

The United States Army Comprehensive Soldier Fitness: A Critical Look

by

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Abstract

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Since 2003, the protracted conflicts in Iraq and Afghanistan have had an enormous impact on the mental health of the Army. To respond to the increased stress on the force resulting from multiple deployments and a high operational tempo, the Army developed the Comprehensive Soldier Fitness (CSF) program. Designed to improve Soldiers' resiliency and psychological fitness, the CSF is built on four pillars: individual assessment through the Global Assessment Tool (GAT); individual online training through the Comprehensive Resilience Modules (CRMs); establishment of a cadre of instructors through the Master Resilience Trainer program (MRT); and institutionalizing training through the Army professional military education system. As it is now implemented, the Army believes the CSF program has been successful, but some experts question the supporting research and contend that the program is not achieving the desired effects. Army CSF studies provide minimal evidence of success. An independent study of CSF is recommended and suggestions for changes in education, accountability and recruitment are offered to help ensure CSF is benefiting the Soldiers, unit readiness and the Army.

The United States Army Comprehensive Soldier Fitness: A Critical Look

These are the casualties of the spirit, the troubled in mind, men who are damaged emotionally. Born and bred in peace, educated to hate war, they were overnight plunged into sudden and terrible situations. Every man has his breaking point, and these, in the fulfillment of their duties as soldiers, were forced beyond the limit of human endurance.

—Beyond Deployment¹

The Comprehensive Soldier Fitness program (CSF) is an Army resiliency program based on positive psychology. It was developed and implemented in 2009 to respond to the increased stress on the force resulting from multiple deployments and a high operational tempo. While stress is not new to the military, a preventive program based on resiliency and psychological health is a new approach for dealing with the psychological strains Soldiers may confront. CSF has the potential to increase Soldiers' ability to cope with difficult or challenging personal, professional and familial situations and circumstances that accompany combat and multiple deployments. As it is now implemented, and based on several studies, the Army believes the CSF program has been successful, but some experts question the supporting research and contend that the program is not achieving the desired effects. This controversy demonstrates the need for additional research and analysis to determine the effectiveness of CSF and ensure that it is truly benefiting the Soldiers, unit readiness and the Army because the mental health of the force has strategic implications.

The nature of war has tested the endurance of Soldiers' resilience throughout history and no conflict has been immune to these injuries or their invisible scars. In the US military, combat stress has been recorded since the Civil War when it was referred to as a psychiatric condition known as Soldier's Heart and was characterized by

“sudden mood changes, heart palpitations, self-inflicted injuries, paralysis, tremors, and a longing to return home.”² In World War I, military physicians started using the term Shell Shock to describe the psychological trauma that men suffered as a result of trench warfare and the intense combat. A soldier who was Shell Shocked was described as “detached from daily life, [having] amnesia, developing a peculiar gait, and becoming blind or deaf.”³ The terms Battle Fatigue and Combat Fatigue were used by physicians in World War II and Korea to describe traumatic responses to psychological stress of combat. Symptoms of battle fatigue were similar to those of Soldier’s Heart and Shell Shock and consisted of anxiety, loss of concentration and motivation, depression, amnesia, and an inability to function normally. Since the Vietnam War, the Army has used the term Post-Traumatic Stress (PTS) to characterize the psychological injuries resulting from exposure to a traumatic event. In 2000, the American Psychiatric Association categorized the symptoms of PTS as intrusive thoughts/recollections, avoidant/numbing symptoms, and hyper-arousal.⁴

Since 2003, the protracted conflicts in Iraq and Afghanistan have had an enormous impact on the mental health of the Army and once again brought the issue of combat related stress to the forefront. The ten plus years of sustained combat have been linked to increased rates of post-traumatic stress, substance abuse and numerous other mental health related issues and disturbing behavioral trends. Evidence of this trend is the increased diagnosed cases of mental disorders in the US Armed Forces that rose from 78,429 in 2001 to 129,678 in 2011(See Table 1 below).⁵

Table 1. Number and Rates of Incidents of Disorders⁶

Number and rates of incidents of disorders, by diagnostic category, active component, U.S. Armed Forces 2000-2011

Category ^a	Total (2000-2011)		2001		2003		2005		2007		2009		2011	
	No.	Rate ^b	No.	Rate ^b	No.	Rate ^b	No.	Rate ^b	No.	Rate ^b	No.	Rate ^b	No.	Rate ^b
Adjustment disorders	471,833	2,952.4	30,451	2,366.9	30,343	2,190.1	32,379	2,418.0	41,783	3,200.2	51,593	3,857.4	55,409	4,263.8
Alcohol abuse/dependence	232,625	1,419.2	20,381	1,575.9	17,408	1,243.4	17,431	1,279.5	20,003	1,490.7	21,746	1,554.9	16,920	1,220.0
Substance abuse/dependence	73,623	434.2	5,860	441.9	4,539	314.3	4,773	338.8	6,086	437.1	8,212	563.0	7,003	484.8
Anxiety	187,918	1,129.2	7,802	591.2	9,549	667.9	12,771	920.1	17,721	1,299.5	23,763	1,680.0	28,565	2,061.1
PTSD	102,549	607.5	2,318	174.4	2,599	179.7	7,863	558.9	12,023	868.2	14,285	991.2	15,805	1,112.7
Depression	303,880	1,860.4	18,820	1,447.2	20,924	1,489.7	24,188	1,778.8	28,179	2,110.8	32,162	2,325.0	31,407	2,305.6
Personality disorders	81,223	479.8	8,281	626.0	7,264	504.6	7,222	514.1	7,130	513.2	5,014	343.7	4,110	284.2
Schizophrenia	5,572	32.7	650	48.8	429	29.6	412	29.1	453	32.4	440	29.9	351	24.1
Other psychoses	15,456	90.7	1,255	94.3	1,005	69.3	1,119	79.1	1,637	117.0	1,689	115.0	1,416	97.4
Other MH	318,827	1,958.4	17,555	1,350.8	17,198	1,222.2	22,720	1,667.5	33,007	2,481.8	36,320	2,650.9	36,394	2,707.5
No. of individuals	No.	Rate ^b	No.	Rate ^b	No.	Rate ^b	No.	Rate ^b	No.	Rate ^b	No.	Rate ^b	No.	Rate ^b
>1 category of mental health disorder	459,430	2,693.2	24,068	1,806.4	23,144	1,595.2	28,622	2,021.5	38,176	2,725.9	45,144	3,068.5	44,483	3,053.1
Any mental disorder diagnosis ^c	936,283	5,488.6	78,429	5,886.3	77,822	5,364.0	87,683	6,192.9	109,011	7,783.8	124,503	8,462.6	129,678	8,900.5

^aEach individual may be a case within a category only once per lifetime
^bIncident diagnoses per 100,000 p-yrs
^cAt least one reported mental disorder diagnoses

In response to these challenges the Army first developed the stress education program Battlemind in 2007, which sought to equip Soldiers with knowledge and skills to effectively transition and reintegrate after the trauma of a combat deployment. Building on Battlemind, the Army then sought to institutionalize a program to deal with the increasing and enduring problems of psychological health. This new program focused on building resiliency through developing of effective coping skills. Resiliency in this context was defined as the “ability to grow and thrive in the face of challenges and bounce back from adversity.”⁷ From this definition, the Army developed and instituted a comprehensive fitness program for Soldiers, families and Department of the Army civilians.

Comprehensive Soldier Fitness (CSF) Program Overview

In late 2008, the Comprehensive Soldier Fitness program was implemented by General George W. Casey Jr., Chief of Staff of the Army (CSA). GEN Casey made implementing CSF a top priority, securing over \$125 million of funding in support of the

program. A preventive approach to psychological health, CSF was modeled after the University of Pennsylvania's Dr. Martin Seligman's theory of positive psychology, which focuses on optimal human functioning and the promotion of the factors that allow individuals to thrive, rather than on the more traditional psychological focus on the treatment of disease and disorders.⁸ Built on four pillars, CSF is designed to improve Soldiers' resiliency and psychological fitness. These four pillars are: individual assessment through the Global Assessment Tool (GAT); individual online training through the Comprehensive Resilience Modules (CRMs); establishment of a cadre of instructors through the Master Resilience Trainer program (MRT); and institutionalizing resiliency training through the Army professional military education system. In theory, these pillars work together to enhance the resiliency and psychological health of participants by improving the four dimensions of psychological fitness: emotional, social, spiritual and family.

The first pillar of CSF is the Global Assessment Tool (GAT). It is a 105 question web-based survey designed and developed by experts from the U.S. military and the University of Pennsylvania to establish a baseline of fitness information for participants. It consists of a series of questions in the four dimensions of psychological fitness (emotional, social, spiritual and family) and is required to be completed by every Soldier annually or prior to a deployment. Upon completion of the GAT, results are posted on the Soldiers' page within of the Army Fitness Tracker website. The feedback provides the Soldier with an assessment of his or her strength within the four dimensions.

The second pillar of the CSF program is the online Comprehensive Resilience Modules (CRMs). It consists of twenty modules covering the four dimensions of fitness

(emotional, social, spiritual and family). Each online module requires 15-20 minutes to complete and they are recommended to a Soldier based on their GAT survey and assessed strength within the dimensions. The intent behind the self-guided online training is to build strength in each dimension of fitness through awareness, understanding and skills development.

The third pillar of the CSF is the Master Resilience Trainer (MRT) program. MRTs are individuals who are certified through a ten day formalized program of instruction given at four locations: the University of Pennsylvania; the Leader Development Division (LDD), Fort Jackson, South Carolina; the National Guard MRT Training Center- Wisconsin (WI), at Fort McCoy, WI; and the Great Lakes Master Resilience Center- Michigan (MI) at Fort Custer, MI. The instruction is also given at various military facilities by a mobile training team. Designated to fill positions in every organization and at every level within the Army, MRTs serve as the principal advisor to the leadership regarding CSF and as a resource for Soldiers seeking help or professional assistance. MRTs also work with commanders to schedule, resource and execute CSF training to increase core competencies of optimism, mental agility, and self-regulation of the individual Soldier.

The fourth pillar of CSF is institutional training, which are blocks of instruction that have been embedded in the officer and enlisted professional military education system. This training consists of presentations from one to four hours in length and includes topics such as: an overview the CSF program pillars; the four dimensions of emotional, family, social and spiritual fitness; and the six competencies of mental health,

which are self-awareness, self regulation, optimism, mental agility, strength of character and connection.

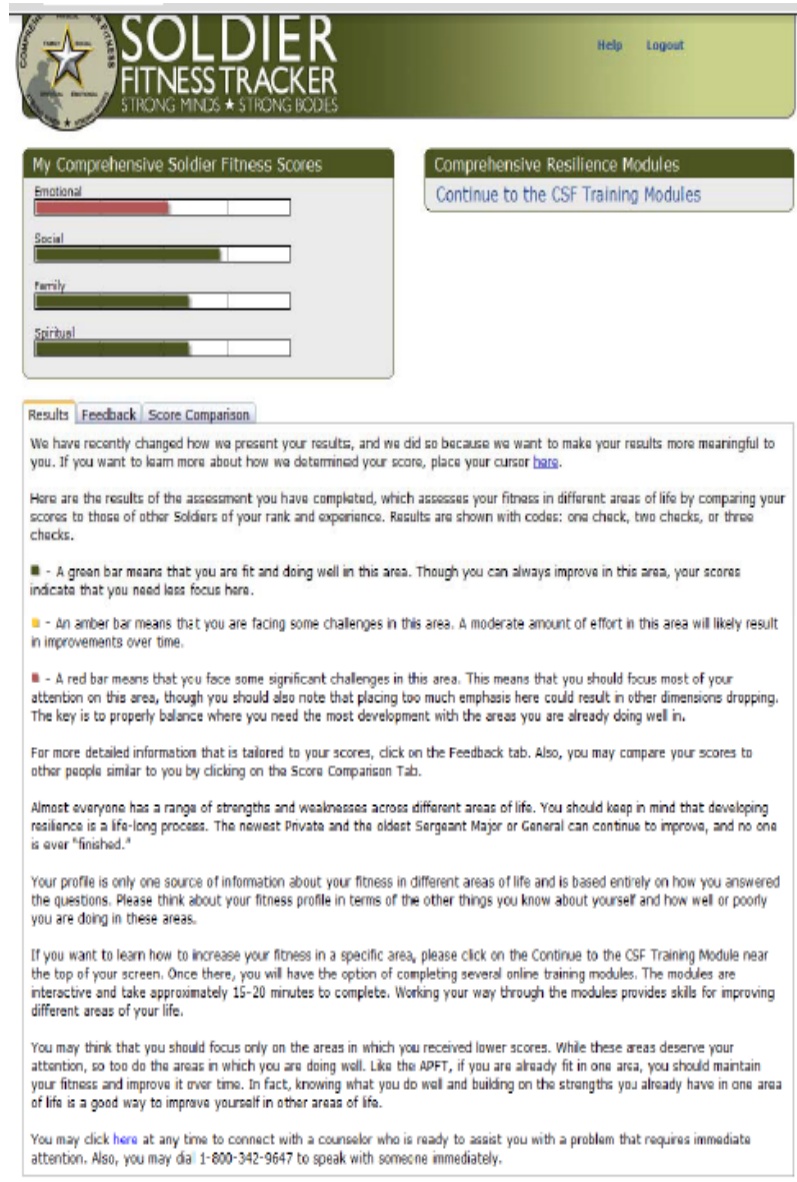
Comprehensive Soldier Fitness (CSF) Program Description and Assessment

The foundation of CSF is the ability of Soldiers to assess themselves using the GAT. This self assessment consists of an online survey of questions that probe a Soldier's personal perception and solicit self reported behaviors related to emotional, social, spiritual and family fitness.⁹ Each of these dimensions is measured by weighing a number of associated attributes. Emotional fitness is defined by adaptability, good and bad coping, catastrophizing, character, depression and positive and negative effect. Family fitness reviews family satisfaction and support. Social fitness uses friendship, loneliness and organizational trust. Spiritual fitness asks questions about how Soldiers conduct their life, which includes questions on spirituality, purpose and meaning of life, and whether or not they feel connected to humanity and the world.

Once the GAT is completed, Soldiers receive feedback via the online Army Fitness Tracker website. The information comes in a tabbed format that consists of the GAT score with a broad narrative, a tailored narrative and a comparison dashboard. The Soldier's score is depicted using a bar chart for each of dimension (emotional, social, spiritual and family). Each bar is color coded in comparison to the mean score of other Soldiers' GAT scores. Green is above 50%, amber represents a score between 26% and 50%, and red is 25% and below. The broad narrative describes this methodology and how to interpret the data and provides any Soldier with a red score a hyperlink and phone number to connect with a counselor (See Table 2 below). The tailored narrative provides written feedback on each dimension and advice on how to sustain strengths and improve weaknesses. The tailored dashboard provides each

Soldier the opportunity to compare his or her scores with those of other Soldiers in the same demographic.¹⁰ Completing of the GAT and receiving the feedback is the first step in the CSF program and is the foundation for the program's success.

Table 2. Soldier Fitness Tracker¹¹



Starting in 2011, the Army initiated a series of studies to evaluate the impact of the CSF program. To date, three studies have been conducted, each of which evaluated the impacts of the CSF program by examining the relationship between

reported resilience and the psychological health and the behavioral outcomes of Soldiers.¹² The first report studied Negative Outcomes (Suicide, Drug Use and Violent Crimes), the second report studied Positive Performance Outcomes in Officers (promotions, selections and professions), and the most recent study, administered by the Army, focused primarily on the impact of the third pillar, MRT. The third study included eight Brigade Combat Teams, four with Master Trainers and four without. The data from all three studies can be analyzed and applied to assess and evaluate the CSF program.

There are significant problems with how these studies used data from GAT. In each study, GAT data was the primary source of data to evaluate individuals. In the third study, changes in a Soldier's GAT data in one or more dimension (emotional, social, spiritual and family) from one survey to the next was used to determine a Soldier's psychological fitness and whether the program was having an impact. While this data is useful in determining a Soldier's profile, the GAT itself may not be the right or appropriate tool in assessing the CSF program. According to one of the CSF psychologists, the GAT survey "captures a snap shot of a Soldier's mood in time"¹³ and while the data may indicate a change, it does not explain how or if this change is related to the program.

After a review of the CSF program, Doctors Eidelson and Soldz criticized the Army's conclusions "there is now scientific evidence that CSF improves the resiliency and psychological fitness of Soldier's"¹⁴ as being deeply flawed because they were based solely on the GAT, a self-assessment by soldiers that does not include validated measures of the program's effects on post traumatic stress disorder, depression,

suicides or psychological disorders.¹⁵ Nor were the Army's conclusions based on any hard behavioral data.¹⁶ Additionally, Eidelson and Soldz stated that "despite changes in GAT scores in several domains there is no evidence that these changes are associated with changes in functional mental outcomes" such as PTSD, depression and anxiety.¹⁷ There is little evidence that improvement in a Soldier's GAT scores signifies any reduction in the incidence or likelihood of significant psychological distress.¹⁸

Participation in the GAT survey also lacks an accountability and enforcement function, except for the notification to the individual Soldier on their Army Knowledge Online (AKO) homepage. This lack of enforcement and the absence of a reporting requirement are evident throughout the Comprehensive Soldier Fitness Execution Order, published in June 2010 and subsequent modification orders, leaving compliance to the discretion of local commanders. Compounding this problem, one of the CSF research psychologists indicated that senior leaders are the biggest violators of not completing the survey as required.¹⁹ These facts suggest that the program is misunderstood and does not have "buy-in" from some of the Army leaders and moreover, is not truly a priority.²⁰

The lack of trust or buy-in is also evident when examining the usability or quality of the GAT survey. Army CSF studies report that 90% of Active, Guard and Reserve Soldiers have participated in the GAT survey.²¹ However, of that number, between 11% and 16% stated that they did not provide accurate or quality information because they do not trust the process, suggesting that the actual percentage of useful participation may be well below 80%.²² In collecting GAT survey data for the studies, researchers also had to account for a significant decrease in the number of useable surveys to

compare, which meant the study consisted of a small population than expected. In short, the data analysis suggests that not only is the program not reaching the intended audience, but that using the GAT data as a metric to evaluate the program is inherently problematic.

One of the most significant problems with using the GAT survey to study the CSF program's effectiveness is that in two of the four domains, family and spiritual fitness, there was no noticeable or identifiable change in the survey assessment over the course of the study. Moreover, the improvement in the domains of social and emotional from one survey to the next was less than 2% between the control group and treatment group (see Table 3). Eidelson and Soldz warn that "these results are even weaker when one considers the minimal associated effects sizes in the report and the experiment wise error involved in conducting many statistical significance tests without adjusting for the number of analyses."²³ The usefulness of the GAT also has to be questioned if Soldiers are not actively using the results to grow individually.

Table 3. Differences Between Treatment and Control Conditions ²⁴

Differences between Treatment and Control Conditions at Time 2

		Control [†]		Treatment [‡]		Mean Diff.	F	Sig.	Partial η^2
Dimension/Subscale		Mean	SD	Mean	SD				
Positive	Emotional Fitness	66.74	0.23	68.04	0.16	1.31	21.19	.000	.002
	Adaptability	68.15	0.32	69.23	0.22	1.08	7.62	.006	.001
	Character	70.58	0.32	72.21	0.22	1.63	18.13	.000	.002
	Good Coping	62.71	0.34	64.01	0.23	1.30	10.27	.001	.001
	Positive Affect	60.74	0.37	61.22	0.25	0.47	1.11	.293	.000
	Optimism	57.06	0.32	58.09	0.22	1.02	6.92	.009	.001
	Family Fitness	71.27	0.35	71.65	0.24	0.38	0.80	.372	.000
	Family Satisfaction	76.90	0.44	76.57	0.31	-0.32	0.36	.551	.000
	Family Support	68.47	0.40	68.80	0.27	0.32	0.45	.504	.000
	Social Fitness	65.08	0.28	65.74	0.19	0.66	3.83	.050	.000
	Engagement	57.46	0.39	58.09	0.27	0.63	1.77	.183	.000
	Friendship	77.70	0.40	79.74	0.28	2.04	17.28	.000	.002
	Org. Trust	59.15	0.39	59.69	0.28	0.54	1.26	.263	.000
	Spiritual Fitness	56.99	0.38	57.07	0.26	0.09	0.04	.852	.000
Negative	Catastrophizing	31.90	0.39	30.29	0.27	-1.61	11.58	.001	.001
	Bad Coping	55.02	0.39	55.02	0.27	0.00	0.00	.997	.000
	Depression	21.40	0.40	20.60	0.28	-0.80	2.69	.101	.000
	Negative Affect	36.17	0.29	35.91	0.20	-0.27	0.58	.445	.000
	Loneliness	35.15	0.35	34.96	0.24	-0.19	0.19	.666	.000

[†]n=3215-3218; [‡]n=6739

Following the GAT self-assessment and feedback, Soldiers are expected to seek self-improvement by participating in the second pillar of the CSF program, the Comprehensive Resilience Modules (CRM). These online modules are linked to the Soldier's GAT survey results, however all the modules are available and accessible to all Soldiers. The CRM consists of PowerPoint presentations and multi-media and situationally based interactive videos designed to build resilience by aiding in self development and teaching skills within the four dimensions (see Figure below for content).

Emotional Dimension: • What is an Emotion • Activating Event Thought Consequences • What do Emotions Do? • What Good are Negative Emotions? • What Good are Positive Emotions? • Put it in Perspective	Family Dimension: • Trust and Insecurity • Hostile Interaction Following Arrival Home • Who is in Charge • Stranger in My Own House • Effective Communication
Social Dimension: • Dynamic of Socially Resilient Teams • Team Diversity and Resilience • Importance of Team Chemistry • Building Resilient Teams • Active Constructive Responding	Spiritual Dimension: • Spiritual Support • Rituals • Making Meaning • Meditation • Hunt for the Good Stuff

Figure. Self Development and Teaching Skills Within the Four Dimensions

Based on Soldier completion rates the CRM pillar is not working. While the subjects within each dimension are relevant, Soldiers are not utilizing or completing the online module training.²⁵ This suggests that even though soldiers are now aware of their strengths and those areas needing improvement, they are not taking advantage of the CRM opportunity, seeking to improve, which is a key objective of the program. Further is the discouraging statement in the third Army study, “CRM had no impact on resilience and psychological health scores during the time period of the study.”²⁶ This statement, coupled with a controlled evaluation of the program that determined that one of the four pillars of the CSF program was ineffective, indicates that the self development aspect of the CSF program does not relate well to or interest Soldiers.

One reason Soldiers might not be interested in or relate well to the CRMs is that online training is not for everyone. The Army Inspector General has said that one of the top ten complaints of Soldiers was that the Army has too much online training. They did not like that they were expected to do it on their personal computers and on their personal time.²⁷ The effectiveness of online learning has been widely studied in civilian and educational settings. For example, one company that launched an online training

program had a 50% attrition rate while another had an 80% attrition rate on their job related web-based training courses. Both companies found that the majority of people preferred the classroom experience when learning.²⁸ Another issue continually identified in studies of online training is the lack of incentives. These studies find that, without a tangible gain, most individuals are reluctant to or are not motivated to complete this online training during their personal time.²⁹ Researchers have found that online training can be a highly effective medium for a specific type of individual: the mature, self-disciplined learner. The same research finds that online modules are an inappropriate learning environment for more dependent learners.³⁰

More important, is the response of Soldiers with lower GAT scores who are directed toward the CRM training. The first study states that there is a link between Soldiers with lower GAT scores and maladaptive behavior, which means that the completion rate among the targeted group might be impacted by the factors of personality, maturity and motivation.³¹ Simply stated, Soldiers with lower GAT scores are more than likely lack the discipline to take or complete the CRM and the voluntary nature of CRM adds to this problem.

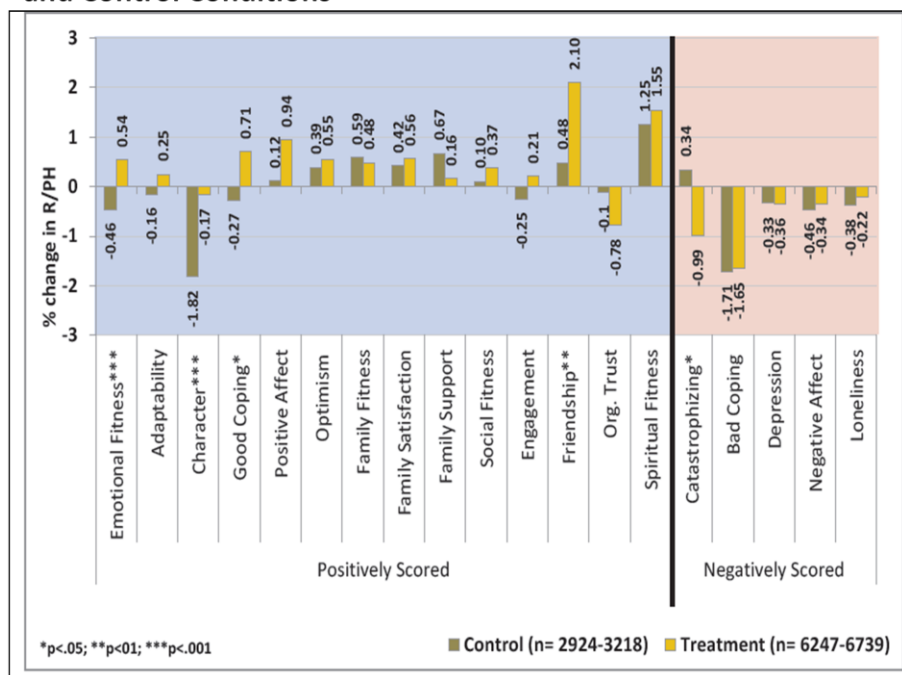
Currently, participation in the module training is not mandatory and even if someone enrolls they are not held formally accountable for completing the modules. Modification 1 of the Army implementation Order states, "local commanders can determine the requirements for CRM completion in the family, emotional and social dimensions. Spiritual dimension CRM is completely voluntary and Soldiers shall not be mandated or directed to complete."³² With no formal individual or unit reporting or tracking requirement, participation in CRM may or may not happen. One study of online

training stated that accountability, or the lack of it, was one of the biggest hurdles for some learners.³³ Additionally, telling a commander he “can” or has the option to determine the CRM requirements undercuts uniformity throughout the Army.

Regardless of whether Soldiers complete CRM, all Soldiers will receive unit-based instruction from a Master Resilience Trainer (MRT). Identified as critically important to the implementation of the CSF program, these Trainers attend a ten day course designed to prepare them to serve as advisors to commanders, unit trainers and counselors. To prepare them for these responsibilities, the MRT course utilizes four modules: resilience, building mental toughness, identifying character strengths and strengthening relationships. Module one focuses on the six competencies: self-awareness, self regulation, optimism, mental agility strengths of character and connection. Module two, building mental toughness, teaches skills that increase competencies learned in module one. Module three focuses on identifying top character traits and practicing them individually and with others to accomplish a goal or overcome a challenge. Module four focuses on building relationships utilizing active constructive response, praise and communication. Following the modules, the last portion of instruction is reinforcement training and teaching MRT students how to use the material to instruct and assist others. This phase consists of a series of practical exercise, role playing and group discussions intended to prepare non-commissioned officers to serve as unit facilitators and trainers.³⁴ While this training is thorough and has received extremely positive feedback from the participants, there are questions about the impact of unit MRTs.

The problem with the MRT pillar is determining and measuring its effectiveness. The third Army study on CSF states, “it is impossible to determine the mechanisms through which the presence of the MRT training impacts the self-reported resiliency and psychological health [GAT survey] of Soldiers and we do not know which of the 12 MRT skills influenced the resiliency and psychological health scores [in the GAT survey] the most or least.”³⁵ This acknowledgement also demonstrates why the GAT survey is not a good single source of data to evaluate the CSF program.

Table 4. Change in Fitness from Time 1 to Time 2³⁶
Change in Fitness from Time 1 to Time 2: Comparing the Treatment and Control Conditions



Another problem with the study is that the third report attributes any and all changes in the CSF dimensions (emotional, social, spiritual and family) and the associated sub-scales to the presence of and training by the MRTs (see Table 4 above). However, there is not a significant improvement or change in the GAT survey between the treatment and control groups during the study. Several leading

psychologists and psychiatrists stated, “the findings do not seem to be very impressive.”³⁷ This is apparent when looking at the numbers or small improvements: .98% better coping skills, 1% more emotionally fit and .41% more adaptable in units with trainers (See Table 4 above). The authors of the report stated that “it is important to keep in mind that the small size of the effects does not necessarily mean that the treatment had a small impact.”³⁸ However, they fail to explain this statement or to describe how the MRTs achieved these effects or how the small effects could have a bigger impact. Clinical Psychologist George Bonanno, stated that even if the Army study is accurate, “it’s not clear they actually showed anything” because “it’s such a small effect one would have to question whether it was worth it.”³⁹ Psychiatry Professor Bessel van der Kolk, echoed Bonanno’s concerns.⁴⁰ Bonanno went on to state that “the study’s design was weak and if they wanted to conclude that there was something special about providing units with MRTs, then for scientific proof, Army officials should have compared three different situations: units with Resilience Trainers, units with no Trainers and units receiving training in how to relax, or how to be better leaders, or just about any alternative.”⁴¹ In other words, some change should have been expected in a unit where the CSF program was the focus, fully implemented and resourced with MRTs vice one where it was not. In spite of the slight change, the results do not validate the influence or impact of the MRTs. Finally, Psychology Professor James C. Coyne said “there’s little reason to believe that these techniques [referring to Master Resiliency Training] would have any efficacy at all. It’s very difficult to do anything preventively before the fact.”⁴²

This skepticism becomes even more evident when an attempt is made to link MRT to changes in an individual's character. In the third Army study, researchers identified a decrease in the character in both the treatment and control groups. The decrease in the treatment group was less than the control group, -1.82 to 0.17 (see Table 4). Based on this finding, the researchers stated that "some evidence exists that MRT training may guard against natural rates of decline in character fitness."⁴³ While this hypothesis is interesting, it lacks evidence and fails to site a source or study where degrading character is a natural phenomenon. This statement is even more questionable based on the researchers' comments that "the study does not provide an explanation of which facts of the MRT training are responsible for impacting on the GAT score."⁴⁴

Finally, are the right individuals being selected to serve as the MRTs? Review of the selection criteria lists no pre-requisites, specific requirements, standards or considerations for candidates and therefore the unit chain of command is the sole determining factor in the selection process.⁴⁵ This means that the right individual may or may not be selected. Doctor Eidelson also questioned whether someone can be adequately prepared to teach this material after only ten days of instruction, stating that the study the MRT program is modeled after had better outcomes when administered by highly trained research staff rather than staffed with personnel recruited from the community.⁴⁶ This consideration raises doubts about how effective a non-commissioned officer can be after only ten days of training and virtually no experience in the field of positive psychology.⁴⁷ The third report also indicated that MRTs were only successful when they were confident with the material, the training was scheduled, and the

program was fully supported by the chain of command.⁴⁸ The absence of standardized selection criteria for MRT candidates and the lack of attributable effects makes the effectiveness of MRT component of CSF unsubstantiated.

The fourth pillar of CSF, institutional resiliency training, is focused on integrating resiliency training into all phases of the officer and enlisted professional military education. In each curriculum or program of instruction, Training and Doctrine Command (TRADOC) has tailored CSF course materials to the level of development and rank/grade of the students. For example, an enlisted Soldier in the grade of E-4 attending the warrior leaders' course to learn how to serve as a team or section leader receives CSF instruction with a different level of focus than a staff sergeant or sergeant first class attending the senior leader course. This approach is intended to build resiliency throughout an individual's career and to prepare him or her for serving in leadership and supervisory positions with skills to educate and lead his or her organization, ultimately making CSF part of the Army culture.⁴⁹

Table 5. Resilience Training Lifecycle: Institutional

Resilience Training Lifecycle: Institutional						
Enlisted	BCT	Warrior Ldrs Course	Advanced Ldrs Course	Senior Ldrs Course	Sergeant Major Course	Pre-Command Course
	Introduces fundamental resilience skills to “check and adjust” individual and buddy responses to stressful events during BCT (2 hours)	Introduces resilient skills (7 thinking skills, character strengths, active constructive responding, effective communication and optimism) (3 hours)	Trains leader principles and skills that enhance Soldier resilience in garrison and during operations (2 hours)	Trains leader skills for mitigating the impact of operations on unit resilience; identifies how resilient skills can be adapted for operations (2 hours)	Addresses strategies for building resilient organizations and reducing stigma; reviews research on behavioral health and operations (1.5 hours)	Prepares senior leaders to develop resilience in subordinate leaders during operations (1 hour)
Officer	BOLC-A (ROTC/USMA)	BOLC-B / WOBC	CCC / WOAC	ILE / WOSC	Pre-Command Course	War College/ WOSSC
	Introduces fundamental resilience and performance skills (2 hours)	Introduces resilient skills (7 thinking skills, character strengths, active constructive responding, effective communication and optimism) (12 hours)	Trains leader skills for mitigating the impact of operations on unit resilience; identifies how resilient skills can be adapted for operations (2 hours)	Addresses strategies for building resilient organizations and reducing stigma; reviews research on behavioral health and operations (1.5 hours)	Prepares senior leaders to develop resilience in subordinate leaders during operations (1 hour)	Reviews Comprehensive Soldier Fitness and resilience training programs (1 hour)

At this point, it is difficult to assess problems or issues associated with the institutional resiliency training pillar of CSF because it has only been in place for 18 months. Due to this limited amount of time, there is a lack of data and feedback to assess its impact or effectiveness. However, the three hours of instruction in the Warrior Leaders Course or the two hours in the Captains Career Course in Table 5 are examples of insufficient time allocated to achieve the intended objective of aiding in creating a culture of resiliency cross the Army. Additionally, the medium for most of this training is PowerPoint based instruction,⁵⁰ which may be less effective than an interactive or scenario based model. The Pre-Command Course CSF Overview (See Table 5 above) exemplifies why this training will not work or achieve the desired result. The purpose of this training is to “apply an evidence-based, Soldier oriented resilience program for leaders to ensure mental fitness within their organization.”⁵¹ To achieve this

goal, the overview is allocated one hour and consists of thirty seven slides, which means that a little over one minute will be spent on each slide, leaving virtually no time for questions or discussions. This small amount of time and limited exposure to the material means that the overview will more than likely not achieve the intended purpose. This point is even more significant because the audience consists of the commanders and sergeant majors that are responsible for the program's implementation and execution at the unit level. It also suggests that at a minimum, this pillar needs more research, analysis and participant feedback to determine its impact and value.

Program Criticism

Because of the significant problems assessing the effectiveness of CSF, the program has been widely criticized. Some of this criticism has focused on the lack of research prior to implementation. Psychoanalysis Professor Stephen Soldz, stated "the problems identified with CSF are legion. It is time for the Army to step back from uncritically promoting this untested program."⁵² Other critics call the program an expensive large scale experiment that lacks supporting research and tests within the Army.⁵³ This fielding without a test could account for another problem that has surfaced: the labeling of one of the program's four key dimension as "spiritual fitness." Many Soldiers and some psychologists feel that spiritual fitness promotes religion and the GAT itself is an assessment of religious faith. While the Army and the program psychologists deny this linkage, many critics have remained skeptical, which has forced the Army to do away with the requirement for Soldiers to participate in any training related to the spiritual dimension. This change meant that one of the critical components of the program was not implemented, further degrading the effectiveness of the already questionable program.

In addition to these issues, one of the other challenges for the Army has been the lack of the program's measurable and quantifiable results. Seligman, Reivich and McBride, the Penn State psychologists behind the program, wrote in one article, "We hypothesize that these skills will enhance Soldiers' ability to handle adversity, prevent depression and anxiety, prevent PTSD and enhance overall well-being and performance."⁵⁴ However, none of these results have materialized. As recently as September 2012 during an Army wide suicide prevention stand down, the Chief of Staff of the Army, General Ray Odierno, stated that the Army was on record pace for suicides in 2012, with 237 suspected incidents, a number that does not include the suicide attempts. He also stated that "the Army will step up its resilience program to combat the problem."⁵⁵ In contrast to the expectations outlined in these statements, the Army CSF program managers and psychologists contend that CSF was never intended to deal with these problems directly and therefore they should not be used as a metric. This assertion is confusing based on the history and origin of the CSF program and clearly demonstrates that even within the Army there is a differing perception, expectation and understanding of the program's utility and purpose. Taken together, these issues reinforce the idea that the program's design and implementation was lacking. While no one can challenge the desire of the CSF program to help Soldiers, an analysis of the data shows there is a lack of empirical evidence to support the efficacy and effectiveness of the program.⁵⁶

This lack of significant results has also led many to question and criticize the \$125 million initial cost of the program, which did not include the "fully burdened cost" or money required to operate or sustain the program.⁵⁷ In 2010-11, this funding was

secured through a year of execution bill. Starting in 2012-17, the CSF requirements were included in the Program Objective Memorandum with specific funding being determined by the priority of senior leaders in a given year rather than planned annual resources from which to build a sustainable CSF program.⁵⁸ In a fiscally uncertain and constrained environment, can leaders justify a program that cannot be fully implemented and has not been shown to improve resiliency?

Recommendations

Given the problems identified with the CSF program, the Army should take the following actions: re-examine the CSF program, establish metrics, implement stricter initial entry standards and improve leader training. The considerable criticism of the Army's own research on CSF is reason enough to reevaluate the program. This reevaluation should consist of an independent review of CSF as it currently exists to determine what factors, if any, are contributing to an individual's or group's resiliency. The data should then be used to improve the program's execution or reshape how information is presented or training is conducted. Regardless, CSF must eliminate what does not work and clearly define measurable outcomes and measures of effectiveness.

Part of the measures of effectiveness could include metrics linked to lower Soldier mental health issues or disciplinary trends. The current program lacks these tools. Leaders and commanders need this type of feedback in order to evaluate their unit's program and Soldiers in order to make the necessary adjustments. As Admiral Mullen, the former Chairman of the Joint Chiefs of the Staff stated in September 2011:

Leaders must identify the metrics that will set the right conditions to promote fitness. Metrics must be feasible, effectively measuring the desired outcome and accurately assessing whether the Total Force Fitness [Joint Term for CSF] program is meeting its goals. They must also demonstrate progress toward achievable and realistic outcomes,

addressing positive as well as negative outcomes that clearly indicate the overall readiness of the Armed Forces. Metrics must tell us whether we are improving the fitness of the force in each TFF domains.⁵⁹

If CSF had this capability, the necessary information to create a system of reporting would exist and leaders and commanders at all levels would be forced to take responsibility and accountability for the program.

While accountability is critical in the Army, enlisting the best possible candidates to serve as Soldiers is where resilience truly starts. According to the first CSF report, “analyses was consistent with expectation that Soldiers who completed suicide, Soldiers who test positive for illicit drug use and Soldiers who commit violent crimes, are less resilient than Soldiers who do not engage in such behavior.”⁶⁰ Although this relationship is not surprising, it does indicate the need for the Army to screen recruits for existence of psychological abnormalities and behavioral issues prior to enlistment. A possible screening model could be one of the Special Operations communities’ mental health tests, which focuses on an individual’s ability to cope with stressful and adverse situations. In addition to mental health screening the Army may also have to change how it educates and trains its recruiters so that they are better prepared to assist in screening recruits. However, until some kind of screening is in place, the Army needs to permanently do away with any and all waivers for psychological or behavioral related problems. The importance of this approach is apparent when reviewing the facts that 11% (>18,000/year) of recruits fail to complete initial entry training at a cost \$75,000 per enlistee and a total of 30% fail to finish their first tour of duty.⁶¹ While ensuring the best Soldiers are recruited the Army must also have leaders with the right skills.

CSF should not be a standalone program. The effective elements of building a more resilient individual should be integrated into the professional military education

system with a focus on the development and education of leaders at every level. Properly trained, informed and educated leaders create the most effective learning environment for Soldiers; the experiential learning environment. Seamlessly and deliberately integrating resiliency training into this environment and making it an outcome of training could assist in creating a more resilient Soldier.

Conclusion

The psychological health of the force has strategic implications. From 2002 to 2009, the number of Soldiers who were non-deployable due to mental disorders increased from 7% to 39% and these numbers have only continued to rise.⁶² By the end of 2012, the Army G-1 expected the total Army non-deployable rate to be as high as 16% with mental illness comprising a significant portion of that number.⁶³ The impact of these figures on manning, force generation and unit readiness is reflected in the Army's commitment to Comprehensive Soldier Fitness and its desire to reverse these trends. However, in a time of dwindling budgets and constrained resources, the Army must demand that programs such as CSF are effective and producing measurable results. If not, Comprehensive Soldier Fitness, like many other well-intentioned programs will be perceived as nothing more than a signal that the Army is trying while in actuality wasting effort and consuming valuable resources and time. In the words of Sir Winston Churchill, "however beautiful the strategy, you should occasionally look at the results."⁶⁴

Endnotes

¹Madeleine Baran, The Rd Bulls: Beyond Deployment (Timeline: Mental illness and war through history), February 2010, <http://minnesota.publicradio.org/projects/2010/02/beyond-deployment/ptsd-timeline/index.shtml> (accessed January 20, 2013).

²Ibid.

³Ibid.

⁴Matthew J. Friedman, PTSD History and Overview (A brief history of the PTSD diagnosis), January 31, 2007 <http://www.ptsd.va.gov/professional/pages/ptsd-overview.asp> (accessed January 20, 2013).

⁵A publication of the Armed Forces Health Surveillance Center, Mental Disorders and Mental Health Problems, Active Component, U.S. Armed Forces, 2000-2011, Volume 19 Number 6, June 2012, http://www.afhsc.mil/viewMSMR?file=2012/v19_n06.pdf#Page=01,¹⁴ (accessed January 20, 2013).

⁶Ibid.

⁷U.S. Army Medical Department, Resiliency Training (Formerly Battlemind), <https://www.resilience.army.mil> (accessed January 20, 2013).

⁸University of Pennsylvania Positive Psychology Center, <http://www.ppc.sas.upenn.edu/akumalmanifesto.htm> (accessed January 20, 2013).

⁹Paul B. Lester, P.D. Harms, Mitchel N. Herian, Dina V. Krasikova, The Comprehensive Soldier Fitness Program Evaluation: Report #3: Longitudinal Analysis of the Impact of Master Resilience Training on Self-Reported Resilience and Psychological Health Data, December 2011, 8.

¹⁰Ibid., 8

¹¹Paul B. Lester, P.D. Harms, Denise J. Bulling, Mitchel N. Herian, Seth M. Spain, Evaluation of Relationships between Reported Resilience and Soldier Outcomes: Report #1: Negative Outcomes (Suicide, Drug Use and Violent Crime), February 2011, 32.

¹²Ibid., 3

¹³Paul B. Lester, Research Psychologist Comprehensive Soldier Fitness, telephone interview by author, October 18, 2012.

¹⁴Lester, et al., "The Comprehensive Soldier Fitness Program Evaluation: Report #3," 1.

¹⁵Patricia Kime, Psychologists question army resilience program, July 2, 2012, <http://www.armytimes.com/news/2012/07/military-psychologists-question-army-training-program-070212w/> (accessed January 20, 2013).

¹⁶Roy Eidelson and Stephen Soldz, "Does Comprehensive Soldier Fitness Work? CSF Research Fails the Test," May 2012, <http://www.ethicalpsychology.org/Eidelson-&-Soldz-CSF-Research-Fails-the-Test.pdf>, 7 (accessed January 20, 2013).

¹⁷Ibid., 6.

¹⁸Ibid.

¹⁹ Paul B. Lester, Research Psychologist Comprehensive Soldier Fitness, telephone interview by author, October 18, 2012.

²⁰ Lisa S. Meredith et al. Promoting Psychological Resilience in the U.S. Military (Santa Monica: Center for Military Health Policy Research, 2011), XV.

²¹ Lester, et al., "The Comprehensive Soldier Fitness Program Evaluation: Report #1," 12.

²² Paul B. Lester, Research Psychologist Comprehensive Soldier Fitness, telephone interview by author, October 18, 2012.

²³ Eidelson, "Does Comprehensive Soldier Fitness Work?," 9.

²⁴ Lester, et al., "The Comprehensive Soldier Fitness Program Evaluation: Report #3," 15.

²⁵ Paul B. Lester, Research Psychologist Comprehensive Soldier Fitness, telephone interview by author, October 18, 2012.

²⁶ Lester, et al., "The Comprehensive Soldier Fitness Program Evaluation: Report #3," 9.

²⁷ LTG Peter M Vangjel, Department of the Army IG with scripted commentary, Carlisle Barracks, PA, U.S. Army War College, December 20, 2012.

²⁸ Dave Zielinski, "The Lie of The 'anytime' of online learning, Training," February 2000, <http://www.eric.ed.gov/ERICWebPortal>, 39. (accessed January 20, 2013).

²⁹ IL Online Network, Weaknesses of Online Learning, <http://www.ion.uillinois.edu/resources/tutorials/overview/weaknesses.asp>, (accessed January 20, 2013).

³⁰ Ibid.

³¹ Lester, et al., "The Comprehensive Soldier Fitness Program Evaluation: Report #1," 23.

³² Fragmentary Order 2 to Comprehensive Soldier Fitness EXORD, Department of the Army, Washington DC, DCS G-3/5/7-CSF, February 10, 2011.

³³ Crystal Vande Poppe, "The Challenges of Online Learning (A look at why students may choose online learning options and challenges that students and teachers may face)," May 24, 2011, <http://suite101.com/article/the-challenges-of-online-learning-a372697> (accessed January 20, 2013).

³⁴ Karen J. Reivich et al. Master Resilience Training in the U.S. Army, (American Psychologist, Vol. 66, No. 1, January 2011), 27.

³⁵ Lester, et al., "The Comprehensive Soldier Fitness Program Evaluation: Report #3," 26.

³⁶ Lester, et al., "The Comprehensive Soldier Fitness Program Evaluation: Report #3," 16.

³⁷ Dan Sagalyn, Health Experts Question Army Report on Psychological Training (Mental health experts say a U.S. Army report on training aimed at enhancing soldiers' psychological

resilience is flawed),” January 2, 2012, http://www.pbs.org/newshour/updates/military/jan-june12/csf_training_01-02.html (accessed January 20, 2013).

³⁸Lester, et al., “The Comprehensive Soldier Fitness Program Evaluation: Report #3,” 15.

³⁹Sagalyn, “Health Experts Question Army Report on Psychological Training.”

⁴⁰Ibid.

⁴¹Ibid.

⁴²Kelley Ward, “What is Master Resiliency Training,” September 2012, <http://kelleyward.hubpages.com/hub/Master-Resilience-Training> (accessed January 20, 2013).

⁴³Lester, et al., “The Comprehensive Soldier Fitness Program Evaluation: Report #3,” 16.

⁴⁴Ibid., 26.

⁴⁵Army Training Requirements and Resource System, Master Resilience Trainer-Course (MRT-C) [https://www.atrrs.army.mil/atrrscc/prerequisites.aspx?fy=2011&sch=145&crs=MRT-C\(UPENN\)&phase=&clsflag=](https://www.atrrs.army.mil/atrrscc/prerequisites.aspx?fy=2011&sch=145&crs=MRT-C(UPENN)&phase=&clsflag=) (accessed January 20, 2013).

⁴⁶Roy Eidelson, “The Dark Side of “Comprehensive Soldier Fitness” Mandatory “resilience training” program for all U.S. soldiers raises concerns,” March 25, 2011, <http://www.psychologytoday.com/print/7594> (accessed January 20, 2013).

⁴⁷Ibid.

⁴⁸Lester, et al., “The Comprehensive Soldier Fitness Program Evaluation: Report #3,” 24.

⁴⁹Army Command Sergeant Major Kenneth O. Preston, “What is Comprehensive Soldier Fitness?,” NCO Journal Editorial, May 2010, 3-4.

⁵⁰U.S. Army Medical Department, Resiliency Training (Formerly Battlemind), <https://www.resilience.army.mil/> (accessed January 20, 2013).

⁵¹U.S. Army Medical Department, Resiliency Training (Formerly Battlemind), Institutional Resilience Training, Resilience Training for Pre-Command (PCC), November 10, 2010, <https://www.resilience.army.mil/ssolifecycle/pcc.cfm> (accessed January 20, 2013).

⁵²US Army, Martin Seligman “CSF Research Fails the Test,” June 10, 2012, <http://valtinsblog.blogspot.com/2012/06/us-army-martin-seligman-csf-research.html> (accessed January 20, 2013).

⁵³Eidelson, “The Dark Side of “Comprehensive Soldier Fitness” Mandatory,” (accessed January 20, 2013).

⁵⁴Ibid.

⁵⁵J.D. Leipold, "Odierno: Resilience training to counter suicides," Army News Service, October. 4, 2012, <http://www.ftleavenworthlamp.com/article/20121004/NEWS/121009493> (accessed January 20, 2013).

⁵⁶ Brenda J. Morgan, USAF NC, "Assessment of Military Population-Based Psychological Resilience Programs," (Military Medicine Vol. 176, September 2011), 982.

⁵⁷Eidelson, "The Dark Side of "Comprehensive Soldier Fitness" Mandatory," (accessed January 20, 2013).

⁵⁸Comprehensive Soldier Fitness EXORD, Department of the Army, Washington DC, DCS G-3/5/7-CSF, April 6, 2010.

⁵⁹Admiral M.G. Mullen, Chairman of the Joint Chiefs of Staff , Chairman's Total Force Fitness Framework, CJCS-Instruction 3405.01, (Washington, DC: Joint Chiefs of Staff, September 1, 2011), A-3.

⁶⁰Lester, et al., "The Comprehensive Soldier Fitness Program Evaluation: Report #1," 23.

⁶¹Accession Medical Standards Analysis & Research Activity, <http://www.amsara.amedd.army.mil/> (accessed January 20 2013).

⁶²Accession Medical Standards Analysis and Research Activity Preventive Medicine Program, Tri-service Disability Evaluation Systems Database Analysis and Research, Annual Report 2012, <http://www.amsara.amedd.army.mil/AMSARAAR.aspx> (accessed January 20 2013).

⁶³C. Todd Lopez, "Officials: 1 in 5 Undeployable by 2012", (Army News Service, November 4, 2010) http://www.operationpromiseforservicemembers.com/Undeployable_110410.html (accessed January 20 2013).

⁶⁴Winston Churchill. BrainyQuote.com, Xplore Inc, 2013, <http://www.brainyquote.com/quotes/quotes/w/winstonchu135256.html> (accessed January 23, 2013).