


The response of military psychology in times of war or other great public crises may presage the success of the profession in less perilous times. The ability of public-sector psychologists to provide assistance and improve the common welfare during conflict or turmoil is generally followed by an increased demand for psychological services. This likely reflects the success of the psychological response during those crises, and it underscores the fact that psychological consequences of war or disaster require both immediate clinical attention and long-term policy development. The U.S. Navy serves as a model for public-sector psychological service provision. A brief history of Navy psychology is provided, followed by an examination of how Navy psychologists are responding to the issues raised by the current conflict in the Middle East and the problems associated with stigma in the treatment of posttraumatic stress disorder.

Psychologists are responsible for the delivery of sizable amounts of mental health care in the U.S. Navy. There are approximately 130 clinical psychologists (including psychologists in training) on active duty today. These clinicians, along with approximately the same number of psychiatrists and a smaller number of uniformed social workers, provide the bulk of mental health services to active-duty members and their families. Although the past

Editor’s Note
Morgan T. Sammons received the Award for Distinguished Professional Contributions to Practice in the Public Sector. Award winners are invited to deliver an award address at the APA’s annual convention. A version of this award address was delivered at the 113th annual meeting, held August 18–21, 2005, in Washington, DC. Articles based on award addresses are reviewed, but they differ from unsolicited articles in that they are expressions of the winners’ reflections on their work and their views of the field.
few years have seen an increased reliance on civilian health care providers to meet the needs of military families via the TRICARE program, Navy mental health providers generated approximately 440,000 outpatient contacts and cared for 75,000 inpatient admissions in fiscal year 2004. Civilian clinical psychologists also provide significant amounts of health care in Navy hospitals and clinics across the globe, and they are an important component of Navy mental health delivery. Navy psychology also incorporates an active research component in aerospace experimental programs and in other research activities, with 22 research psychologists and 25 aerospace experimental psychologists on active duty. Research psychologists in the employ of the Naval Health Research Center and the Navy Environmental Health Center provide in-depth epidemiological analysis of behavioral health issues facing active-duty members.

A Brief History of Navy Psychology

Clinical psychology in the U.S. Navy has a long and distinguished history dating back to World War I, when psychologists assisted the Navy and other branches of the military in the screening of recruits. Psychologists’ participation in the war effort—as researchers and uniformed clinicians stationed at Army hospitals—was seen as vital to the burgeoning of the profession in the decade that followed. Not only was their work seen by policymakers as a success, it also convinced psychologists themselves of the tangible value of the services they provided (Benjamin, DeLeon, Freedheim, & VandenBos, 2003). Since that time, the progress of Navy psychology has been ineluctably intertwined with that of the field at large. In several key areas, clinical activities or research initiatives begun in the military have emerged as models of practice in the civilian community (Sammons & McGuire, in press). In recent years, two major examples of this military-to-civilian crossover can be cited—the move to acquire prescriptive authority and the direct involvement of psychologists in the management of stress related to traumatic events. These two contributions are not only topical, they are also representative of the tremendous contributions of public-sector psychologists toward the improvement of the public health of the nation.

Navy psychology is a daughter of necessity, born of a need to provide an effective mechanism for recruit screening in World War I. The psychological services provided during and after World War I, in the form of recruit assessment and personnel screening, had a forceful influence on the civilian sector—so much that it has been seen as providing the essential impetus for the fledgling field of industrial and organizational psychology to become a unique discipline (Benjamin et al., 2003; McGuire, 1990).1 But military psychology did have a far more profound influence following World War II, during which over 500 psychologists served in uniform and many more participated in research activities related to military operations. As is well-known, recognition of the need to provide mental health services to veterans following that conflict led to the rapid growth of psychology in the Veteran’s Administration and the expansion of the field of clinical psychology as a whole.

Professional psychology expanded significantly in the aftermath of wartime interventions that were viewed by the public and policymakers as highly successful. The demand for industrial–organizational psychologists grew substantially in both government and private industry (Koppes, 2003), and as is well-known, the demand grew for clinical psychology in particular to provide mental health services to veterans. Two lesser known effects of psychology’s participation in World War II are worth mentioning. The first is the significant effect of involvement in the war effort in regard to the organization and functioning of the American Psychological Association (APA). Capshew and Hilgard (1992) attributed the massive postwar expansion of the APA to reforms that occurred as a result of war-effort initiatives:

World War II marked a significant turning point in the history of the American Psychological Association. Before the war, the APA functioned as a disciplinary society that did little more than publish a few scientific journals and host an annual meeting. Afterward, it grew into an activist association with a large central office that represented and served the professional interests of its members. The rise of the APA into the large, complex, and powerful institution we know today can be traced to the circumstances of the Second World War, when the organization redefined its role in the profession through a set of far-reaching internal reforms. (p. 149)

The second notable effect is the birth of the accreditation process for doctoral programs in psychology. During the war, the APA worked with the U.S. Public Health Service and the Veteran’s Administration not only to expand doctoral training programs in psychology but to identify quality benchmarks for such programs, leading to APA’s accreditation program for both clinical and counseling psychology (Benjamin et al., 2003).

