



**Veterans Return to Civilian Life: A Review of the Factors Associated with a Resilient Outcome and How Social Workers Can Prepare to Help**

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# Veterans Return to Civilian Life: A Review of the Factors Associated with a Resilient Outcome and How Social Workers Can Prepare to Help

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*Alexa Smith-Osborne, PhD*

Public concern over the treatment of returning injured service members from Operation Enduring Freedom -- the U.S. war in Afghanistan -- and Operation Iraqi Freedom --the war in Iraq -- (OEF/OIF) has escalated as deployment periods have lengthened, allowed recuperation periods have shortened, and reports of inadequate case management and insufficient mental health and family support services, such as at Walter Reed Army Medical Center and Fort Carson, have proliferated (Priest & Hull, 2007; Zwerdling, 2007). Military difficulties in recruiting and retaining adequate force levels to conduct these missions in the current All Volunteer Force era suggest that the strains of multiple rapid deployments of increased length, with associated increased risk for certain types of casualties, may remain the status quo, despite military and Congressional goals for relief of troops (National Priorities Project, 2006). Significant delays in processing disability claims and difficulties accessing timely treatment for veterans once they have been discharged from the military have also been identified as issues requiring rapid resolution (Dole et al., 2007).

Limitations in the capacity of the Department of Defense (DoD) and Veterans Affairs (VA) health care system to respond to these extraordinary demands reflect the weaknesses of the overall American health care system (Dole, et al., 2007). The system shows particular strains in responding to severe and complex casualties, requiring long-term rehabilitation or characterized by delayed, later onset sequelae/morbidity, such as Traumatic Brain Injury (TBI) and Posttraumatic Stress Disorder (PTSD) co-morbid with amputation or loss of body functions (Cooper, 2008; Langbein, 2008; Smith-Osborne, Alexa, 2008a).

Even before military operations began in Iraq, the VA had noted a surge in the number of disability claims for PTSD: the number of veterans receiving disability compensation for PTSD in-

creased by 79.5% between fiscal years 1999-2004 and accounted for 20.5% of all compensation benefits (Committee on Veterans' Compensation for Posttraumatic Stress Disorder [CVCPTSD], 2007, p.2). Pre-OIF claims were being filed by Vietnam era, Gulf War, and OEF veterans. This fact underscores findings that PTSD symptoms can manifest themselves many years after a traumatic event, may be exacerbated by another traumatic event, or may interfere with ability to function only later in life (CVCPTSD). The increased survival rates of the most severely injured service members in OIF compared to these earlier conflicts are predicted to continue and accelerate this pattern of increased demand on the VA system (Dole, et al., 2007).

DoD focus has necessarily been on expanding and targeting service networks to meet immediate needs of OEF/OIF troops and retain them in fit-for-duty status rather than on longer term outcomes in post-deployment and civilian life. This focus may reflect assumptions by both the DoD and the VA that long-term resilient outcomes for veterans can be adequately facilitated by existing VA and civilian benefit and human services systems, such as VA Vocational Rehabilitation and Education Program services, the Family and Medical Leave Act provisions, and Offices of Disability Services in colleges attended by GI Bill beneficiaries (Church, 2008; Langbein, 2008). However, the recent findings and recommendations of the Wounded Warriors Commission (Dole et al., 2007) and of Congressional committees considering updating GI Bill provisions (Morrow, 2008) suggest that evidence-based interventions/programs need to be developed, and that existing evidence-based approaches need to be more widely implemented in order for desirable long-term outcomes to be

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## Veterans Return to Civilian Life

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realized. For example, one recent study found that PTSD treatment for OIF service members in military health clinics appeared relatively ineffective, perhaps due to an insufficient number of sessions or to the application of inefficacious psychotherapy modalities (rather than the specific, evidence-based techniques) relative to the severity and comorbid presentations of combat-related PTSD (Milliken, Auchterlonie, & Hoge, 2007). Further, these findings suggest that current levels of resource allocations are meeting only a fraction of actual needs of veterans in transitioning to civilian life (Dole et al., 2007). All these trends suggest the need for rapid mobilization of updated social work staff development and continuing education in all areas pertaining to services for veterans and their families.

