Supported Education for Returning Veterans with PTSD and Other Mental Disorders

Alexa Smith-Osborne
University of Texas at Arlington

Military service itself has been documented as a positive turning point in enlistinge’s life trajectories. However, for the veteran population with psychiatric disorders, resources other than the GI Bill, such as supported educational psychiatry rehabilitation programs, may be as important or more important to their post-service outcomes. Methods: This paper examines new clinical developments in supported education for veterans with PTSD and related disorders, utilizing systematic literature review methodology. Results: Five reports were retrieved which psychiatric rehabilitation practice guidance or examine supported education programs targeted to veterans in the current combat era who are suffering from PTSD or polytrauma. Level of evidence is predominantly descriptive. Conclusions and Implications for Practice: While the extant literature suggests applicability of available supported education models to the prevalent mental disorders in this current veteran population, high quality studies are needed to investigate their effects for this population. Current trends in military mental health programs and the civilian recovery movement suggest that supported education programming for veterans of this current combat era must incorporate resilience theory-based concepts and approaches and avoid diagnostically-driven and restrictive eligibility criteria.

Pursuit of a post-secondary education by a large segment of our society’s young adult population is a relatively recent phenomenon that occurred after World War II. It was spurred on by the GI Bill and its extensions to large population of returning veterans at that time (Angrist, 2011). The recently enacted post 9/11 GI Bill is intended to restore this financial aid mechanism to close the benefit levels of the original GI Bill (Hall, 2009; McChesney, 2008), with a view to supporting the stated educational goals of the all-volunteer enlistees and the rehabilitation of wounded warriors through educational attainment leading to employability. This paper explores trends in the provision of rehabilitation services to that segment of college-bound veterans who are returning from war with PTSD—declared the signature injury of current conflicts (Tanenl & Jaycox, 2008).

Since the psychiatric deinstitutionalization era of the 1970s, psychosocial rehabilitation programs (PRPs) in this country have flourished. They are directed to large segments of our severely and severely mentally ill population (SPM). PRPs usually take the form of day programs, clubhouses, residential rehabilitation, and vocational rehabilitation (International Center for Clubhouse Development, 2001; Smith-Osborne, 2005). A less common form of PRP, but one which may have great importance to their post-service outcomes is supported education which may enhance educational attainment for veterans who are suffering from PTSD or polytrauma. When examining the segment of the veteran population which experiences post-traumatic stress disorder (PTSD), Savoca and Rosenheck (2000) concluded that the effects of mental health on veterans’ earning potential in the civilian sector were as important as the non-health effects such as educational attainment and job placement. Management services in the first Gulf War veteran cohort have found that, particularly for veterans with high ratings of service connected disabilities, resources other than the GI Bill may influence their post-service outcomes (Smith-Osborne, 2009a, 2009b). Helpful resources have been found to include the level of informational social support, support network density, non-labor sources of income and total family income, non-Veteran private health insurance, working status, and mental health treatment (Smith-Osborne, 2009a, 2009b).

These findings continue to be important to today’s conflicts which are characterized by the signature injuries of PTSD, depression, traumatic brain injury, and co-occurring substance use disorders, as well as polytrauma—a combined physical and psychiatric injuries (Tanenl & Jaycox, 2008). It is too soon to conclude what the impact will be of initiating benefits close to the levels of the original GI Bill grant measures of veteran education. In the years following to college campuses has already spurred efforts to provide enhanced supportive services for the overall population and specifically for veterans with mental health issues and disabilities (Douglas, 2001; Polyomavirus) for anticipated that the post-9/11 GI Bill or VA rehabilitation benefits combined with support from campus Offices for Students with Disabilities would meet the needs of student veterans with psychiatric disabilities (Langbein, 2008). However, civilian studies have found that, without the benefit of a supported education intervention, the psychiatrically-disabled population is least likely to participate in disability benefits of the VA and other VA populations need to be adapted for the changing demographics and educational trajectories of current veterans (Crowder et al., 2010; Smith-Osborne, 2009a, b).