In the Navy, the operational demands of the war led to the integration of psychology into the direct-care delivery system—Navy hospitals and clinics—marking a departure

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1 The military continues to play an extremely important role in organizational and industrial psychology at the present time. The U.S. Army Research Institute’s Project A and the subsequent Career Forces Project have been described as perhaps the largest personnel research projects ever and as being of particular importance in advancing the field of industrial and organizational psychology (Borman, Klimoski, & Ilgen, 2003).
from the nonclinical, assessment focus predominant after World War I. The demand for clinical services grew during the Korean conflict, and in 1956, the predoctoral internship program at the National Naval Medical Center in Bethesda, Maryland, received APA accreditation, one of the first predoctoral internships in the United States to do so. Over the next several decades, psychology continued to expand its presence in Navy hospitals, gradually establishing predoctoral internships at two other teaching facilities, the Naval Medical Center in Portsmouth, Virginia, and the Naval Medical Center in San Diego, California. As the profession matured in the civilian sector, Navy psychology also responded with increasingly sophisticated training programs, sending psychologists to postdoctoral fellowships in pediatric psychology, health psychology, neuropsychology, and psychopharmacology.

The Psychopharmacology Demonstration Project

One of Navy psychology’s best known and most widely emulated training programs was the Psychopharmacology Demonstration Project, a triservice initiative begun in 1991 at the behest of the U.S. Congress that produced 10 military psychologists trained to prescribe psychotropic agents. Navy psychology played a key role in the program, producing the first two graduates and a total of 4 of the 10 fellows trained in the program. This program has been described in detail elsewhere (Laskow & Grill, 2003; Newman, Phelps, Sammons, Dunivin, & Cullen, 2000; Sammons & Brown, 1997), and its termination in 1997 is also well-known. Although this program did not have the longevity that many had hoped it would, it attracted national attention to the profession and served as a model and basis of comparison for civilian programs designed to train postdoctoral psychologists in prescriptive authority. The core curriculum of the Psychopharmacology Demonstration Project is emulated in these civilian programs, and it has been reflected in the statutes passed in Louisiana and New Mexico entitling appropriately trained psychologists in those states to prescribe.

OSCAR and Mental Health Services in the Field

In the 1980s, Navy psychology began to expand from its hospital-based roots, and as in the days of global conflict, it established a direct presence in support of fighting forces. Personnel screening has always been a core function of Navy psychologists, who are required to assess the psychological suitability of applicants seeking to work in specialized environments (aviation, submarines, special forces, or work with classified or nuclear material). But rather than serving in traditional roles as diagnosticians and therapists, Navy psychologists began to offer direct services to operational units as well. This role, which began with the provision of services to special forces units and in Survival, Evasion, Resistance, and Escape training, has now expanded to encompass several major activities—including aircraft carriers and other underway platforms—and direct support to combat units deployed in Operation Iraqi Freedom. A major initiative that relies heavily on the contributions of Navy psychologists is the Operational Stress Control and Readiness (OSCAR) project, designed to provide direct mental health support to Marine units throughout the entire deployment cycle, with mental health assets who are organic to a unit delivering education, consultation, and treatment both in garrison and in the theater of operations.

The Marine Corps have traditionally relied on small-unit leaders and chaplains for mental health service provision. Because neither line leaders nor chaplains were consistently trained in mental health applications, Marines in need of evaluation or treatment required referral to the sole division psychiatrist when in garrison (a division consists of approximately 25,000 Marines) or to an “augmented” psychiatrist or psychologist (a provider who had no prior involvement with the Marines under his or her care and treated them only during the period of deployment) when deployed. Marines could also seek services from a nearby military hospital, but this involved travel time, removal of the Marine from training, and possible identification as having a mental health problem. Until the recent past, division psychiatrists tended to practice using a civilian-like model of office-based consultation. Because Marines tended to be evaluated without an in-depth understanding of the contextual factors within their units, this often led to line leaders’ dissatisfaction with mental health services, underuse of services, and an increased risk of stigma associated with help-seeking behavior. Not uncommonly, Marines received recommendation for separation from the Corps on the basis of unsuitability, and some mental health providers earned the unenviable sobriquet of “wizard” (because Marines sent to them would mysteriously disappear). Mental health providers, particularly augmentees serving in theater, often did not receive appropriate operational training and were unfamiliar with the stresses experienced by Marines both within their units and on the battlefield. Mental health services in Marine divisions were, then, largely based on civilian models, resulting in care that was uncoordinated, lacking in operational familiarity, and had no true accountability to line leaders to treat Marines and return them to their units.

To rectify these problems, a Navy psychiatrist with a long history of service in the Veterans Administration proposed a system to equip Marine divisions with organic mental health personnel. Rather than the reactive, office-based model that had marked service provision in the past, this new model was based on a community intervention and prevention model. Assignment of mental health personnel directly to the units where they worked allowed them to gain familiarity with and greater trust of both indi-
individual Marines and their leaders and to support Marines throughout all phases of the deployment cycle.

OSCAR personnel are proving to be of significant benefit to deployed Marines and commanders. At present, OSCAR mental health assets are organic to all three Marine divisions. These providers (six psychiatrists and two psychologists) serve in addition to the one psychiatrist formerly assigned to each Marine division. From January through June 2004, OSCAR providers saw a total of 6,614 individual Marines in addition to providing 741 unit stress-management briefings. The goal of these providers is to "treat Marines as Marines, not patients" by preventing symptoms of combat stress from becoming debilitating. Their success is exemplified by a 97% overall return-to-duty rate for all Marines seen in the Marine Expeditionary Force with OSCAR mental health support. In keeping with the precept of avoidance of stigma by avoiding use of the label patient, these numbers do not include hundreds of significant but undocumented interventions with colleagues, commanders, and individual Marines.

Psychologists at Sea

Another important initiative in creating a comprehensive and proactive mental health presence in the operational arena is the Psychologists at Sea program, which in the past six years has grown from an experimental project with one psychologist aboard an aircraft carrier to the present program, through which there are now Navy psychologists aboard all 12 aircraft carriers in the fleet. These psychologists have become vital components of their ships' medical departments and have repeatedly demonstrated their ability to provide a range of expert mental health services while underway. Since its inception, the program has resulted in an overall 87% reduction in the rate of medical evacuations from carrier battle groups, and it has reduced the number of administrative separations for mental health reasons by over 90% during deployments. As Jones and Lee (2002) commented, much of the success of these psychologists is attributable to a change to a philosophy that emphasizes adaptability and potential for future service, unlike previous models based on diagnosis of pathology that often resulted in separation of potentially useful assets. Because of the success of this program, psychologists have recently been deployed with the medical departments of large amphibious vessels that support expeditionary strike groups (ESGs). Similar to carrier battle groups, which comprise approximately seven vessels with a total manning approaching 12,000, ESGs are made up of an amphibious assault ship and five support vessels with a total manning of around 8,000 personnel. They are designed to transport and land large numbers of troops on foreign soil. The requirements for mental health personnel aboard ESGs are now being evaluated, but as of this writing, three psychologists have been deployed with ESGs, and the placement of psychologists with every deployed Naval force is an emerging trend.

Service Delivery in the Navy: Confronting the Problem of Stigma in Dealing With Posttraumatic Stress Disorder

The overall prevalence of mental disorders in the U.S. Navy, as well as that in other branches of the military, is unknown. Because of population demographics (a younger, predominantly male sample), medical prescreening prior to enlistment, and ongoing random urinalysis (which acts as a deterrent to illicit substance abuse), it is likely that an age- and gender-matched cohort comparison would reveal higher rates of diagnosable disorder and substance abuse in a civilian sample. One index of the overall mental health of a population is the suicide rate; this rate tends to be significantly lower in military populations than it is for age-matched civilian counterparts, with an average of 10–11 suicides per 100,000 for the Navy and 13 per 100,00 for the Marines (Gaskin, 2003; Kennedy, 2003). Nevertheless, younger servicemembers may, like their civilian counterparts, be more likely to engage in substance abuse and other high-risk behaviors—behaviors that are almost certainly mediated by the stresses of deployment and exposure to combat. Although the rate of hospitalization for mental health problems in military populations is approximately comparable to that in civilian populations (Hoge et al., 2005), this may also reflect, as Hoge et al. (2005) speculated, the universal availability of high-quality health care and a focus on efforts to refer and rehabilitate service members with vocational problems resulting from mental disorders.

Despite the relative overall mental health of active-duty forces, mental health problems remain one of the most common reason for medical discharge from the U.S. Navy, second only to orthopedic injuries (Marietta, Bohnker, Manos, & Sack, 2005). This suggests that the current emphasis on the manifestations of posttraumatic stress disorder (PTSD) and other forms of combat and operational stress is well placed. Combat stress has, in one guise or another, been a remarkably consistent consequence of exposure to traumatic experiences. PTSD can be a chronic and debilitating disorder—one closely associated with related problems such as substance abuse, depression, and domestic and occupational dysfunction. These symptoms may prove to be even more debilitating for the servicemember’s readiness capability and his or her occupational and family functioning.

Substantial and lasting impairment can result from PTSD, and it seems apparent that the type of PTSD that results from combat differs from other forms of the disorder (Prigerson, Maciejewski, & Rosenheck, 2001). While acknowledging the special issues that PTSD brings to a military population, it is equally important to simulta-
neously recognize that although almost all combatants acknowledge the life-changing nature of such experiences and will report symptoms that may be consistent with some feature of a mental disorder, full-blown features of PTSD or associated conditions are detected in only a comparative few. Between 20% and 30% of screened servicemembers will, in general, report some form of psychological symptomatology, but very few (perhaps only 1%–2%) are found to suffer from diagnosable PTSD (Rona, Hyams, & Wessely, 2005). This may be attributable to a number of factors, not the least of which is stigma associated with acknowledging mental distress or seeking mental health services. Indeed, reluctance to seek mental health services in military populations has been found to be highest among those who express the highest degree of symptomatology (Rona et al., 2005), and studies of American servicemembers have indicated that a fear of approbation by superiors may be the primary barrier to the seeking of mental health services (Hoge et al., 2004). It is important to underscore that even among those who do seek care for mental distress, stigma may reduce adherence to an effective regimen and, correspondingly, negatively affect outcomes (Corrigan, 2004). Because PTSD is associated with a number of comorbidities, including major depression, and because both PTSD AND major depression have been linked to higher rates of suicide (Oquendo et al., 2005), implementation of effective stigma-reduction strategies is crucial.

Corrigan (2004) identified two types of stigma that may interfere with seeking mental health care: public stigma (i.e., that associated with public perceptions of a stigmatized group) and self-stigma (i.e., that associated with internalization of public stigma). To these may be added a category of institutional stigma or discrimination, which Corrigan, Markowitz, and Watson (2004) suggested includes the policies of organizations that restrict the opportunities of people with mental illness. To the extent that military policies are perceived to restrict the opportunities of servicemembers with PTSD or other disorders to continue to serve in their assigned roles, both access to and successful engagement in mental health treatment may be compromised. This poses a difficult challenge for the military, because its unique occupational demands place legitimate restrictions on employment of persons with mental disorders that are generally not present in civilian settings.

It is therefore apparent that a four-pronged approach must be used in dealing with combat stress and other related disorders: preventive efforts to reduce incidents of clinically significant symptomatology, refinements of treatments of proven efficacy, mechanisms for enhancing resiliency in populations at risk, and strategies to address the issue of stigma in mental health seeking. Because of the particular importance of stigma in military populations, in the remainder of this article, I briefly review potential avenues for stigma reduction.

Confronting Stigma in a Military Population

The issue of stigma in a military population is particularly germane (see, e.g., Olson, Stander, & Merrill, 2004), because many servicemembers may view seeking mental health services as a sign of weakness in front of their peers or as a potential barrier to advancement or selection for special duties. As noted in the widely publicized study by Hoge et al. (2004), substantial majorities of respondents (Army and Marine ground troops who had served in Afghanistan or Iraq) to an anonymous survey reported that fear of stigmatization was the primary reason preventing them from seeking mental health services. Data from other sources also indicate that in spite of systems that have been put in place for early identification of physical or mental health problems stemming from a deployment, underreporting of mental health symptoms is common. All deployed servicemembers are required to complete a Pre- and Post-Deployment Health Assessment (PDHA) before their departure and again on their return. Recent analyses of PDHA data suggest that the percentage of those servicemembers who endorse an interest in seeking help for problems potentially associated with PTSD, as well as the overall number of those referred, has been declining.

These numbers are in stark contrast to those found on anonymous screening of returning combatants, on which the percentage of respondents endorsing symptoms consistent with PTSD or another diagnosis ranged from 9% to 30%. Additionally, recent news reports suggest that incidences of PTSD in clinical populations of servicemembers approximate those predicted by survey results. Roughly 16% of Marines who were referred to the mental health department in Camp Pendleton, California, in January and February 2005 (at a time when many of the 25,000 Marines stationed in that area returned from Iraq) received diagnoses of PTSD (Sisson, 2005). Though these numbers are in keeping with survey results, they are lower than the numbers anticipated by commanders and mental health personnel, as were incidents of drunk driving and disciplinary actions. These numbers may reflect inaccuracies in projections or the fact that many latent difficulties have not yet had time to manifest. Alternatively (and more positively), the lower than expected incidences may reflect the effectiveness of active preventive services by mental health providers and a successful public-awareness campaign regarding the symptoms of PTSD.

Stigma Is Reduced by Providing Services at the Appropriate Level of Care

One mechanism for avoiding the stigma associated with mental health care is ensuring that servicemembers are referred to the appropriate level of care. It is abundantly clear that participation in combat or exposure to other potentially threatening events are life-changing experiences. Most of those exposed, however, will not require any for-
mal mental health intervention. The reactions to combat stress that do occur can often best be addressed by a chaplain or via psychological first aid provided by a noncredentialed provider such as a Navy corpsman. Some may benefit from the judicious application of critical-incident stress debriefing or similar techniques in the battlefield setting. In situations removed from the theater of operations, both the Navy and the Marine Corps offer counseling assistance through nonclinical outlets that are charged with providing a range of services (i.e., financial planning, relocation assistance, and recreational activities) provided by Navy Fleet and Family Service Centers (FSSC) and Marine Corps Community Services (MCCS). These centers generally have a social worker and several master’s-level counselors on their staff. Between the Navy and the Marine Corps, these centers generated a total of almost 500,000 counseling contacts in fiscal year 2004 (T. Rau & T. Campise, personal communication, February 3, 2005). Although FSSC and MCCS assets provide valuable resources to active-duty and family members, they cannot address more severe forms of mental distress or any diagnosable mental conditions. Continued interaction with the medical treatment system will be necessary to provide for a true continuum of mental health care and appropriate patient placement. Although many patients with mental health diagnoses will continue to require specialty mental health consultation, by the use of clinical practice guidelines designed for primary care providers (e.g., the Post Deployment Health Clinical Practice Guideline [available online at http://www.pdhealth.mil/]), primary care clinicians can be empowered to provide treatment to active-duty service members and their families.

When utilizing primary care resources, however, careful consultation is required, especially when partnering with resources in the civilian sector. Primary care network providers not intimately familiar with the demands required of active-duty members may inadvertently prescribe medications or other treatments that have a negative effect on the servicemembers’ readiness status. Servicemembers treated in the purchased care system become, by definition, “patients,” and their treatment takes place outside the context of the unit and military environment, with attendant ramifications for perceptions of stigma. For these reasons, treatment of military personnel with PTSD or related symptoms in the primary care setting is, although feasible, potentially difficult, and it should be done with ongoing consultation with military mental health providers.

Stigma Is Reduced by Providing Treatments of Proven Efficacy

Proponents of biological treatments for PTSD and other mental disorders argue that the presumption of biological causality has a potent effect in reducing stigma in that it is more difficult to ascribe the effects of a disorder with a demonstrable organic basis to weakness of character or moral shortcoming. This reasoning, however, has been subject to some criticism. First, the presumption of organicity may put the patient at risk of receiving only somatic treatments when less invasive therapies may suffice. Second, the presumption of a biological flaw may actually not be less stigmatizing if it also carries the presumption that the disorder is likely to be permanent or ineradicable. Third, the negative effects of a mental disorder on employability or social functioning are not likely to be lessened simply because biological causality is presumed. Finally, as Corrigan (2004) noted, “it places responsibility for the stigma on the person with mental illness rather than where it belongs—on the public” (p. 621). Corrigan argued that it is not the demonstration of causality that results in a reduction in stigma, it is the availability of effective treatments that permits this barrier to be overcome.

In this regard, the accumulating body of evidence supporting the efficacy of several treatments for PTSD should be of material assistance in reducing stigma associated with care seeking for this disorder. The Veterans Health Administration and the Department of Defense have recently released a collaborative guideline (Veterans Health Administration & Department of Defense, 2004). Cognitive therapy, exposure therapy, stress-inoculation training, and eye movement desensitization and reprocessing have all been recommended by this guideline as empirically validated treatments providing significant benefit for PTSD. Imagery-rehearsal therapy, psychoanalytic therapy, and patient education were judged to provide some benefit, and dialectic behavior therapy and hypnosis were deemed likely to be of some adjunctive assistance. Foa, Keane, and Friedman (2000) have also provided an excellent survey of other interventions that have been the subject of well-designed investigations.

In the realm of pharmacotherapy, there is reasonable evidence to support the use of selective serotonin reuptake inhibitors in the management of PTSD. In the realm of drug treatments, it is increasingly possible to distinguish between those medications that may be effective for acute stress disorder and those that are of benefit for PTSD and other more chronic forms (Veterans Health Administration & Department of Defense, 2004). As an aside, an early psychopharmacological finding of some interest to military medicine came to light when attempting to devise in-situ treatments for combat stress. After the recognition that the first modern antipsychotic agent (chlorpromazine, which has been marketed under Thorazine and other names) induced in most patients a sense of profound indifference, it was used as a battlefield treatment for severe stress reactions during the Korean conflict. It soon became apparent, however, that this indifference was not a desirable characteristic in front-line management of stress, and use of chlorpromazine rapidly fell out of favor (Healy, 2002). Ad-
ditionally, as with other psychological therapies that involve an exposure–response-inhibition paradigm, there is likely a negative drug–psychotherapy interaction when benzodiazepines or similar agents are simultaneously administered. Because these compounds are effective as anxiolytics, their use is generally counterproductive in psychotherapies that involve the controlled expression of anxiety in a re-learning paradigm. This, one of the few extant examples of a negative drug–psychotherapy interaction, should be the subject of further investigation in determining optimal combinations of medications and psychosocial interventions for PTSD. This issue notwithstanding, it is clear that a variety of both psychological and pharmacological treatments are of demonstrable efficacy in treating PTSD. As the issue is studied further and other treatments become validated, the stigma of seeking assistance for this particular disorder is likely to diminish further in military personnel and others.

**PTSD and Related Symptoms Are Likely More Prevalent in Victims of Conflict Than in Combatants**

Although appropriate attention is paid to managing sequelae of potentially traumatizing events in those directly involved in conflict, the effects of exposure to conflict on noncombatants also requires a response. Cardozo et al. (2004) reported on the results of a Centers for Disease Control–sponsored study of the mental health of approximately 800 Afghan nationals, whose country has been subject to almost ceaseless violence and civil disruption for the past two decades. Problematic symptoms of depression and anxiety were present in over two thirds of the sample, and symptoms of PTSD likely meeting diagnostic criteria were present in over 42%. Not surprisingly, those with pre-existing psychological difficulties were differentially affected, as were those with repeated exposure to traumatic events, and female sex was also associated with higher rates of these disorders.

Efforts to predict the development of PTSD in exposed populations must further address two issues: factors leading to increased individual vulnerability to symptom development and assistance seeking (Elhai, North, & Frueh, 2005) and the efficacy of early interventions designed to prevent the onset of symptomatic features of PTSD (McNally, Bryant, & Ehlers, 2003). (As students of the literature well understand, lively debate is ongoing regarding early interventions, particularly those using some aspect of stress debriefing, and it is not the purpose of this article to expand on this discussion.)

**Summary and Recommendations**

Management of war-related psychological distress will remain a challenge for a considerable period of time, and the effects of exposure to conflict on noncombatants also requires a response. Cardozo et al. (2004) reported on the results of a Centers for Disease Control–sponsored study of the mental health of approximately 800 Afghan nationals, whose country has been subject to almost ceaseless violence and civil disruption for the past two decades. Problematic symptoms of depression and anxiety were present in over two thirds of the sample, and symptoms of PTSD likely meeting diagnostic criteria were present in over 42%. Not surprisingly, those with pre-existing psychological difficulties were differentially affected, as were those with repeated exposure to traumatic events, and female sex was also associated with higher rates of these disorders.

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**Summary and Recommendations**

Management of war-related psychological distress will remain a challenge for a considerable period of time, and

Navy psychology and its counterparts in the other uniformed services and the Department of Veterans Affairs (VA) must be prepared to meet this need. Though data are preliminary, Kang and Hyams (2005) reported that of the 244,054 veterans of service in Afghanistan and Iraq, 48,733 had received some form of care in a VA since their return home. Using 2004 data, the authors reported that among that group of veterans, 26% (12,670) had a possible mental condition. Fully 10% were judged to have a potential diagnoses of PTSD. Kang and Hyams also observed that in this sample, the rate of PTSD was approximately 3.7 times higher in those who had served in Army or Marine units serving on the ground than among Navy and Air Force veterans who did not and that rates of PTSD among enlisted personnel were twice those found among officers. Finally, Kang and Hyams noted that the frequency of diagnosis of mental disorders increased substantially between February and December of 2004—from less than 15% to over 25% for all mental disorders and from less than 5% to 10% for PTSD. Although this could represent an artifact of reporting, rates for nonpsychological disorders were stable over this period of time. Whether this suggests a latency of symptom onset or increasing difficulty in dealing with symptoms of PTSD, a greater number of resources available to treat psychological symptoms of combat, or simply widespread publicity regarding PTSD and related disorders is unclear. Regardless of cause, these data indicate that the problem is substantial, is likely to grow with time, and will require a well-organized response to effectively address it. Remarkable strides have been made in the treatment of battlefield injuries. The lethality of war wounds in the current conflict, expressed as a percentage of those wounded in action who succumb to their injuries, is considerably lower (10%) than the lethality for any other major conflict (by comparison, the lethality rate of battlefield wounds was 24% in Vietnam; Gawande, 2004). As Gawande noted, this is likely due to fundamental changes in military medical treatment strategies. Another factor, however, is the development of effective personal protective equipment, such as Kevlar vests, that reduce the severity of penetrating abdominal injuries. In a like fashion, the military mental health treatment system has made considerable strides in providing mental health care directly to servicemen and women in harm’s way. Has similar progress been made in providing our country’s fighting forces with appropriate psychological protective equipment to allow them to withstand the effects of PTSD and other forms of operational trauma?

Military psychology’s challenge is to shape itself to deliver effective services in an environment characterized by both ongoing active conflict and the preparedness required by the global war on terror while simultaneously providing a value of care that meets or exceeds that found in nonpublicly funded health care delivery systems. Creativity and
the willingness to investigate new areas of collaboration will be required to accomplish these goals. One potential solution may involve more extensive partnering with federal, nongovernmental, and private mental health service delivery systems, especially in response to large natural or human-caused disasters. Navy psychology, along with psychology in other branches of the military, might work more closely with psychologists in other federal agencies to provide a seamless mental health response to large-scale disasters. Although domestic disaster relief is not the traditional purview of military psychology, it is increasingly apparent that a major natural or human-caused disaster will require a coordinated response among all federal agencies. The recent activity of Navy medicine in providing relief to the tsunami- and earthquake-devastated areas of Indonesia is an example of the efficacy of such collaborative efforts. In Operation Unified Assistance, the Navy provided a floating medical platform, the hospital ship USNS Mercy, from which a public health psychologist and mental health workers from nongovernmental agencies provided direct services and training for disaster relief workers. A Navy psychologist aboard a nearby aircraft carrier also provided assistance. This type of interagency cooperation may serve as a model from which to draft plans for future integrated responses to large-scale disasters.

Continued integration of behavioral health care into the primary care delivery system is another mechanism for achieving better realignment of mental health service delivery with the mainstream of health service delivery. It has been well demonstrated that the vast majority of Americans receive mental health services not through specialty mental health providers but, generally, in the primary care setting and that the mental health needs of the population may better be addressed by providing truly integrated behavioral health systems in the general medical environment. Civilian models of behavioral health integration are in their relative infancy. Similarly, integration projects that have been piloted in the Navy have yielded limited but promising data indicating improved access to behavioral health care and enhanced patient satisfaction. Challenges in demonstrating the cost efficacy of these integrated services remain, but they should diminish as this form of integrated treatment becomes more accepted. Continued collaboration with the Veterans Health Care Administration will also help to ensure a truly seamless transition and continuity of care for our servicemembers—particularly wounded servicemembers—with mental health concerns. Unlike previous wars, the current conflict in the Middle East has presented an opportunity to prospectively devise treatment paradigms for PTSD and other forms of operational stress. The VA’s tradition of excellence in research on PTSD and related disorders should continue to be used to develop treatments of demonstrable effectiveness. Behavioral health staff at the Naval Medical Center in San Diego, California, are partnering with the VA in an Institutional Review Board–approved multisite study of a virtual-reality-assisted, graded exposure paradigm for treating PTSD in active-duty Sailors and Marines (Cha, 2005). Current treatments for PTSD are largely based on paradigms that involve cognitive reexposure to traumatic events. Other, less well-investigated approaches focus less on past events than on the persistence of dysfunctional symptoms that interfere with adaptation (e.g., Grant, 2005). Such approaches merit further systematic study. The effects of repeated deployment on the chronicity and severity of psychological symptomatology is another area requiring further research inasmuch as this may have a direct influence on readiness for future operational commitments. As effective strategies for the management of PTSD are devised, it is of paramount importance to recall that such symptoms do not exist independently and that PTSD is often but one of a range of definable conditions that affect servicemembers with psychological difficulties. Attention should be paid not only to managing comorbid diagnoses (alcohol or tobacco dependence; e.g., McFall et al., 2005) but to the numerous, and potentially more problematic, occupational and domestic difficulties that may beset servicemembers with symptoms of PTSD. At the same time that interventions for PTSD are refined, however, it is essential to recall that ultimately, answers to the problem of PTSD lie not in its cure but in its prevention. This is not in the hands of mental health practitioners, it is in the hands of military leaders who promote efforts at destigmatization, normalization, and resiliency. Navy psychologists must continue to refine their abilities as consultants to more effectively develop and promote this message.

The ability of a Web-based, clinician-supported educational and assessment protocol such as the VA’s De-Stress program (T. Keene, personal communication, January 22, 2005) to address needs of personnel at risk for the development of PTSD or related symptoms should be further explored via the establishment of Institutional Review Board–sanctioned protocols between the Navy and the VA.

A continued focus on systematic evaluation of service provision will be required to demonstrate not only that behavioral health services can be delivered in a cost-effective manner but that they have a true positive influence on wellness. A current initiative underway in Navy medicine, in parallel with other large health care delivery systems, is an effort to evaluate the cost and efficacy of mental health service provision. Although such large-scale outcome measures have recently been the focus of both attention and controversy, it is instructive to recall that such efforts, often spearheaded by psychologists, are not new in the public sector. In the 1950s and 1960s, VA psychologists directed several large-scale, multisite investigations of treatment efficacy and outcomes designed to improve the effectiveness of hospitalization in the VA (Pickren, n.d.). Navy psy-
psychologists must continue to critically evaluate the effectiveness of the mental health services they provide. In doing so, it will be important to not only examine traditional measures of health (rates of hospitalization for mental disorders or substance abuse, rates of prescription of psychotropics, overall use of outpatient services) but to look at other measures that also provide an index of the overall health of a population, such as lowered rates of automobile accidents, reductions in incidents of absenteeism, reductions in domestic violence reports, and cost offsets that accrue from provision of preventive mental health services. When evaluating the utility of clinical practice guidelines, the costs of both developing and implementing such guidelines must be considered along with their ease of implementation and any costs in provider productivity that result from adherence to an algorithmic treatment approach.

As noted in the discussion of stigma above, refinement of mechanisms to reduce stigma associated with mental health service provision should be a continued focus. Navy psychology is attempting to address this issue by adopting a preventive, community-based approach founded on principles of resiliency, normalcy, and restoration of function, as exemplified in the OSCAR program. The potency of peer disclosure as a mechanism for reducing suicide has already been demonstrated in military populations (Centers for Disease Control and Prevention, 1999); similar efforts may also be effective in reducing stigma associated with seeking treatment for PTSD and other forms of combat stress.

Navy psychology is well positioned to provide high-quality, comprehensive mental health care for servicemembers and their families. At the same time, it must be acknowledged that the management of PTSD and other sequelae of combat stress must be primarily preventive in nature and, perforce, take place outside the confines of the military health care system. Ultimately, education and early intervention will be key to the development of psychological resilience and the reduction of incidents of combat-related mental health disorder. In such efforts, Navy psychologists have forged crucial partnerships with chaplains, social workers, substance abuse counselors, and others mental health workers from outside the military medical system to create a truly preventive, community-based approach to behavioral health service delivery. It is reasonable to suppose that with clear demonstration of the efficacy of such approaches, these models may be adapted to address a number of needs in the civilian sector as well. As previously noted, the success of psychology in meeting the military needs of the nation in times of conflict has proven to be a harbinger of the success of the profession at large. New mechanisms of integrated behavioral health service delivery that encompass education and prevention as well as evidence-based treatment strategies may be among the legacies of the profession’s involvement in the current national crisis.

Author’s Note
The opinions expressed by Morgan T. Sammons are wholly his own and do not represent the official views of the U.S. Navy or the U.S. Department of Defense.

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References


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