### **Implications from the First Gulf War**

Since prior research suggests that the underlying mechanisms for posttraumatic symptoms may be similar across veteran cohorts (Vogt & Tanner, 2007), and since the first Gulf War cohort is the most similar demographically and contextually to the current active military and veteran cohort, implications for risk and protective factors for resilient outcomes will be drawn from the substantial literature on this group of veterans. Such similarities include their status as part of an All Volunteer Force in combat in the Middle East, having a much larger proportion of women than prior veteran cohorts (from 2% before the Vietnam era to 9% by the time of the Gulf War to 15% currently [Smith, Jacobson, Smith, Hooper, Ryan, & The Millennium Cohort Study Team, 2007]), and having joined the military with advancing their education as the primary incentive (Angrist & Johnson, 2000; Congressional Budget Office, 2007; Fernandez, 1980; National Priorities Project, 2006; U.S. Department of Veterans Affairs [VA], 2001).

#### *Risk Factors*

An important risk factor uncovered by Gulf War-era studies that has also been found for current troops was duty status during a war-zone deployment: Reservists/National Guard troops were found to be at relatively higher risk for PTSD than active duty troops (Wolfe, Erickson, Sharkansky, King, & King, 1999; Larsen, Highfill-McRoy, &

Booth-Kewley, 2008; Vogt & Tanner, 2007). War-zone deployment during the Gulf War included increased risk of compromised physical health status other than actual injury from combat operations, such as exposure to nuclear, biological, and chemical toxins. Mental health issues, including PTSD, arose from exposure to the wounded, dead, and dying, and to threat of death and injury (including sexual assault of female service members). Other lower level risk factors during deployment have been identified as worry about home and family, level of perceived threat and perceived seriousness of injury (e.g., labeling an injury a concussion instead of a traumatic brain injury may lower the victim's stress level), daily hassles posed by harsh living conditions in unfamiliar environments, and the misogynistic attitudes and sexual harassment experienced by female service members (King, King, Vogt, Knight, & Samper, 2006).

Among the non-deployment risk factors for PTSD were vulnerabilities due to a history of assault (including misogynistic attitudes, sexual harassment, and sexual assault of female service members while in the service), childhood abuse, and pre-existing mental disorders (Iowa Persian Gulf Study Group, 1997; Kimerling, Clum, & Wolfe, 2000; King, King, Vogt, Knight, & Samper, 2006; Sadler, Booth, Mengeling, & Doebbeling, 2004). In general, studies have found a weaker association between pre-deployment vulnerabilities and near-term outcomes than between deployment and post-deployment exposures/stressors and near-term outcomes. For example, these findings would suggest that misogynistic attitudes and sexual harassment of female service members during and just after deployment would pose more serious risks for negative outcomes than pre-deployment harassment or a childhood history of abuse, particularly if certain protective factors, such as unit cohesion, are present in the immediate pre-deployment social environment for those most at-risk.

#### *Protective Factors*

Several protective factors may be important to both near-term and long-term outcomes. Consistent with the resiliency literature (Smith-Osborne,

2007), pre-deployment and post-deployment social support have been found to be protective against PTSD in the Gulf War and Vietnam cohorts (Benotsch et al., 2000; Fontana, Rosenheck, & Horvath, 1997; Sutker et al., 1995). Better preparedness as to what to expect in the war zone and which coping mechanisms are likely to be effective in preventing or reducing posttraumatic symptoms and maintaining health may be protective against PTSD, depression, and other anxiety disorders (King, King, Vogt, Knight, & Samper, 2006). Denser social networks providing informational social support post-deployment were associated with mental health treatment and recent PTSD treatment was associated with use of the GI Bill to seek a college degree (Smith-Osborne, Alexa, 2008b). Use of non-VA financial aid and higher levels of health insurance were found to moderate the impact of mental health symptoms on Gulf War veterans' educational attainment, while higher family income, living with a small intact nuclear family, and using both forms of financial aid while not requiring VA mental health services in the past year were found to mediate impact of mental health symptoms on veterans' educational attainment (2008b).

### **Outcomes**

Overall, the established literature suggests that risk and protective factors, other than the factor of deployment in a war zone, have stronger direct associations with mental health outcomes than with physical health outcomes. Characteristics of the deployment itself and the service member's occupational role and category during deployment relate more strongly to physical health outcomes according to varying probabilities of exposure to nuclear, biological, and chemical toxins and of physical injury in the line of duty. However, poorer mental health outcomes have been associated with poorer physical health status among veterans (Smith-Osborne, 2008a), as has also been found in civilian populations (e.g., Ortega, Feldman, Canino, et al., 2006; Stein, Cox, Afifi, et al., 2006; Strik, Denollet, Lousberg, et al., 2003), while "Gulf War syndrome," as defined by the Center for Disease Control (Fukuda, et al., 1998), is a multisymptom illness inclusive of both physi-

cal and mental health domains, which has been documented in veteran populations throughout history. Thus, it is reasonable to consider the risk and protective mechanisms as relevant to both domains, particularly when the focus is on near-term symptom and condition outcomes.

Longer-term functional outcomes such as family status, occupational attainment, and educational attainment, have been associated with several contextual mechanisms, such as perceptions of and access to service delivery systems. Studies of the Gulf War cohort drawn from the most recent National Survey of Veterans indicated that a small percentage had used VA vocational rehabilitation services, although close to half had a rated, service-connected disability, and that this cohort may have less favorable attitudes toward using VA health services (Smith-Osborne, Alexa, 2008a, 2008b). Recent studies of the first Gulf War cohort have suggested that these veterans did not show improvement in the major anticipated resilient outcome, higher level of post-service educational attainment, compared to the conscription era Vietnam cohort (Angrist, 1993; Smith-Osborne, Alexa, 2008 a, 2008b): both cohorts had an average educational attainment of 14 years. This was the case despite the military's (and American society's) longer experience with an all-volunteer military, heavy emphasis on educational benefits in recruiting such a force, and the predominant application of those benefits for college degree-seeking rather than other kinds of training. This finding is more unexpected due to the higher proportion of women in the Gulf War service population, who have a greater tendency to use VA educational benefits for higher education (U.S. Department of Defense, n.d.; Congressional Budget Office, 2007). It is possible that rates of GI Bill use and degree completion did not improve in this cohort in part due to factors such as lower health status, including the so-called "Gulf War syndrome" (Doebbeling et al., 2000; Haley, Kurt, & Hom, 1997; Iowa Persian Gulf Study Group, 1997; Kang, Natelson, Mahan, Lee, & Murphy, 2003; Smith-Osborne, Alexa, 2008a), and the attention and memory deficits which have been associated with PTSD and which may have delayed onset (Prigerson, Maciejewski, & Rosen-

## Veterans Return to Civilian Life

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heck, 2001; Prigerson, Maciejewski, & Rosenheck, 2002; Rosenheck, Bassuk, & Salomon, 1999; Savoca & Rosenheck, 2000; Smith-Osborne, Alexa, 2008b; Vasterling, Brailey, Constans, & Sutker, 1998).

### **Implications from the Emerging Literature from OEF/OIF**

The emerging literature from the OEF/OIF conflicts has begun to identify some impact patterns that depart from those of prior conflicts in terms of near-term outcomes. Although earlier studies found higher prevalence of PTSD, TBI, depression, anxiety, and other mental health conditions among OEF/OIF service members (Hoge, Auchterlonie, & Milliken, 2006; Smith et al., 2008a), one recent study suggests that active-duty combatants may experience relatively lower risks of combat stress disorders than earlier cohorts, perhaps due to improved pre-deployment screening and deployment selection procedures in this conflict as compared with earlier wars (Larson, Highfill-McRoy, Booth-Kewley, 2008). Other studies suggest that more than 50% of GIs reporting PTSD and depressive symptoms just following deployment will report resolution of symptoms in the next five to six months (Milliken, Auchterlonie, & Hoge, 2007; Smith et al., 2008a). Factors associated with persisting PTSD symptoms in the remainder of participants in the Smith study included being a smoker or problem drinker pre-deployment, as well as being older, divorced, more highly educated, an officer, Reserve/Guard member, Marine, or healthcare specialist. Further, two to three times as many new cases PTSD symptoms were found several months later among GIs initially presenting with few symptoms, as well as elevated rates of depression, alcohol misuse, and referrals for treatment and separation from military service, with high utilization of mental health services in the first year after deployment (Hoge, Auchterlonie, & Milliken, 2006; Milliken, Auchterlonie, & Hoge, 2007).

However, higher rates of PTSD (Cooper, 2008; Dole et al., 2007), and perhaps other cognitive impairments (Vasterling, Proctor, Amoroso, Kane, Heeren, & White, 2006), do seem to characterize the current conflicts. Mild TBI, which is often co-

morbid with PTSD and depression, has been found to be associated with poorer health status, higher medical service utilization, and increased functional impairment (Gaylord, Cooper, Mercado, Kennedy, Yoder, & Holcomb, in press; Hoge, McGurk, Thomas, Cox, Engel, & Castro, 2008; Schneiderman, Braver, & Kang, 2008). Mild to severe TBI frequently co-occurs with physical injuries and exposures to toxic substances, which result from types of explosive devices particularly common in this conflict. Blast injuries occur through a multifactorial injury mechanism, including the initial direct exposure to the over-pressurization wave, the impact from blast-energized debris, the displacement of the victim by the blast impact, and the inhalation of toxic fumes, smoke, and chemicals released by the device (Cooper, 2008). Animal studies suggest that the initial over-pressurization waves may produce cognitive dysfunction even when the blast was focused on the torso while the head was protected (Cooper, 2008); thus, “near misses,” in which service members are protected from penetrating debris by body armor and helmet, may also pose risk of TBI. Studies of concussion (mild TBI) in civilian populations such as high school athletes, similarly to the emerging OIF/OEF literature, suggest that symptoms such as irritability, sleep disturbance, and attention and memory deficits may emerge some time after the initial injury or exposure, long after initial symptoms such as dizziness, confusion, memory loss of the injury incident, nausea, balance problems, and headache may have passed. However, current military service-members with mild TBI have noted persisting headaches, as well (Hoge et al., 2008). Certainly, the commonalities in symptom presentation among TBI (particularly persistent post-concussive symptoms), PTSD, and “Gulf War syndrome” complicate the diagnostic and treatment process, leading to the following recommendations;

\* Clinical assessment should be done for PTSD, depression, and post-concussive symptoms whenever a previously deployed OIF/OEF veteran presents for any one of these conditions;

\* Clinicians should approach PTSD as a condition with a continuum from mild to severe rather than a diagnosis which is to be established or not;

\* Clinicians should be aware that as PTSD screening scores increase, an association has been found with increasing risk for persisting post-concussive symptoms, defined as the self-report of three or more current symptoms (such as headaches, dizziness, memory difficulties, balance problems, tinnitus, irritability, sleep problems) which the veteran attributes to a possible head injury or concussion, whether blast-related or related to other injury mechanisms (Schneiderman, Braver, & Kang, 2008).

As found in the first Gulf War literature, the risk factors for PTSD among current military members and veterans may include vulnerabilities due to stressors in the life course prior to military service (Hoge, Castro, &, 2007; Ouimette, Cronkite, Henson, Prins, Gima, & Moos, 2004; Smith et al., 2008b) and younger age and minority ethnicity (Brailey, Vasterling, Proctor, Constans, & Friedman, 2007), as well as exposure to combat-related traumatic events and injuries. Active duty women who are health services providers have higher odds of exposure to certain risk factors for developing PTSD than those in combat support specialties, while those both on active duty and Reserve/Guard forces in certain technical roles may be at higher risk for toxic environmental exposures (Smith et al., 2007). In contrast, Reserve/Guard women in combat specialties have higher odds of exposure to PTSD risk factors than all other Reserve/Guard specialties (Smith et al., 2007).

Protective factors relevant to development of psychopathology and health disparities (i.e., for short-term resilient outcomes) are being studied in pre-deployment, deployment/military theater, and post-deployment time frames. Pre-deployment protective factors may include high levels of preparedness and unit cohesion, as well as general social support, and low levels of pre-deployment stressors (Brailey, Vasterling, Proctor, Constans, & Friedman, 2007). In-theater (i.e., deployment) protective factors may include continued unit cohesion (especially for personnel with higher levels of premilitary life stressors), lower levels of worry

about family/home issues (perhaps relating to family cohesion, family stability, and not being a deployed single parent), and higher levels of preparedness concerning coping with physical and psychological stressors in the deployment environment (Brailey, Vasterling, Proctor, Constans, & Friedman, 2007; Hoge, Clark, & Castro, 2007; King, King, Vogt, Knight, & Samper, 2006).

### *Implications from the Psychosocial Rehabilitation Literature*

Since the deinstitutionalization era of the 1970's, community-based psychosocial rehabilitation programs (PRPs) in this country have focused on promoting the independent living skills, treatment involvement, and recovery of the persistently and severely mentally ill population (Dincin, 1975; Anthony & Blanch, 1987). PRPs usually take the form of day programs, clubhouses, drop-in centers, residential rehabilitation sites, and vocational rehabilitation services (International Center for Clubhouse Development, 2001; Lucca & Allen, 2001; Macias, Jackson, Schroeder, & Wang, 1999; Mowbray & Tan, 1992; Mowbray, Robinson, & Holter, 2002; Mowbray, Lewandowski, & Holter, 2006). Another less common form of PRP is the supported education program, which is designed to assist persons with mental illness in pursuing post-secondary education (Megivern et al., 2003; Mowbray et al., 2004). Supported education programs often begin in self-contained classes and then progress to inclusion settings, or provide mobile advocacy and case management services on-campus for students who are fully integrated into mainstreamed classes (Cook & Solomon, 1993; Unger, 1994).

Outcome study findings of these supported education programs (Mowbray, Collins, & Bybee, 1999; Mowbray, Bybee & Collins, 2004; Smith-Osborne, Alexa, 2005; Unger & Pardee, 2002) and other types of PRPs provide evidence for effective program features which may be applicable to other adult populations with mental and cognitive symptoms, disorders, and disabilities which affect learning, such as those veterans with TBI, PTSD, dual diagnoses, and complex multi-symptom illnesses, as well as readjustment-

## Veterans Return to Civilian Life

Table 1: Staff Development and Continuing Education Relevant to Supporting Resilience among OIF/OEF Veterans: Risk Factors

Risk Factors from the Evidence	Related Staff Development/ Continuing Education Area	Application
Increased risk for PTSD, in a continuum	Assessment instruments/techniques for PTSD	Workshop, acquire and use tools
Increased risk for other neurological dx	Neuroscience fundamentals	Workshop, coursework
Increased rates of severe injury	Physiology and neuroscience	Workshop, coursework
Possibly insufficient rates of referral and tx	Screening/assessment instruments/techniques	Workshop, acquire and use tools
Possibly poor outcomes of PTSD tx	Behavioral (e.g., exposure therapy), & CBT techniques and psychopharmacology tx	Training and supervision, collaboration with prescribers
Active duty lower risk for PTSD	Prevalence rates for your community by unit	Share data and analyze
Prior hx vulnerability raises PTSD risk	How prior hx interacts with PTSD	Workshop, use dual dx frame
Higher deployment stress/exposures to threat raises risk psychopathology	Mobilization of service delivery, social support, family/unit cohesion asap; no re-traumatization	Workshop, early case id
For women, sexual assault/harassment raises risk of compromised health	Inclusion of this area in assessment/tx planning for female veterans	Workshop, tools to address this area, interagency coordination

related conditions. Further, while the VA has a long history of providing rehabilitative treatment and vocational rehabilitation to veterans, the Wounded Warriors Commission found that VA service models and benefit policies need to be evaluated and may need to be modified to meet the needs of younger, more college-oriented, more proportionately female, and more severely or cognitively injured veterans from current conflicts (Dole et al., 2007; Smith-Osborne, Alexa, 2008b). For example, the psychosocial rehabilitation evidence base would suggest that the availability of a continuum of intensive case management services could enhance treatment adherence, the density of social networks (both for social support and information), and effectiveness of other benefits and rehabilitation services for veterans.

One possibility suggested by the PRP supported education literature would be to modify VA benefit policies to allow coverage for more flexible college scheduling, including part-time or reduced course loads, and for non-credit remedial and self-contained introductory student skills classes (Dole et al., 2007, p.7; Smith-Osborne, Alexa, 2005; Weiner & Wiener, 1997). Some colleges are already piloting self-contained transition classes for veterans and student veterans peer support groups (Church, 2008), which are strategies consistent with the supported education evidence base. That evidence base has also found that treatment adherence, as well as vocational outcomes, are improved for participants in supported education programs.

### *Discussion of Ramifications for Social Work Staff Development and Continuing Education*

Table 1 displays risk factor findings from the bodies of evidence previously discussed, with the associated area of need for social work staff development and continuing education, while Table 2 displays protective factor findings similarly. Where there are gaps in the evidence base, or emerging, exploratory research findings, it is recommended that decisions on staff development be made only after conducting surveys and/or focus groups of clients/potential clients and stakeholders for the specific agency and community to assess their perceived needs, demographic characteristics, health/educational/vocational service access, health status, and readjustment status.

Further, agencies in communities near a military installation may find it worthwhile to participate in transition briefings routinely held by each service branch for separating military personnel. Such information would be particularly relevant for communities where large National Guard or Reserve units have been mobilized and deployed in Iraq and Afghanistan, since these personnel will be staying in the community, whereas separating active duty personnel may be more likely to disperse to other communities and therefore have less of an impact on the community service systems immediately surrounding the military installation over the long run. It may also be useful to solicit data from local military installations and local veteran service organizations on current rates of previously deployed veterans returning to the community for a recent time period, particu-



larly in rural areas or those far removed from VA facilities. For communities in which military treatment facilities are located, agencies may also need to consider the needs of aging military retirees who previously received free care (with billing of Medicare and private supplemental insurance for inpatient stays and certain other services) from these facilities, but are no longer being served due to the prioritization of current active duty personnel and their families. The financial impact and associated health access issues for this aging population, including coverage of multiple prescription medicines, needs to be assessed.

Sources of training include the traditional sources for in-house staff development and continuing education, such as expert speakers, workshops offered by local advocacy organizations and colleges, professional development seminars by schools of social work, and workshops offered by national proprietary networks (if in a convenient location). In addition, webcasts and audio conferences are being offered by subscription by national proprietary networks and national special interest organizations, and the VA is offering free webcasts that are subsequently archived in transcript form on government websites freely available to the public (e.g., on the Maternal and Child Health Bureau website). Announcements of relevant webcasts and summaries of emerging research are available on the VA website, the National Institute of Health website, and through the listserv of the Institute for the Advancement of Social Work Research. Additionally, the delivery of evidence-based interventions for conditions prevalent among current veterans may require agencies to support

staff in acquiring lengthy training and supervision from specialists in the particular intervention, unless some staff members were trained in these interventions and the theory base for them as part of their social work education. Obtaining standardized manuals and consultative supervision from outside the agency for particular interventions may also be helpful in acquiring and delivering new, effective interventions.

The current and emerging literature suggests that the needs of OIF and OEF veterans will be variable and dynamic over time, and that the changing policy environment may be significantly related to that need level, the nature of need expression, and nature of the relevant service delivery systems in the future. Therefore, implications of the literature for undergraduate and graduate social work programs must also be considered. Addressing relevant educational needs for the current cohorts of social work students could have a significant “pay-off” in national preparedness to meet the needs of returning veterans. Table 3 displays recommendations for social work education.

In summary, social work practice with veterans can be enhanced by awareness of the specific operation of protective mechanisms for this population, contextualized within life stage and the life trajectory turning points of military service and reentry into civilian (and for some veterans, student) status. The importance of both social support and benefit factors in this population suggests that generalist social work practitioners with population-specific preparation have the particular expertise and perspective to address the rele-

Table 2: Staff Development and Continuing Education Relevant to Supporting Resilience among OIF/OEF Veterans: Protective Factors

Protective Factors from the Evidence	Related Staff Development/Continuing Education Area	Application
Denser social networks (including informational)	Evidence-based methods, incl. manualized protocols, that target enhancement of these protective mechanisms at the micro, mezzo, and macro levels	Workshop, training & technical assistance (T&TA)
Social support	Program development, including tech-assisted	T&TA
Increased preparedness (in military and coping skills)	Psychoeducation; macro methods (policy, advocacy)	Workshop, T&TA
Increased understanding of common conditions w/o emphasizing severity	Health education and psychoeducation, including family/caregivers; public info campaign/macro	Workshop, T&TA, manuals
Family cohesion/living with small intact family	Family therapy (military family knowledge)	Workshop
Higher post-service income and benefits	Targeted case management, macro methods	Workshop, T&TA
Use of GI Bill and other financial aid for college	Targeted case management, macro methods	Workshop, T&TA
Use PTSD Tx, use supported education program	Evidence-based interventions, program development	Manuals, training



## Veterans Return to Civilian Life

Table 3: Social Work Education Relevant to Supporting Resilience among OIF/OEF Veterans

Factors from the Evidence	Related Social Work Education Area	Application
Increased risk for conditions which affect cognitive functioning	Neuroscience fundamentals and human biology	HBSE course in neuroscience/human biology
Need for evidence based interventions for effective tx of these conditions	Evidence-based practice methods, incl. manualized protocols	Infuse practice courses with enhanced EBP approaches, including search techniques and practice toolkits; offer field placements which utilize manualized interventions and protocols
Need for use of specific protective factors	Evidence-based methods, incl. manualized protocols, that target these mechanisms at the micro, mezzo, and macro levels	Micro/macro joint seminars on known protective mechanisms and related EBP methods, incl. program development

vant mental health, resource, and interpersonal issues among veterans.

The need for coordination between community networks (including colleges), military medical facilities, and VA medical and vocational rehabilitation facilities is highlighted in the literature. The existing social work role in military and VA service systems, and social work expertise in inter-agency coordination and managing complex service systems, make it clear that social workers both in those systems and in the community will play a pivotal role in implementing such coordination. Community-based social work agencies with a high level of preparedness can work most effectively with social workers in both the military and VA systems to provide crucial information and referral, case management, intervention, and psychosocial rehabilitation services to soldiers who are separating from service as they make the transition back to civilian life.

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## Veterans Return to Civilian Life

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