
Comprehensive Soldier Fitness and the Future of Psychology

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Psychology responded to the national needs in World War I and World War II and was itself transformed. National need calls a third time: unprecedented levels of posttraumatic stress disorder, depression, suicide, and anxiety along with a need for a resilient Army capable of meeting the persistent warfare of the foreseeable future. As a large part of the Comprehensive Soldier Fitness program, positive psychology is meeting this need with new tests, with new fitness courses, and with resilience training. These developments may transform the practice of psychology and psychology's relation to medicine and education.

Keywords: army, positive psychology, resilience

Whom shall I send? And who will go for us?
And I said, "Here am I. Send me!"

—Isaiah 6:8

The history of American psychology has been shaped by national need. This has been true of both the science of psychology and the practice of psychology. In this article, we look at past turning points and then describe why we believe that the Comprehensive Soldier Fitness (CSF) program is another such turning point.

In the past century, psychologists were among the first professionals to offer assistance to the nation. The work of psychologists in World Wars I and II helped to improve the effectiveness of the military, and it made enduring changes in psychology's identity and in the public recognition and acceptance of psychology.

Psychology in the United States was first recognized as an independent discipline in 1892 with the establishment of the American Psychological Association (APA). It began as a research-academic discipline with little interest in applications, and for the most part it remained so in its early years, with some notable exceptions. For example, two of the founders of American psychology were William James, who treated mentally ill patients with psychotherapy and medication, and Lightner Witmer, who established the first psychological clinic at the University of Pennsylvania in 1896 and is viewed as the founder of clinical psychology. But the first big leap into the application of psychology took place in the context of World War I.

In 1917, as war raged through Europe and American involvement seemed imminent, Robert Yerkes, a 40-year-old Yale professor of biopsychology and president of APA, proposed that APA help to create within the U.S. Army a psychology unit to select recruits and determine their du-

ties. In a letter to the APA Council of Representatives, Yerkes (1918) wrote, "Our knowledge and our methods are of importance to the military service of our country, and it is our duty to cooperate to the fullest extent and immediately toward the increased efficiency of our Army and Navy" (p. 191).

A detailed plan was approved by the National Research Council and submitted to the Surgeon General of the Army. A unit was quickly established under the overall direction of Yerkes, who was commissioned a major. One group developed two new intelligence tests, the Army Alpha and the Army Beta, and administered them to more than 2 million soldiers. A second group interviewed and classified 3,500,000 soldiers and developed proficiency tests for military specialties.

The response of APA members to Yerkes's call for service was immediate. Although APA then had fewer than 300 members, Yerkes was able to compile a list of 150 psychologists who were willing to serve as civilian or uniformed psychological examiners, 24 of whom were available for service within a week. By the end of the war, several hundred psychologists were overseeing the work of several thousand men in personnel units throughout the military.

The effects of the program extended far beyond the military. Psychology, as a scientific and applied discipline, gained the recognition and support of the public, and psychological and educational testing centers were established in colleges and universities and in business and industry.

After the armistice, some of the participants in the Army program remained in military service to work in the 43 Army rehabilitation hospitals that had been established. Others left the service to develop tests for business and industry, but most returned to academic positions. Among those who served in the program were people who became the nation's leading psychologists, including J. R. Angell, E. K. Strong, E. G. Boring, Lewis Terman, E. L. Thorndike, L. L. Thurstone, and John B. Watson.

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The attention given to psychology, and the increased number of academic programs, brought about a rapid increase in the number of psychologists. In the years following World War I, APA's membership grew tenfold, from approximately 300 members to 3,000. Doctoral production rose rapidly through the 1920s, and by the end of the decade, at least 35 universities had established doctoral programs, most of which included programs in applied psychology.

In 1939, as war again ravaged Europe, 50 psychologists met together to celebrate the 20th anniversary of their demobilization as members of the Army's Committee on Classification of Personnel. The meeting was attended by a representative from the Army Adjutant General's office, who drew attention to the worsening situation in Europe. Yerkes, representing APA, and Walter Bingham, representing APA's practitioner counterpart, began working to establish psychologists' roles in the coming war. Bingham was commissioned as a colonel, appointed chief psychologist for the Army, and given responsibility for personnel classification.