This paper will examine recent developments in supported education programs which have been expanded or piloted to enhance post-secondary educational attainment for veterans with PTSD and other mental disorders in the current combat era. Identification of these program trends will help focus future research efforts to investigate their outcomes and their contribution to the evolution of best practices in this rehabilitation counseling field.

Method

Literature search and data sources

The systematic paper utilized a systematic review design and methodology in support of the research aim above. Inclusion criteria and search strategies for this review were selected following the guidelines of Quality of Reporting of Meta-analyses (QUORUM; Moher, Cook, Eastwood, Olkin, Rennie, & Stroup, 1999) and the guidelines of Quality of Reporting of Meta-analyses (QUORUM; Moher, Cook, Eastwood, Olkin, Rennie, & Stroup, 1999) for the following electronic databases, first for peer-reviewed journal articles and then for conference proceedings and books published in the following electronic databases, first for peer-reviewed journal articles and then for conference proceedings and books (Smith-Osborne, 2005).

Results

Indications for supported education programs for veterans with PTSD and other mental disorders. Since the literature on veterans with PTSD and other mental disorders. Since the literature on PTSD and Other Mental Disorders

Alex Smith-Osborne
University of Texas at Arlington

which is designed to assist persons with SPMI in pursuing post-secondary education (Gilbert, R., Hix, X., Jaxon, D., & Bellamy, C., 2004; Hain & Giusa, 2004; Megivern, Anderson, Wentworth, Barnhart, & Howard, 2004; Megivern, Pellerin, & Mowbray, 2003; Mowbray, Bybee, & Collin, 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 (Cook & Solomon, 1993; Sullivan, Nicoll, Stanley, & MacDonald-Miller, 1993). For the SPMI population, supported education has usually been funded and initiated as one component of full-service psychosocial rehabilitation programs, within psychiatric hospitals with large young adult/adolescent caseloads, or by colleges in collaboration with local community mental health agencies and funded by state mental health department grants. Sustaining resilience and recovery-oriented programs like supported education has been difficult within the current managed behavioral health care insurance environment, which maintains the traditional focus on symptom reduction (Hoffman & Mastron, 1991; Mowbray, Brown, Forrest, Longfong-Norman, & Soydan, 2002).

In developing supported education for current veterans, it is important to consider that the most important incentives to join the U.S. military service under today’s All Voluntary Force (AVF) are to secure first, vocational/technical training from the active duty service (Angrist, 2011). In fact, veterans’ educational benefits are the largest federal program for student financial aid in America (Angrist, 2011). Active duty benefits include academic credits awarded for military service, military coursework, military scholarships, and the Active Duty Montgomery GI Bill (All the Benefits of Service, 2005).

Historically, the end of military conscription was associated with lower levels of pre-service education among persons entering active duty military service (Harris, 1976) until the first Gulf War. Several studies have suggested that, although the use of veteran educational benefits increases AVF veterans’ lifetime educational attainment by about 1.4 years, they are experiencing truncation of their work trajectories due to several factors associated with military service (Angrist, 1991, 1998; Angrist & Johnson, 2000; Angrist, 2011; Autor, Duggan, & Lyle, 2011). During active duty, their deployment is associated with a reduction in employment rates among their wives due to child care responsibilities. After separation from military service, their added educational increment may simply “cancel out” the effect of lost time from the civilian workforce due to military service. Additionally, AVF veterans are enrolling in disability compensa-

Identification of these program trends will help focus future research efforts to investigate their outcomes and their contribution to the evolution of best practices in this rehabilitation counseling field.

Inclusion criteria and study selection

Inclusion criteria specified full text papers, books, and pre-

sentations written in English. A search of 2005 to 2010 (in English) in the following electronic databases, first for peer-reviewed journal articles and then for conference proceedings and books published in the following electronic databases, first for peer-reviewed journal articles and then for conference proceedings and books (Smith-Osborne, 2005). Abstracts for additional references were thus obtained and reviewed. Finally, requests for relevant unpublished papers and conference presentations or proceedings were made to mental health professionals involved in supported education and employment for OIF/OEF veterans, and results were evaluated for inclusion criteria.

The PTSD and Other Mental Disorders

Alexa Smith-Osborne
School of Social Work, University of Texas at Arlington, 211 S. Cooper Street, Box 19129, Arlington, Texas, 76019-0129.

E-mail: alexaso@uta.edu

Journal of Rehabilitation
2012, Volume 78, No. 2, 4-12

Journal of Rehabilitation
2012, Volume 78, No. 2, 4-12
Supported Education for Returning Veterans with PTSD and Other Mental Disorders

Alexa Smith-Osborne

University of Texas at Arlington

Military service itself has been documented as a positive turning point in enlisting’s life trajectories. However, for the veteran population with psychiatric disorders, resources other than the GI Bill, such as supported education psychiatric rehabilitation programs, may be as important or more important to their post-service outcomes. Methods: This paper examines new clinical developments in supported education for veterans with PTSD and related disorders, utilizing systematic literature review methodology. Results: Five reports were retrieved which provide psychiatric rehabilitation practice guidance or examine supported education programs targeted to veterans in the current combat era who are suffering from PTSD or polytrauma. Level of evidence is predominantly descriptive. Conclusions and Implications for Practice: While the extant literature suggests applicability of available supported education models to the prevalent mental disorders in this current veteran population, high quality studies are needed to investigate their effects for this population. Current trends in mental health programs and the civilian recovery movement suggest that supported education programming for veterans of this current combat era must incorporate resilience theory-based concepts and approaches and avoid diagnostically-driven and restrictive eligibility criteria.

Pursuit of a post-secondary education by a large segment of our society’s young adult population is a relatively recent phenomenon that occurred after World War II. It was spurred on by the GI Bill and was initially targeted to the large population of returning veterans at that time (Angrist, 2011). The recently enacted post 9/11 GI Bill is intended to restore this financial aid mechanism to close to the benefit levels of the original GI Bill (Hall, 2009; Messeney, 2008), with a view to supporting the stated educational goals of the all-volunteer enlistees and the rehabilitation of wounded warriors through educational attainment leading to employability. This paper explores trends in the provision of rehabilitation services to that segment of college-bound veterans who are returning from war with PTSD—declared the signature injury of current conflicts (Tanelan & Jaycox, 2008).

Since the psychiatric deinstitutionalization era of the 1970’s, psychosocial rehabilitation programs (PRPs) in this country have flourished to serve severely and severely mentally ill population (SPMI). PRPs usually take the form of day programs, clubhouses, residential rehabilitation, and vocational rehabilitation (International Center for Clubhouse Development, 2001; Smith-Osborne, 2008). A less common form of PRP, but one which may have great salience for today’s veterans, is the supported education program, which is designed to assist persons with SPMI in pursuing post-secondary education (Gilbert, R., Haxemer, S., Jaxon, D., & Bellamy, C., 2004; Hain & Giusia, 2004; Megivern, Anderson, Wentworth-Barnhart, & Howard, 2004; Megivern, Pelleriti, & Mowbray, 2003; Mowbray, Bybee, & Collins, 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 (Cook & Solomon, 1993; Sullivan, Nicolltes, Stanley, & MacDonall-Wilson, 1993).

For the SPMI population, supported education has usually been funded and initiated as one component of full-service psychosocial rehabilitation programs, within psychiatric hospitals with large young adult/adult/adolescent caseloads, or by colleges in collaboration with local community mental health agencies and funded by state mental health department grants. Sustaining resilience and recovery-oriented programs like supported education has been difficult within the current managed behavioral health care insurance environment, which maintains the traditional focus on symptom reduction (Hoffman & Mastramani, 1991; Mowbray, Brown, Furlong-Lornan, & Snyder, 2002).

In developing supported education for current veterans, it is important to consider that the most important incentives to join the U.S. military service under today’s All Voluntary Force (AVF) are to secure first, vocational/technical training from the active duty assignment, and second, post-service educational benefits (Angrist, 2011). In fact, veterans’ educational benefits are the largest, long-term benefit source to the large population of returning veteran population, high quality studies are needed to investigate their effects for this population. Current trends in mental health programs and the civilian recovery movement suggest that supported education programming for veterans of this current combat era must incorporate resilience theory-based concepts and approaches and avoid diagnostically-driven and restrictive eligibility criteria.

During active duty, their deployment is associated with a reduction in employment rates among their wives due to child care responsibilities. After separation from military service, their added educational increment may simply “cancel out” the effect of lost time from the civilian workforce due to military service. Additionally, AVF veterans are enrolling in disability compensation earlier in their work lives than conscription-era veterans. These effects are sufficiently broad and long-term as to suggest that any gains in educational attainment attributable to veterans’ benefits may be partially compensatory in nature, in that they only partially redress negative sequence of time and functional capacity lost from the civilian labor market due to military service. These results suggest the importance of testing mechanisms such as supported education which may enhance educational attainment for wounded warriors and other veterans beyond what is being accomplished by the post 9/11 GI Bill.

When examining the segment of the veteran population which experiences post-traumatic stress disorder (PTSD), Savoca and Rosenheck (2000) concluded that the effects of mental health on veterans’ earning potential in the civilian sector were as important as the non-health effects such as educational attainment and job placement. Despite government services of the first Gulf War veteran cohort have found that, particularly for veterans with high rates of service connected disabilities, resources other than the GI Bill may impact on their post-service outcomes (Smith-Osborne, 2009a, 2009b). Helpful resources have been found to include the level of informational social support, support network density, non-labor sources of income and total family income, non-Veterans Affairs (VA) financial aid, level of VA health care coverage, and recent mental health treatment (Smith-Osborne, 2009a, 2009b).

These findings continue to be important to today’s conflicts which are characterized by the signature injuries of PTSD, depression, traumatic brain injury, and co-occurring substance use disorders, as well as polytrauma—combined physical and psychiatric injuries (Tanelan & Jaycox, 2008). It is too soon to conclude what the impact will be of initiating benefits close to the levels of the original GI Bill, as the number of veterans returning to college campuses has already spurred efforts to provide enhanced supportive services for the overall population and specifically for veterans with mental health issues and disabilities (Dole et al., 2007; Dole, 2007). Policymakers anticipated that the post 9/11 GI Bill or VA rehabilitation benefits combined with support from campus Offices for Students with Disabilities would meet the needs of student veterans with psychiatric disabilities (Langbein, 2008). However, civilian studies have found that, without the benefit of a supported education intervention, the psychosocially disabled population is the least likely to adapt and to co-morbid mental disorders. Since the implementation of supported education has been predominantly descriptive, with

Method

Literature search and data sources

The review used a systematic literature review methodology in support of the research aim above. Inclusion criteria and search strategies for this review were selected following the guidelines of Quality of Reporting of Meta-analyses (QUORUM). In developing the search, we refer to the following electronic databases, first for peer-reviewed journal articles and then for conference proceedings and books published on PTSD and veterans, supported education and PTSD (and variants) and veterans, and supported education (Dole et al., 2007; Hall, 2009). Policymakers anticipated that the post 9/11 GI Bill or VA rehabilitation benefits combined with supportive educational services and supported education—type psychosocial rehabilitation programs for veterans with PTSD and other mental disorders, higher education/postsecondary education/college and PTSD (and variants) and veterans, and PTSD and supported education. