate concern. Both were seen as a positive example of leadership during the focus groups (e.g., *"…the ability to talk…and listen to Soldiers.", "Collaboration with immediate supervisors to resolve common leadership conflicts…rather than just sending the Soldier to Anger Management classes or using UCMJ [Uniformed Code of Military Justice].", "Ineffective NCOs care about themselves, don't ask Soldiers how they are doing.", "They should treat us like people"*). One Soldier compared leadership to parenting by citing an example of how a parent

can monitor their child's activities on the internet without observing every mouse click. Soldiers want engaged leaders, but not micromanagement.

Descriptions and examples of negative leadership reflected detachment within the chain of command or disengaged leaders. An often cited example was: *"There's a disconnect between people sitting behind computers and people doing the job."* A specific and frequently referenced example of negative leadership behaviors addressed tasks received from *"people sitting in the TOC* [Tactical Operations Center]" that fail to reflect awareness of on-the-ground circumstances. Sometimes these negative behaviors were compensated for by another leader acting protectively, such as, *"protection [by the] Brigade Commander"* overruling what Soldiers referred to as "*irrational tasks.*" Soldiers' regard for leaders increased when they were aware that their leader acted to prevent them from performing tasks that were perceived as unreasonable or lacking relevance (*"…seeing company grade curse out a Major who was abusing the unit with too many missions, [company grade officer] trying to protect unit from too many missions"*).

8.2.2 Teamwork / Common Objectives

A complimentary theme to Caring About Soldiers was the importance of teamwork and common objectives. The previous theme of Caring About Soldiers captured the valuation of the individual. The next theme of Teamwork/Common Objectives captured the importance of the group and achieving group objectives. Eleven percent of feedback comments reflected the importance of teamwork, *"mutual respect,"* and *"sharing burdens with Soldiers."* As seen for the theme of Caring About Soldiers, the theme of Teamwork/Common Objectives was equally distributed across rank categories. In contrast to Caring About Soldiers, Teamwork/Common Objectives focused on factors external to dyadic relationships between Soldiers and leaders (*"…that company grade officer goes out into the field with us and participates on the patrols." "We shared hardships with Soldiers more than your average line unit." "Good leaders pull their own weight; don't give menial or personal tasks to others to do"*). The dyadic relationships that were described in this theme included bi-directional communications and highlighted the importance of a leader who is open to feedback (*"…they would hang out in their hooch and do nothing. They were lazy while we were working." "NCOs don't stick up for us or have our backs when shit hits the fan. The NCOs see us juniors as a liability"*).

8.2.3 MOS / Infantry Mission

Seventeen percent of the feedback reflected sentiment directly citing the Infantry, which differed from the abstractness of the Teamwork/Common Objectives theme. MOS/Infantry Mission feedback frequently provided descriptions of the perceived value and support for the Infantry profession such that the Infantry frequently felt they were different from the rest of the Army professions (e.g., *"Infantrymen don't need to be around other MOSs….attaching Infantry to CAV is asking for trouble….CAV treats us [Infantry] like redheaded bastards." "Doing non-Infantry stuff is wrecking morale." "[We are] not recognized for any good work….awards given to FOBBITS for stupid stuff and not given to people taking direct fire." "Infantry is different."*). In addition, Soldiers reported deployment experiences that did not match their combat expectations and pre-deployment training (*"I feel that we trained inadequately. I haven't shot my weapon at all here…. I am glad that we had a weak deployment with minimal contact with enemy, because if we did have contact we would have had a lot of casualties." "'…their [NCO's] morale is 'done.' They [NCOs] had deployments before, want to do the same [type] again but are pissed off with the retrograde POG mission."*). Soldiers largely reported frustrations with the Rules Of Engagement (ROE) (*"Rules of engagement suck: when we take IDF, let us shoot back!" "ROE suck but we are told not to talk about it."*). Several anecdotes that were offered highlight the perceived inability to return enemy fire under current ROEs and were self-reported

to have a powerful negative impact on their morale (*"Pride is at an all time low in the Army"*). In contrast, leaders who were proponents for the use and practice of Infantry skills and enemy engagement, when warranted, had a powerful positive effect on morale (*"Company CDR is awesome: he fought for a change in our mission [from reserve force on the FOB to active patrolling]"*). This theme was consistent across rank categories and was most pronounced within the junior enlisted focus groups.

8.2.4 Leader Maturity

The theme of Leader Maturity served as a backdrop for all other themes. Eleven percent of the narrative feedback reflected perceptions of leaders who executed leadership in a manner that lacked "maturity" (e.g., personally attacking or belittling subordinates; *"Ineffective NCOs are eager to embrace the authoritative role." "We are not properly briefed on missions and intent and when we fail, we are yelled at for failing." "NCOs choose their Squad Leaders and Team Leaders using favoritism. They choose their buddies." "NCOs make stress a lot more….by smoking the dog shit out of us." "Definite lack of maturity….like high school all over again." "Big changes [in the Army] require more [inter]personal skills."*). Several words were polled among focus group participants as potential descriptors for the type of behavioral anecdotes reported. "Maturity" was widely agreed to best capture the desired leadership behaviors.

Across the separate focus groups for junior enlisted, NCOs, and junior officers, participants placed a similar level of value between leadership styles that emphasized motivation and those that emphasized intimidation. Soldiers within the focus groups, however, embraced newer leadership styles focused on motivation and less on intimidation: *"Be bold—too many NCOs interpret the need for new/different communication skills with junior enlisted to mean they must be soft on them. We need to maintain tough standards without bullying Soldiers."* Across both styles, those leaders described as lacking "maturity" were characterized as portraying an overly quick, aggressive, and negative style in which they acted without regard for the severity of the situation or the likelihood of achieving a desired behavioral objective. Of the examples of immature leadership cited, the worst examples demonstrated the disconnect between the severity of the leader's behavior and the action's external relevance or purpose (*"I did see 1 PFC getting poorly treated by NCO, NCO having PFC repeatedly do stupid shit, with no known benefit anywhere…"*). Immature leadership behaviors were reported by all rank categories to have negative effects on both those who reported being subject to immature leadership as well as those who merely witnessed instances.

NCOs reported that when they did execute corrective leadership for behavioral problems, they were concerned by the potential for formal investigations on harassment or hazing ("*Morale killers: hazing overkill." "…perception that information passing up the chain of command does not work…..'If it is not suicide or hazing, they don't care.'" "No one sticks up for each other, everyone is too afraid for getting written up"*). In the specific examples cited, the use of corrective actions described by NCOs as "minor" was often interpreted as hazing by others. NCOs reported that charges of hazing by others frequently resulted in formal discipline actions being taking against them for corrective leadership behaviors. The observation that NCOs hesitate to take corrective action because of the potential of being investigated for hazing may reflect inexperience in the use of appropriate disciplinary techniques.

8.2.5 OER Bullets

Another theme across all three rank categories was that of Soldiers perceiving their leaders aggressively pursuing leadership opportunities, or, as typically phrased, "officers/NCOs chasing OER/NCOER bullets" (Officer Evaluation Report/Noncommissioned Officer Evaluation Report): *"*

"Lots of company officers are jumping on the "last" opportunity to get in the fight, due to mission drawdown. They know there might not be another, which has affected mission planning. That drive has not helped." "The officers are all about pay-grade and don't care about us. They are in it for themselves. They sent us out to an area that was not in our AO because they wanted to earn awards." "We are asked to do stuff when the mission is complete….and the LT tried to find stuff for us to do, regardless of danger." "Some actions are seen to jeopardize our well being and safety, thought to be due to actions of LT but he may have been passing down from higher leadership….there are set 'mission abort criteria' that have been ignored when abort conditions were presented." "Seems like leaders want to 'get into the shit' like in their previous deployments, regardless if such activity is counter to the current [type of] mission." Nine percent of the feedback received in the focus groups addressed leaders looking out for their own successes. This behavior was frequently exemplified through anecdotes of a task or a mission that had no perceived purpose or value other than to satisfy individuals' initiatives or experimentation in leadership. Often such anecdotes were associated with leadership initiatives above the company level (*"The company leadership worked hard for the Soldiers. It seemed like the higher ups and the BC were not doing a good job." "Everything that has come down, stupid shit for Infantry has come down from COL and higher, brigade level").* The perceptions of leaders chasing NCOER/OER bullets existed within the context of the retrograde nature of the current combat operations which has resulted in reduced combat opportunities for Infantry. Some Soldiers cited examples of continued activities at abandoned posts and large scale missions with reduced manpower that they perceived as confusing, pointless, and sometimes unnecessarily dangerous.

8.2.6 Selection, Screening and Authority, Responsibility

The final theme was distinct from other themes as it was attributed to the institution rather than to individuals. This theme reflected institutional opportunities to include and exclude Soldiers for deployment and enlistment (as opposed to universal acceptance). The theme also addresses institutional oversight and governance of leaders' behavior that is perceived as having the potential to run counter to achieving objectives under the leader's responsibility. This theme was principally drawn from commentary provided by NCOs regarding both deployment and garrison environments and represented less than 10% of the overall feedback received in focus groups.

Personnel selection/screening was regarded as useful for leadership, and, for the current deployment, was regarded as having a positive effect given ongoing reductions in OEF manpower and the opportunity to preferentially select or screen deployers from within units ("*This deployment, there was more screening of personnel than in previous deployment where anyone with a heartbeat was taken…..in the screening, NCOs had a role in the process.*" "*It's critical to get to know soldiers before you deploy so that you are not surprised when problems arise during deployment (e.g., a marriage goes bad*"). When NCOs reported that they and other staff had input on the pre-deployment screening process, the NCOs reported reduced behavioral problems and less need for corrective leadership during deployment.

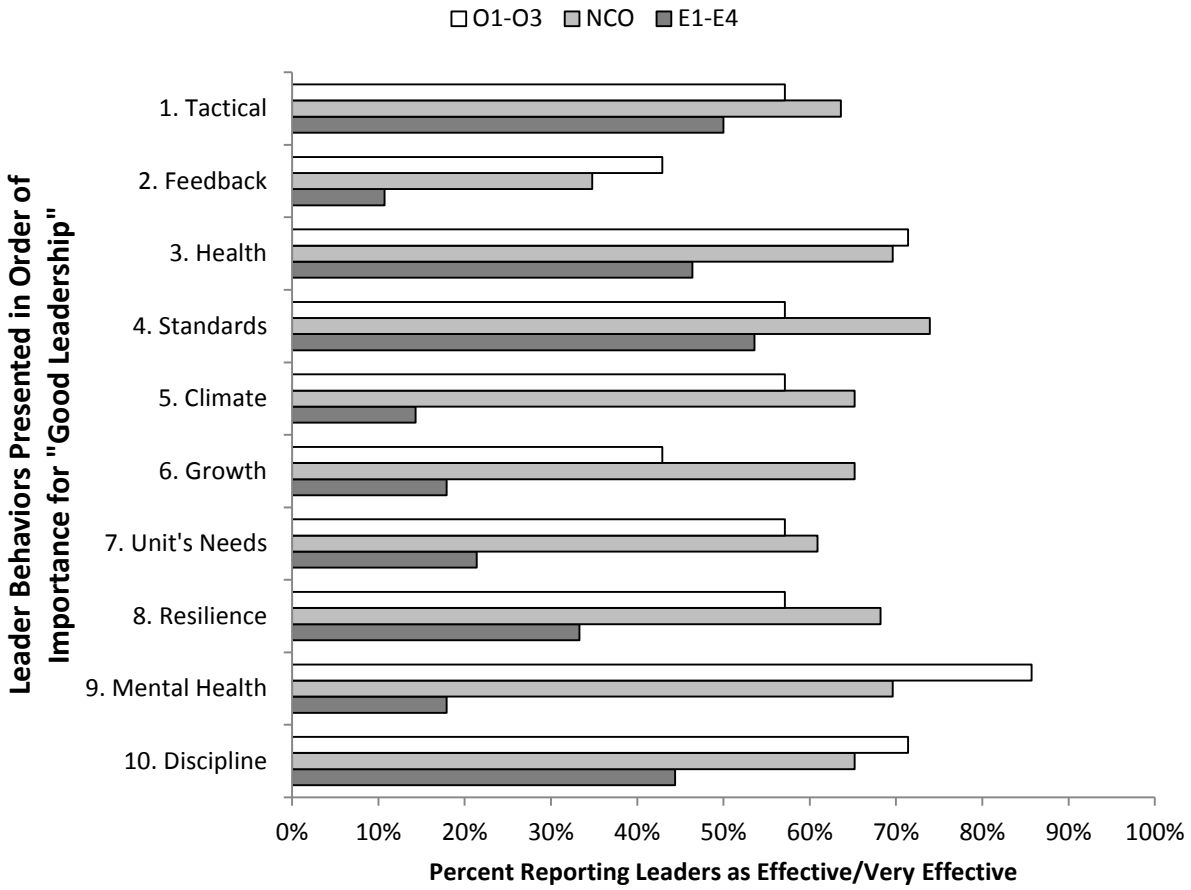
8.3 Soldier Focus Group Results: Rating Leadership Qualities

At the conclusion of each focus group, Soldiers rank ordered 10 leadership behaviors according to their relative importance for "good leadership." The behaviors used in this task included creating a positive unit climate (e.g., cohesion, morale); maintaining standards; dealing with discipline problems; dealing with combat stress and/or other mental health concerns; demonstrating resilience; putting the unit's needs before their own; accepting feedback and advice from others; demonstrating tactical proficiency and competence; encouraging Soldiers to grow and learn from deployment experiences; and encouraging healthy behaviors (e.g.,

sleep, nutrition, and physical fitness). Soldiers were told that there was no right or wrong answer for this task and that they should base their judgments on their own perspective and opinion. Then, after they finished rank ordering the 10 leadership behaviors, the Soldiers rated the effectiveness of their unit during this deployment on each of the leadership behaviors.

Averaged across the 62 Soldiers who completed this task, “Demonstrating tactical proficiency and competence” was ranked as the most important behavior and “Dealing with discipline problems” was ranked as the least important behavior. There were, however, some differences across rank categories for what behaviors define a “good leader.” NCOs regarded “Demonstrating tactical proficiency and competence” as the most important element of leadership, whereas Junior Enlisted regarded “Accepting feedback and advice from others” as equally important to Tactical Proficiency. Officers regarded “Accepting feedback and advice from others,” “Creating a positive unit climate,” and “Encouraging healthy behaviors” as slightly more important than Tactical Proficiency. For all three military rank categories, the leadership behaviors judged to be the least important (among the 10 behaviors given) were “Dealing with discipline problems,” “Dealing with combat stress and/or other mental health concerns,” and “Demonstrating resilience.” The pattern of differences within each military rank category is displayed in Figure 8.3.1 (leadership behaviors are presented based on overall rank order).

Figure 8.3.1: Focus Group Ratings of Leader Effectiveness



Averaged across the 58 Soldiers included in the second part of the leadership judgment task (rating own unit leader effectiveness) “Maintaining standards” was rated as leadership’s most effective quality, though this pattern of responses was inconsistent between focus groups. When considering the rank of focus group members, Junior Officers reported their unit leadership being most effective at “Dealing with combat stress and/or other mental health concerns,” “Dealing with discipline problems,” “Demonstrating resilience,” and “Demonstrating tactical proficiency and competence.” “Accepting feedback and advice from others” was judged consistently as the least effective behavior of unit leadership across all rank categories.

8.4 Summary

The focus group feedback reflects Soldiers’ desire to feel included as functioning and contributing members of an effective group (in this case, US Army Infantry). Junior and senior Soldiers alike regard face-to-face engagement (“caring”) as a hallmark of Army leadership. Detached, self-serving, and immature characteristics of leaders detract from valued face-to-face engagement and are perceived as negatively impacting morale. There was a consistent level of frustration voiced across focus groups that the skills of professional Infantry are being under-utilized or under-valued in the current Army mission in OEF. The focus groups consistently identified face-to-face engagement and the concept of leaders “caring for Soldiers,” as positive behaviors that improve morale, but also require leaders to commit already scarce time and resources to engage more with their Soldiers.

9 SOLDIER REPORT: DISCUSSION & RECOMMENDATIONS

9.1 Overview of Findings

The results from MHAT 9 are generally positive and reflect sustained improvements in the behavioral health status of deployed maneuver units in the ATO. Specifically, rates of meeting criteria for acute stress, depression, anxiety, or suicidal ideation remained low, while well-being, leadership, and unit effectiveness indices generally improved or remained comparable to 2012. These results are likely attributable to several key factors. First, the prevalence of the primary risk factor (combat) has decreased significantly in Afghanistan since 2012. The nature of combat experiences that Soldiers reported has also changed and the levels of non-combat stressors have decreased. Second, behavioral health screening was employed by units surveyed prior to deployment. Soldiers with pre-existing behavioral health issues were generally not brought into theater. Third, Soldiers with behavioral health issues identified in theater are routinely returned home for follow-on care instead of being treated in theater. Fourth, Soldier perceptions of officer leadership improved significantly. Fifth, the frequency of predeployment training related to behavioral health (suicide prevention, stress reduction, and resilience training) was reported at significantly higher rates than 2012 and Master Resilience Trainers were reported most commonly at the company level. And finally, the 9-month deployment length policy is in full effect. When asked why they thought morale in theater was significantly higher this year than in the past, Soldiers were very quick to attribute increased morale to deployment length and quality of life. In comparison to the previous three MHATs, the current results indicate a healthier force in terms of the data collected in the MHAT surveys.

9.1.1 Well-Being Indices

Soldiers reported a significant increase in individual morale relative to 2010 and 2012. Soldiers also reported a significant increase in unit morale relative to 2012, but comparable to 2009 and 2010. Furthermore, the percent of Soldiers that met screening criteria for acute stress, depression, anxiety, or endorsing suicidal ideation was at an all time low for OEF. For MHAT 9, Soldiers who indicated that they have taken medication for a mental health or combat stress problem during this deployment was only 2.6%, significantly lower than the antidepressant use rate of 4.6% among a demographically comparable civilian sample (Olfson & Marcus, 2009).

9.1.2 Concussive Events

Rates of exposure to blast and other concussive events continued to decline across MHATs. It was encouraging to find that Soldiers were more likely to report being evaluated by a medic when events reflected proximity to a blast. Nevertheless, a significant percentage of Soldiers who reported risk for concussion also reported not getting evaluated by a medic or Corpsman. MHAT 9 was not designed to rigorously evaluate screening criteria for exposure to blast events and consequently many possibilities exist to explain the finding, including that those Soldiers were evaluated by a medical professional other than a medic or Corpsman. Senior leadership in the ATO is committed to ensuring that Soldiers get the care they need. Specific guidance has been given that all individuals involved in concussive/potentially concussive events are tracked by name to ensure that the Military Acute Concussion Evaluation (MACE), acute and follow-up care, 24 hour rest, and appropriate documentation in the electronic medical record are properly completed. The records from significant activity reports are compared to Blast Exposure and Concussion Incident Reports (BECIR) and individual medical records to ensure that proper documentation has been completed.

9.1.3 Sleep

Given the strong association between behavioral health and sleep duration and quality, sleep indicators may serve as an important marker for behavioral health (Swinkels et al., 2013). The number of hours of sleep reported in MHAT 9 is significantly correlated with the number of accidents due to sleepiness and the percent of Soldiers meeting criteria for any psychological problem (acute stress, depression, or anxiety). Furthermore, over 25% of Soldiers report concerns about lack of sleep, predominantly due to nighttime duties, poor sleep environment, and high OPTEMPO. Stress related to personal life disrupts sleep more frequently than stress related to combat.

Soldiers who rated their NCOs more positively on sleep leadership were less likely to report sleep problems. If the types of sleep leadership behaviors prescribed in FM 6-22.5 (Combat Operational Stress Control Manual for Leaders and Soldiers) were reported, then you see a significant reduction in sleep problems regardless of whether the NCO is perceived overall as an effective leader or not. Furthermore, the types of sleep hygiene behaviors described in FM 6-22.5 are significantly correlated with Soldiers' perceptions of their unit's readiness. Soldiers report that the item with the strongest relationship to combat readiness ("Consider sleep as an important planning factor") is performed often or always by only about 60% of the NCOs, demonstrating that there is room for improvement.

Guidelines concerning sleep already exist in FM 6-22.5, FM 7-15, 7-22.7, and ATTP 5-0.1. Leaders may underestimate how much they can influence sleep environments and enforce sleep discipline. According to FM 7-22.7 (The Non-Commissioned Officer's Guide), a Soldier Critical element of the team building stages includes the leader's responsibility to observe and enforce sleep discipline as part of the sustainment stage. Small unit leaders should be encouraged to review these materials to optimize sleep, performance, and behavioral health across the deployment cycle and should think about emphasis on retraining positive sleep behaviors upon redeployment. This includes ensuring that Soldiers get 8 hours of sleep per 24 hours whenever possible, and also be allowed additional recovery time after periods of sleep loss. Future efforts should also assess how confident small unit leaders are in enforcing unit sleep plans across the deployment cycle. Unfortunately, when OPTEMPO increases, sleep is usually the first thing sacrificed. It is critical for leaders to remember that risk increases if proper sleep plans are not implemented and Soldiers are in sleep deficit.

9.1.4 Changing Nature of Combat

The J-MHAT 8 report findings suggested that the level of combat experiences reported in 2012 was similar to 2010, but the nature of the experiences changed significantly. It was also found during focus groups that Soldiers reported anger about their changing roles as the mission had evolved from combat operations to working alongside the Afghan National Security Forces (ANSF). It was suggested that although this changing role might cause frustration for Soldiers, it might also be a factor in reducing combat-related mental health problems seen in 2012.

The changing nature of combat may be fully expressed in the mindset of maneuver units in Afghanistan in 2013. During focus groups, there was a clear sentiment that many maneuver units were eager to use their Infantry skills in a combat mission and are frustrated in the current "advise and assist" mission. The major difference between 2012 and 2013, however, is that the change in mission is not new and did not happen in the middle of their deployment. In 2013, Soldiers reported that they had pre-deployment training expectations that the "fight is winding down." Consequently, their expectations regarding the current mission were managed and may have factored into their thinking, resulting in less of a negative effect on morale (even if the

mission is perceived as frustrating). A notable example of this consideration is supported by focus group comments regarding working with the ANSF and "Green on Blue" incidents. Soldiers reported that they utilize force protection measures when working alongside the ANSF. These measures were not seen to impact morale, but rather were seen as the cost of doing business.

9.1.5 Protective Factors: Leadership, Unit Climate, and Resilience Training

In addition to significant decreases in risk factors (combat levels and deployment related stressors) in 2013 compared to 2010 and 2012, there was a significant increase in protective factors such as leadership ratings, training, and reducing barriers to care. Soldiers' perceptions of their leader's effectiveness were associated with behavioral health and unit effectiveness measures. When looking at combined ratings of NCO and officer leadership, there was an additive effect of leadership on the percent of Soldiers who met criteria for any psychological problem (acute stress, depression, or anxiety). When Soldiers rate both their NCOs and officers as effective, there is a significantly lower rate (5.8%) of psychological problems than with other combinations of leadership. When Soldiers rate both types of leaders as ineffective, there is the highest rate of psychological problems (22.6%). This pattern is robust and evident with most outcome measures, to include unit effectiveness, stigma, and barriers to care.

We examined leadership behaviors that could predict behavioral health outcomes in addition to ratings of overall leader effectiveness. To do that, we assessed the extent to which NCOs promote behavioral health using a new scale based on guidance in FM 6-22.5 that we called the NCO Combat Operational Stress Control leadership scale. Soldiers who rated their NCOs as effective or very effective in carrying out these behaviors had improved behavioral health outcomes. Each individual item in the NCO COSC leadership scale was significantly correlated with Soldier perceptions of combat readiness. For the item most strongly related to combat readiness, "Preparing Service Members in advance to deal with any negative reactions to the rigors of combat," only about half of Soldiers who responded to the survey reported that their NCOs were effective at this task. This suggests that NCOs may benefit from reviewing and implementing materials associated with combat operational stress control prior to deployment and prior to significant missions.

Given the strong relationship between leadership and behavioral health and unit effectiveness outcomes, we recommend integrating behavioral health and unit effectiveness indices as a part of command climate surveys, to gauge the impact of leadership on units. This practice should help small unit leaders assess the level of stress their Soldiers are experiencing and support their ability to identify need, plan logistically, and marshal resources to help when and where appropriate.

Finally, there was a positive association between receiving Resilience Training prior to deployment and well-being indices in 2013. Also, Soldiers who reported having resilience training *during* deployment were significantly less likely to endorse stigma-related items. Overall, over 50% of Soldiers reported having Master Resilience Trainers in their units with 39% reported at the company-level. This suggests that MRT training is contributing to creating a more resilient force and suggests that focus should be maintained on the Ready and Resilient Campaign. In addition, leaders should be familiar with MRT resources that are available online. Battalion or brigade commanders and Command Sergeants Major can access the MRT Resource Center and can use online tools to further enhance the resilience training programs in their units.

10 BEHAVIORAL HEALTHCARE SYSTEM ASSESSMENT

10.1 Afghanistan Theater of Operations Behavioral Health Overview

Despite a decline in overall troop strength in the Afghanistan Theater of Operations (ATO), the scope of services behavioral health personnel provide remains largely unchanged since the J-MHAT 8 report. Unlike previous reports, MHAT 9 did not include a separate survey of or focus groups with behavioral health providers. What follows is a comparison of staffing ratios by branch of service, estimates of provider productivity by region, and action taken on J-MHAT 8 recommendations regarding behavioral health staffing and distribution.

10.2 Behavioral Health Staffing and Distribution

Within the ATO, personnel numbers for both behavioral health staff and overall military personnel remain fluid due to a combination of deployment rotations, operational requirements, and Service Member (SM) needs. For these reasons, it is important to recognize that the data presented in Table 10.2 represent a snapshot of behavioral health staffing and distribution as of July 2013.

Table 10.2 provides a categorization and accounting of the behavioral health personnel by occupational specialty and branch of service across the six MHATs conducted in Afghanistan. The total number of Army behavioral health personnel has grown across all MHAT survey years, with the most pronounced increase between 2009 (n = 16) and 2010 (n = 88). Army behavioral health personnel constituted a majority of behavioral health personnel in the ATO beginning in 2010 (59.9%), reaching a proportional high in 2013 of 83.8%. Behavioral health specialists constitute 50% of the Army's total behavioral health personnel serving in the ATO during 2013. In 2013, psychologists constitute 14.9% of total behavioral health personnel, social workers made up 14% of total behavioral health personnel, psychiatrist constituted 7% of total behavioral health personnel, and occupational therapists represented 4.4% of total behavioral health personnel.

The total number of Navy behavioral health personnel (n = 9) providing services in 2013 decreased dramatically from 2012 and currently represent 6.6% of all behavioral health personnel in the ATO, down from a high of 19.1% in 2010. Behavioral health specialists (n = 3) represent 33.3% of all Navy behavioral health personnel. Relative to both Army and Air Force behavioral health personnel, Navy BH personnel are decidedly more IP-centric, with 6 of 9 personnel (66.7%) being either a psychiatrist, psychologist or psychiatric nurse practitioner. The reduction in behavioral health personnel parallels a reduction in USMC personnel, expeditionary force replaced by regimental combat team in late 2012. Navy manning of the role III center in RC-South and its mental health department has not changed.

The total number of Air Force behavioral health personnel in 2013 (n = 13) represent 9.6% of overall behavioral health personnel in the ATO, down from a peak of 62.1% of all behavioral health personnel in 2007. Behavioral health specialists (n =7) make up 53.8% of Air Force behavioral health personnel assigned to the ATO in 2013, followed by psychologists (n = 3) who represent 30% of total Air Force behavioral health personnel (50% of Air Force IPs). Social workers (n = 2) comprise 15.4% of total Air Force behavioral health personnel (33.3% of IPs), while the sole Air Force psychiatrist represents 7.7% of the total Air Force behavioral health personnel (16.7% of IPs) assigned to the ATO in 2013.

Table 10.2 Distribution and Ratio of Mental Health Specialties by Service						
ARMY						
SPECIALTY	MHAT 3 2005	MHAT 5 2007	MHAT 6 2009	J-MHAT 7 2010	J-MHAT 8 2012	MHAT 9 2013
Psychiatrist	2	0	1	8	5	8
Psychologist	1	1	2	13	12	17
Social Worker	1	2	4	4	15	16
Psychiatric Nurse Practitioner	0	0	0	2	1	4
Psychiatric Nurse*	0	0	0	1	3	0
Behavioral Health Specialist	5	7	7	48	43	57
Occupational Therapist	0	0	1	5	3	5
Occupational Therapist Technician	0	0	1	7	8	7
TOTAL	9	10	16	88	90	114
NAVY						
Psychiatrist	0	0	2	8	3	2
Psychologist	0	0	0	4	8	3
Social Worker	0	0	0	1	0	0
Psychiatric Nurse Practitioner	0	0	0	1	0	1
Psychiatric Nurse*	0	1	0	0	1	0
Behavioral Health Specialist	0	0	0	14	10	3
Occupational Therapist	0	0	0	0	1	0
Occupational Therapist Technician	0	0	0	0	0	0
TOTAL	0	1	2	28	23	9
AIR FORCE						
Psychiatrist	0	3	3	3	3	1
Psychologist	0	4	4	5	4	3
Social Worker	0	3	3	5	2	2
Psychiatric Nurse Practitioner	0	0	2	0	1	0
Psychiatric Nurse*	0	1	0	1	0	0
Behavioral Health Specialist	0	7	13	14	11	7
Occupational Therapist	0	0	0	2	1	0
Occupational Therapist Technician	0	0	0	1	0	0
TOTAL	0	18	25	31	22	13
JOINT SERVICE THEATER FORCES STAFFING RATIO						
Total	9	29	43	147	135	136
Overall Staffing Ratio	1756	651	1123	646	723	567
Independent Practitioner Ratio**	3951	1452	2194	1508	1654	1242

*Psychiatric Nurse Practitioners and Psychiatric Nurses were not differentiated until 2009 MHAT.

**Independent Practitioners include Psychiatrists. Psychologists, Psychiatric Nurse Practitioners, Social Workers and Occupational Therapists.

Note: Data collected with assistance of ATO Behavioral Health Consultant. Rates do not include Coalition personnel.

The bottom of Table 10.2 provides overall staffing ratios of behavioral health personnel to SMs, as well as the ratio of IPs to SMs. The overall staffing ratio compares the total number of behavioral health personnel available in theater – mental health professionals, mental health technicians, occupational therapists (OT) and OT technicians – to the overall size of the U.S. military force in Afghanistan.

Overall staffing ratios have fluctuated across MHAT years, with 4 of 6 ratios meeting or beating the 2009 MHAT 6 recommended ratio of 1:700 to 1:800. Despite a post-surge drawdown of total forces beginning in 2011, total behavioral health personnel within the ATO have remained relatively stable since 2010. Furthermore, the IP ratio in 2013 is at an all-time low, indicating that relative to total troop strength, the number of IPs per Soldier has never been higher. The sustained level of behavioral health staffing relative to the decreased level of troops due to the drawdown suggests that current IP staffing levels have not kept pace with the ATO drawdown.

A recommendation was made in the 2009 MHAT 6 report to increase the overall behavioral health personnel to SM ratio to reach a 1:700 to 1:800 staffing ratio. Data from J-MHAT 7 OEF indicate that the 2010 overall staffing ratio was 1:646 and the ratio of independent practitioners to SMs improved as well in 2010 (1:1508). In 2012, the staffing ratio increased slightly with an overall staffing ratio of 1:723 and the independent practitioner ratio of 1:1654. The staffing ratio (1:567) in 2013 far surpasses the 2009 recommendation and underscores the need to monitor behavioral health staffing ratios and dispersion across the ATO. Over the next four months, the projected number of behavioral health personnel is expected to drop to 125, resulting in a staffing ratio of 1:576, still well above the 2009 recommendation. Given current troop strength, 90-102 behavioral health personnel would meet the 1:700 – 1:800 staffing ratio. Monitoring staffing ratios should be continuous and coordinated with operational forces as they drawdown and relocate across the theater in order to optimize staffing ratios.

10.3 Theater Suicide Review

Table 10.3a presents suicide incidents in the ATO from 2001 through July of 2013. In 2012, the Army had 18 suicides in the ATO, the highest count across all previous year. By mid-June 2013, the annual number of Army suicides in the ATO is on track to decrease significantly from the past three years (data obtained from US Armed Forces Medical Examiner). The numbers, however, were not adjusted based on troop strength per year.

Table 10.3a: Army Suicides in ATO, CY 2001 - 06 July 2013

	Year												
	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013*
Army	1	2	1	1	3	3	3	7	4	12	14	18	2

*As of 06 July 2013

Table 10.3b provides demographic characteristics of the confirmed suicides in the ATO across years. To date in 2013, both suicides were committed by males using firearms. One was committed by an E-3 and the other by an E-6.

Table 10.3b: Demographic Characteristics of Confirmed Soldier Suicides in ATO

	Year					
	2007	2008	2010	2011	2012	2013*
Firearms	91%	94%	92%	93%	100%	100%
Male	100%	91%	100%	93%	94%	100%
Age $\leq$ 30	83%	84%	83%	79%	83%	50%
E1 - E4	61%	75%	50%	64%	72%	50%
Non-white	18%	28%	17%	29%	22%	100%

*As of 06 July 2013

11 STATUS OF J-MHAT 8 RECOMMENDATIONS

Table 11: Status of J-MHAT 8 Recommendations

J-MHAT 8 Recommendation	Status	Comments
Conduct retrospective and prospective analysis of percentage of SMs presenting with pre-existing conditions and unstable symptoms. Clarify and enforce policy regarding pre-deployment BH screening for SMs with pre-existing BH conditions. Consider tightening BH waivers.	Green	Current mission requirements and ATO drawn-down coincide with improved pre-deployment screening and little-to-no behavioral health waivers for deploying Soldiers.
Conduct retrospective and prospective analysis on SMs presenting for homicidal ideation (HI); track and report HI using external assets (e.g., MHATs) or organic personnel. Remove from theater any SM who consistently presents with hostile thoughts and intentions towards anyone.	Amber	Requires further study. Anecdotal evidence that HI continues to be problematic. Most HI/SI that fails to respond rapidly to basic (doctrinal) treatment approaches are currently recommended for evacuation.
Conduct a review of BH assets in theater by region and clinic according to the population at risk and patient utilization rates; develop an effective system to collect data on BH outreach services provided to SMs and commands. Continue to engage with operational commanders regarding reduction and dispersion of troops so that BH resources can be allocated appropriately.	Amber	Coordinating with division BH providers from TF MED-A level is problematic. Theater consultant position formerly at USFOR-A level and probably should return to this level. Coordination of Theater Consult with USFOR-A critical. BH consultants (psychiatrists) within Combat Support Hospitals unnecessarily redundant. OTSG now including Theater consultant in quarterly Key Leaders meeting.
Review admission criteria for Restoration Centers. Consider restructuring the 3, 5, 7 day programs to include standard outpatient visits and stand-alone psycho-educational classes. Consider reallocating these personnel and space resources.	Amber	Admission criteria (e.g., no SI/HI at time of referral) remain largely unchanged. If more than 3 days of treatment required, the Soldier should probably be evacuated. The Restoration Center moved to Craig Hospital vicinity since J-MHAT 8. A draw-down in BH personnel currently lags behind overall troop strength, but will re-align within the calendar year. Greater emphasis on BH clinicians (vs. OTs) required as remaining providers will need to provide a full spectrum of services with fewer providers in total.
Create a joint billet for the USFOR-A Behavioral Health Consultant; have the USFOR-A BH Consultant serve as a member of the USFOR-A Surgeon General's staff.	Amber	In progress. USFOR-A writing FRAGO for key subject matter experts to fill dual billets on TF MED-A and USFOR-A staff (to include the Theater BH consultant).
Review naming conventions for Behavioral Health Clinics. Clearly separate	Amber	Warrior Recovery Center name mirrors that of KAF. These

the name Warrior Resilience Centers (vs. Warrior Restoration Center) as they are designed to build resilience among all SMs, not treat patients.		centers provide combined combat stress and traumatic brain injury capabilities/services. Current doctrine and related naming conventions make no reference to this novel treatment approach.
Implement an effective education and awareness campaign for line commanders regarding BH resources in theater to include their appropriate use and the basic tenants of behavioral health treatment.	Amber	This is the mission of Combat/Operational Stress Control (COSC) teams (i.e., telling commanders who and where COSC teams are and the range of services they provide).
Educate commanders on the legal requirements for patient confidentiality and Command-Directed Mental Health Evaluations. Develop and issue command team graphic training aids (GTAs) with this information.	Amber	On-going requirement best managed as needed between subject-matter experts (IPs) and commanders.
Standardize USFOR-A paperwork required for BH evacuation: 1) Consider using only CENTCOM required paperwork, 2) Limit the amount of time a commander can refuse to sign paperwork to evacuate a patient, 3) Create identified positions to serve as nonmedical attendant escorts for emergency BH evacuations. Thoroughly evaluate for the USFOR-A Surgeon General's plan to have Landstuhl Regional Center provide attendees to escort BH evacuees to Landstuhl.	Amber	The recommendation that Landstuhl provide escorts may not be a feasible recommendation. Providers only make recommendations, therefore no action taken on limiting the amount of time a commander can refuse to sign evacuation paperwork. However, the unit escorts' return-to-theater on available flights should be given a higher priority to minimize the time they are lost to their unit.
Review and clarify scope of care for BH specialists/technicians and Occupational Therapists in theater and their responsibility in support of independent BH clinicians.	Amber	CONUS standards of care should apply to theater. BH technicians should not work independent of credentialed providers.
Develop a comprehensive peer review program and oversight function for isolated providers and those organic BH assets that do not report through TF MED-A, and are scattered throughout the theater. Standards of care and clinical documentation need to be clarified and continuously taught and reviewed upon provider rotation.	Amber	Consider using a standardized peer review form. Reviewers have to have AHLTA-Warrior and TMDS access to view clinician notes across theater.
Review available IT systems; consider overhaul of the system so that only two systems are necessary: AHLTA-Theater, so that providers can enter their notes in a stand-alone system when traveling; and one system which would allow providers to download notes entered into AHLTA-Theater and also view notes that have been entered in garrison and by other providers in theater.	Amber	Access and documentation in AHLTA-Warrior may help off-set regional issues.
Continue TBH in theater as it is currently being used; assess the outcome of the July TBH pilot program and discontinue 24/7 manning of TBH assets if it does not add significant value to the BH treatment of SMs.	Green	Continue 24/7 availability of TBH covered by on-call BH provider at BAF/KAF.

Determine where Substance Abuse evaluations can be conducted and by whom.	Green	Psychiatrists and psychologist typically credentialed to provide these evaluations. Social Worker evaluations should be reviewed by psychiatrist/psychologist. In-theater treatment not appropriate. AA meetings commonly available at larger FOBs (KAF/BAF).
Where possible, shift Special Duty Evaluations to clinics and personnel who have low case loads. If this is not feasible, develop a joint policy waiving the requirements for the face-to-face BH evaluation for special duty assignments until the SM returns to CONUS.	Amber	Current AHLTA-T measures of productivity fail to account for preventive work. Clinics with high case loads must coordinate with Theater BH Consultant for possible repositioning of assets. Increasingly, clinics should look to narrow services (e.g., special duty evaluations should mirror medical physicals—not to be done in-theater).

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13 Appendix A: Psychometric Assessment of Leadership Scales

An assessment of the psychometric properties and incremental validity of each leadership scale over and above other leadership measures of equivalent level (e.g. NCO compared to Immediate Superior, Officer compared to Company Grade Officer) was conducted. These analyses provided substantiation for which leadership scales and relationships were highlighted in the MHAT-9 report.

To determine the utility of the WRAIR and CAL leadership measures, statistical analyses of scale reliability, scale factor structure, and discriminate and convergent validity were conducted. The WRAIR scales for NCO Leadership, Officer Leadership, and NCO Sleep Leadership demonstrated consistent relationships with relevant outcomes when compared to prior MHAT reports and reported acceptable scale reliability and structure. The new WRAIR COSC Leadership scale was assessed and demonstrated high reliability and strong relationships with expected behavioral health and organizational effectiveness outcomes. It also related as expected with similar leadership scales included in the MHAT-9 survey.

The items and scales adapted from CAL's CASAL 2011 survey were assessed for their quality and relationships with their WRAIR equivalencies (e.g. officer, NCO). CAL's measures of leadership, including Toxic Leadership, Leader Competency, Expectations of an Army Leader, Leader Cultural Competency, and COSC Leadership, all demonstrated acceptable item and scale level quality (e.g. reliability, expected relationships with other leadership and behavioral health indices). The four items originally included in the survey grouped as "Unit Effectiveness" were separated for study analyses because the scale-level statistics and reliability were deemed inadequate to group the four items together as a scale using MHAT data. The four individual items were useful in predicting several key MHAT-9 report outcomes. All scale reliabilities are reported in Table 13.1 along with the number of items included in each scale. Each of the leadership scales used in the survey follow in Tables 13.1.1-13.1.11. It should be noted that the CAL scales and items were equivalent in quality and psychometric rigor when compared to the WRAIR scales. The latter substantiates the claim that both WRAIR and CAL scales are appropriately assessing the construct of leadership at both general and specific behavioral levels.

Table 13.1: MHAT 9 Leadership Scales and Reliabilities

Scale Name	Items	α
WRAIR NCO Leadership	8	.84
WRAIR NCO COSC Leadership	7	.95
WRAIR NCO Sleep Hygiene	9	.94
WRAIR Officer Leadership	8	.81
2011 CASAL – Selected Leader Competency Items - Immediate Superior	7	.95
2011 CASAL – Selected Leader Competency Items - Company Officer	7	.94
2011 CASAL Toxic Leadership Items - Immediate Superior	6	.81
2011 CASAL Toxic Leadership Items - Company Officer	6	.76

Scales were subsequently assessed for their ability to predict behavioral health (e.g., screening positive for any psychological problem, anxiety, depression, suicide ideation) and organizational effectiveness (e.g., individual morale, group morale, unit cohesion, intentions to stay in the Army) outcomes over and above other leadership scales included in the MHAT-9 survey. Hierarchical regressions demonstrated relationships with outcomes of approximate equivalency between the WRAIR NCO Leadership and the Officer Leadership scales with their CAL counterparts of the Leader Competency Scale at the Immediate Superior and Company Officer Level, respectively. Of the CAL scales, the Leadership Competency scale at the Immediate Superior and Company Officer levels were the most predictive of outcomes. The CAL items addressing Expectations of an Army Leader ("Be, Know, Do") and Leader Competency inconsistently predicted outcomes and thus were less informative for this report's discussion though were informative for a general discussion on leadership competencies.

The CAL Toxic Leadership scale, as adapted, did not show consistent nor robust predictive validity for key report outcomes incremental to the WRAIR scales. Thus, the Toxic Leadership scales were used less frequently as it was not as informative as the CAL Leader Competency scale for our specific behavioral health outcomes. In addition, the WRAIR NCO and Officer Leadership scales were stronger predictors of outcomes compared to the CAL Toxic Leadership scale at the Immediate Superior and Company Officer levels, respectively.

When WRAIR scales were compared with each other, the COSC scale and NCO Leadership scale predicted relevant outcomes robustly and, interestingly, inconsistently predicted outcomes better than the other suggesting that WRAIR and CAL scales are equally useful measurement tools with the WRAIR NCO Leadership scale providing a more generalized leadership metric in parallel with the CAL Immediate Superior Competency scale and the WRAIR COSC scale addressing specific stress control behaviors leaders may exhibit to varying degrees. COSC Leadership also demonstrated consistent relationships with sleep outcomes when compared to the WRAIR NCO Sleep Leadership scale. Thus, the WRAIR COSC Leadership scale may be used in concert or independently of the NCO Sleep Leadership scale which addresses specific leadership behaviors targeting sleep habits of Soldiers.

Overall, the scale- and item-level analyses demonstrated a group of psychometrically reliable measures which robustly predict focal behavioral health and organizational effectiveness outcomes. The CAL measure of Toxic Leadership demonstrated the weakest reliability and validity, but was still an informative leadership metric. CAL reported higher internal reliability in their CASAL 2011 report for the Toxic Leadership scale than was found using MHAT-9 data. The difference in reliability and scale predictive validity may be due to a number of factors including: the WRAIR version of the scale consisting of two fewer items than the CASAL version, the difference in sampled populations (e.g. garrison versus deployment settings), and the discrepancy in ranks surveyed (CAL did not include E1 - E4 in the CASAL 2011 survey report). Conversely, the WRAIR COSC Leadership scale created for MHAT-9 demonstrated promising convergent and divergent validity suggesting it holds high utility for future assessments of leadership behaviors critical to behavioral health.

Table 13.1.1: WRAIR NCO Leadership Scale Items
How often does your NCO:
Tell Service Members when they have done a good job?
Embarrass Service Members in front of other Service Members?
Try to look good to higher ups by assigning extra missions or details to Service Members?
Exhibit clear thinking and reasonable action under stress?
Show favoritism to certain members in the platoon?
Show concern about the safety of Service Members?
Ensure that Service Members do not assume unnecessary risks when conducting missions?
Demonstrate tactical proficiency and competence?

Table 13.1.2: WRAIR Combat Operations Stress Control (COSC) Leadership Items
How effective is your NCO at:
Intervening when a Service Member displays a negative reaction to the rigors of combat?
Demonstrating concern for Families of Service Members during deployment?
Encouraging Service Members to express emotions following losses and setbacks during the deployment?
Encouraging Service Members to seek help for problems before they affect job performance?
Reminding Service Members after intense experiences that we are here to serve with honor, serve a mission, and serve a greater purpose?
Preparing Service Members in advance to deal with any negative reactions to the rigors of combat?
Helping Service Members to handle the conditions of living in a deployed environment?

Table 13.1.3: WRAIR Officer Leadership Items
How often do Officers:
Tell Service Members when they have done a good job?
Embarrass Service Members in front of other Service Members?
Try to look good to higher ups by assigning extra missions or details to Service Members?
Exhibit clear thinking and reasonable action under stress?
Show favoritism to certain members in the platoon?
Ensure that Service Members do not assume unnecessary risks when conducting missions?
Protect the company from receiving too many taskings?
Demonstrate tactical proficiency and competence?

Table 13.1.4: WRAIR NCO Sleep Leadership Items
How often do NCOs in your platoon:
Ask Service Members about their sleeping habits?
Encourage Service Members to get adequate sleep?
Consider sleep as an important planning factor?
Encourage Service Members to nap when possible?
Encourage Service Members to get extra sleep before missions that require long hours?
Work to ensure Service Members have a good sleep environment?
Support the appropriate use of prescription sleep medications when Service Members need help with sleeping?
Discourage the use of caffeine or nicotine use within several hours before trying to go to sleep?
Encourage Service Members to try to go to sleep on time?

Table 13.1.5: CAL Unit Effectiveness
Leaders in my unit or organization help Soldiers handle combat stress.
In my unit or organization standards are upheld.
There is a discipline problem in my unit or organization.
My immediate superior is an effective leader.

Table 13.1.6: CAL Expectations of an Army Leader - Be, Know, Do
How well does/do your current Immediate Superior/Company Officers:
Match your expectations of what an Army leader should be, know, and do?

Table 13.1.7: CAL Leader Cultural Competency
Considering your current deployment, how effective is/are your:
Immediate Superior at interacting with the local Afghan population?
Company Officers at interacting with the local Afghan population?

Table 13.1.8: CAL Leader Competence - Immediate Superior
How effective is your Immediate Superior at:
Creating a positive environment?
Balancing subordinate needs with mission?
Demonstrating resilience when faced with adversity?
Encouraging candid respectful discussion?
Demonstrating empathy?

Table 13.1.9: CAL Leader Competence - Company Officer
How effective are your Company Officers at:
Creating a positive environment?
Balancing subordinate needs with mission?
Demonstrating resilience when faced with adversity?
Encouraging candid respectful discussion?
Demonstrating empathy?

Table 13.1.10: CAL Toxic Leadership - Immediate Superior
My Immediate Superior:
Puts the needs of the unit/organization and mission ahead of self.
Ignores constructive criticism.
Interferes with performance of my duties.
Makes poor decisions under pressure or in difficult situations.
Promotes good communication among team members.
Behaves in a way that makes me regularly try or think about physically avoiding him/her or them.

Table 13.1.11: CAL Toxic Leadership - Company Officer
My Company Officers:
Put the needs of the unit/organization and mission ahead of self.
Ignore constructive criticism.
Interfere with performance of my duties.
Make poor decisions under pressure or in difficult situations.
Promote good communication among team members.
Behaves in a way that makes me regularly try or think about physically avoiding him/her or them.