Yerkes, still vigorous as he approached retirement age but too old for military service, spent his time contacting high-level officials in the government and military to promote a broader role for psychology to include treatment, enhancement of morale, and training of military psychologists. By early 1941, he had drafted a comprehensive plan for the military that also aimed to transform the role of professional psychology. Yerkes wrote,

Psychology must stand as a basic science for such universally desirable expert services as the guidance and safeguarding of an individual's growth and development, education and occupational choice, social adjustments, achievement and maintenance of balance, poise and effectiveness, contentment, happiness, and usefulness. (Yerkes, 1941, quoted in Capshew, 1999, p. 50)

Just six months after Pearl Harbor, there were over 100 psychologists working in Washington, DC. At the request of the Selective Service, a list of 2,300 psychologists qualified to help local draft boards determine the mental capacity of registrants was compiled, and efforts were made to ensure that some 1,500 psychologists eligible for the draft were placed in positions where their background and training could be utilized. Soon, hundreds of psychologists were spread throughout the military and in government agencies.

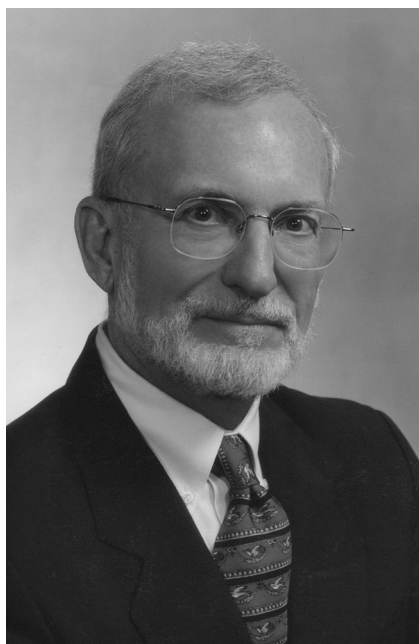
Personnel psychology in the military thrived in the war years, as it had in World War I. As psychologists developed many new tests of achievement, knowledge, and aptitude, the Army established the largest and most diversified testing program in history. Millions of tests were administered; for example, The Army General Classification Test (AGCT) was administered to 9 million men, one seventh of the U.S. male population.

At the start of World War II, clinical psychology, as opposed to personnel psychology, had little recognition in the military, and not much more in the wider world. Later in the war, psychologists began to serve in mental illness settings in the military, primarily because of the actions of psychiatrist William C. Menninger, newly appointed chief of neuropsychiatry. An acute shortage of psychiatrists led to the appointment of a chief clinical psychologist, the commissioning of 250 men who had experience in clinical psychology, and the establishment of permanent divisions of clinical psychology in the military services. By the end of the war, clinical psychology had become a full-fledged mental health profession, and the election in 1946 of Carl Rogers as the first clinical psychologist to be APA president confirmed its new status.

Building a productive relationship between psychology and the military was not without problems, but as the war drew to a close, both seemed pleased with the partnership. Surveys indicated that psychologists were more satisfied with their utilization in the military than were physicists, chemists, and geologists. And the military demonstrated its appreciation of the work of psychologists by continuing to recruit them: Demand for psychologists exceeded supply throughout the war (Napoli, 1981, p. 105). The Navy representative on the National Defense Research Committee said, "I believe that the application of psychology in selecting and training men, and in guiding the design of weapons so they would fit men, did more to help win this war than any other single intellectual activity" (Smith, 1948, quoted in Napoli, 1981, p. 105). Psychology's contribution received praise from senior military officers and from the Army's chief psychiatrist, William C. Menninger, who foresaw a continuing role for psychologists in clinical work (Napoli, 1981, p. 106).

In 1946, the Veterans Administration, faced with an estimated 40,000 war casualties, launched a major program to fund training for new clinical psychologists. Subsequently, the National Institute of Mental Health and the U.S. Public Health Service provided millions of dollars in training and research grants to psychology graduate programs. The military services, especially the Navy, contin-

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ued to fund psychological research. In the first 30 years after World War II, the federal government spent over \$1.2 billion on psychological research, and over half of the members of APA received some government support (Napoli, 1981, p. 137).

Federal support through the military helped to build psychology into a major scientific discipline and profession and APA into the largest doctoral-level scientific society in the world. There are now approximately 3,000 psychologists in the Department of Veterans Affairs (VA) and over 1,500 serving in the military. And psychologists, with their research and applied work, continue to provide services to a wide spectrum of American society.

The Current National Need

The first author (Martin E. P. Seligman) was initially visited by Colonel Jill Chambers in August 2008 to discuss the problems of returning warriors, and this led to a meeting with U.S. Army Chief of Staff General George W. Casey Jr. and his advisers in the Pentagon in early December 2008. They outlined two sets of national needs and asked what psychology's response could be.

One national need was the unprecedented rates of posttraumatic stress disorder (PTSD), depression, suicide, and divorce among military personnel. Two facts stood out about this need: (a) The Army and the VA system were expending huge resources to treat these clinical issues, but their question was not how to provide more treatment but rather how to prevent these problems. (b) Related to this question was the identification of who was most at risk for PTSD: The Millennium Cohort Study found that the bottom 15% in mental and physical fitness accounted for 58% of the cases of PTSD (LeardMann, Smith, Smith, Wells, & Ryan, 2009). The other national need was for a resilient

fighting force in our small, all-volunteer Army that would be capable of meeting the challenge of the persistent warfare and repeated redeployments that loom in the Army's future.

Seligman responded by suggesting that the human response to high adversity, such as combat, is normally distributed: On the left of the distribution are the minority who collapse—exhibiting what is called variously PTSD, depression, or anxiety. In the middle are the great majority who are resilient; they return to their normal level of functioning after a brief period of disruption. On the right-hand side of the distribution are those who grow: people who after adversity attain a higher level of functioning than they began with or, in other words, exhibit posttraumatic growth. The aim of any prevention program, Seligman suggested, should be to move the entire distribution toward growth. This aim would lower PTSD, increase resilience, and increase the number of people who grow.

Other important ideas, as well as a concrete plan, emerged from this meeting. The former Surgeon General of the United States, Richard Carmona, advised that civilian medicine was perversely incentivized: Of the \$2 trillion the United States spends annually on health care, 75% goes into chronic disease and end-of-life care. In contrast, Army medicine is rationally incentivized—its mission is to produce health, not cure disease, and by producing health preventively, it will reduce later disease. This could be a model for civilian medicine.

The Surgeon General of the Army, Lieutenant General Eric Schoomaker, suggested constructively to General Casey that the program should not be part of his Medical Corps. Moving it from medicine to education and training would help remove any stigma and be much more in line with a universal training purpose. Seligman said that his model for preventive training was positive education: The Penn Resilience Program teaches teachers the skills of resilience and positive psychology, and the teachers then embed these skills into the teaching of their students. This reliably produces less depression and anxiety among the students (Seligman, Ernst, Gillham, Reivich, & Linkins, 2009). General Casey said that this model fits the Army's training process well: The teachers of the Army are the drill sergeants, and they would become the teachers of resilience and positive psychology. He further hoped that a successful demonstration of the effects of resilience training in soldiers and their families would provide a model for the civilian education of young people.

General Casey then set the new plan for Comprehensive Soldier Fitness into motion: It was assigned to education and training, under Brigadier General Rhonda Cornum, not to medicine. The four components detailed in this special issue of the *American Psychologist* were fleshed out over the next three months: creating the Global Assessment Tool (GAT); creating self-improvement courses for the emotional, social, family, and spiritual fitness dimensions measured on the GAT; beginning to provide resilience training and positive psychology training throughout the Army; and beginning to identify and train master resilience trainers from Army personnel and civilian psychologists.

These four components have involved dozens of psychologists over the past two years. We have worked in test creation and validation, in course creation, in writing and refining resilience and positive psychology training materials, and in serving as data analysts, as research designers, and as the trainers and facilitators of live courses with Army personnel. Of critical interest is the Soldier Fitness Tracker (Fravell, Nasser, & Cornum, 2011, this issue). This powerful platform creates an unprecedented, hypermassive database in which psychological variables, medical variables, and performance variables are merged. All of these activities continue as we write, in active collaboration with our peers from the Army.

Future Opportunities

We can only speculate about what the future may hold. The validation of the GAT, the effects of the fitness courses, the effects of resilience and positive psychology training, and the efficacy of the master resilience trainers will all be carefully measured by the Army over the months and years to come. We underscore the importance of delineating the four dimensions of psychological “fitness”: emotional, social, family, and spiritual (Cornum, Matthews, & Seligman, 2011, this issue). These are the capacities that underpin human flourishing not only in the Army but in schools, corporations, and communities, and the building of these fitnesses may help define the role of the practicing psychologist of the future. The Army will rigorously ask whether building these fitnesses decreases rates of PTSD, depression, and anxiety; improves performance and morale; improves mental and physical well-being; and helps soldiers and their families in the successful transition back to civilian employment.

If the results are positive, we hope to see expanded collaboration between the military and psychology in creating an Army that is just as psychologically fit as it is physically fit. Among the future possibilities are the following:

- Training of all ranks of soldiers and of civilian employees of the Army in resilience and positive psychology
- Parallel training offered for all family members of soldiers
- Mobile training units for resilience training in far-flung outposts
- Comprehensive Military Fitness: the training of *all* the armed services and their employees in the techniques of resilience and positive psychology
- Expanded online and in-person courses for the military in emotional, social, family, and spiritual fitness
- One million soldiers taking the GAT is an unprecedented database for the prospective longitudinal study of the effects of psychological variables on physical health, mental health, and performance. The Soldier Fitness Tracker is the backbone of this longitudinal study, and we predict that this database

will become a national treasure for psychological and medical research.

The use of resilience training and positive psychology in the Army is consciously intended as a model for civilian use. The bulk of health care costs in civilian medicine go not to building health but rather to treating illness. The Army’s emphasis on building psychological fitness preventively is intended to be a model for the future of medicine generally. Imagine that building emotional, social, family, and spiritual fitness among young soldiers noticeably reduces morbidity, mortality, and mental illness, offers a better prognosis when illness strikes, and cuts down on treatment costs. We should know whether this is the case in the next decade. If the CSF program turns out to work, it should—in any rational system—revolutionize the balance between treatment and prevention and radically reform how civilian health care is provided.

The implications for public education and for the corporation may be just as sweeping. Positive education claims that teaching young people the skills of emotional fitness along with teaching the traditional goals of education will enable youth to perform better at school and to perform better later in the workplace. And, more important, perhaps these young people will enjoy lives that have more positive emotion, engagement, and meaning and better relationships. All of these claims will be directly tested prospectively in the CSF program: The resilience training and the fitness courses offered are almost exact parallels of the courses we use in positive education (Seligman et al., 2009). If it turns out that soldiers given this training perform better in their jobs, are more engaged, have more meaning in their lives, enjoy better relationships, and have more fruitful employment when they return to civilian society, this will ground a new model for our public schools. Again we will know whether this is so within the next decade.

Objections

We are not unmindful of those segments of American society, including some psychologists, who look askance on working with the military in any way.

The task of the military is to provide the capability of defending the nation from threat. Revulsion toward war is understandable, but it is not the military that sets the nation’s policies on war and peace. The military carries out the policies that emerge from our democratic form of government. Withholding professional and scientific support for the people who provide the nation’s defense is, we believe, simply wrong. Psychologists are as diverse in their views as any other group of citizens, but the American Psychological Association has, for six decades, been solid in its support on behalf of the men and women who serve in our armed forces.

Here, in unvarnished form, are three of the objections that might be raised to working with the military, and our responses:

- Psychology should devote its scarce resources to helping those who are suffering, not those who are well.

Positive psychology seeks to broaden the scope of psychological science and practice. It seeks to build more positive emotion, engagement, and meaning and better relationships among all people, and it has developed new interventions to do just that. It is a supplement, not a replacement, for the science and practice of relieving suffering. We believe that soldiers with PTSD, depression, anxiety, and other disorders should continue to receive the best of treatments. We are also mindful, however, that the known treatments are of limited effectiveness (Seligman, 1993, 2006). The CSF program will not subtract from the treatment resources; rather it is a preventive program that will likely reduce the need for them by effectively preventing suffering.

- Psychology should do no harm: Aiding the military will make people who kill for a living feel better about killing and help them do a better job of it.

If we had discovered a way of preventing malaria—mosquito netting, draining swamps, quinine—and our soldiers were fighting in a malaria-infested theater, would these voices also counsel withholding our discoveries? We would not withhold our help: The balance of good done by building the physical and mental fitness of our soldiers far outweighs any harm that might be done. The alleged harm—making healthier killers or helping them to feel better—turns also on the final objection.

- Psychology should not aid the foreign policy of the United States.

Three ideologies have arisen in the past century that have sought to overthrow democracy by force: fascism, communism, and jihadist Islam. It should be noted that without a strong military and the will to use force responsibly in self-defense, our victories would not have hap-

pened, and defense against current and future threats would be impossible. Psychology materially aided in the defeat of the first two threats, and in doing so it carved out its identity. We are proud to aid our military in defending and protecting our nation right now, and we will be proud to help our soldiers and their families into the peace that will follow.

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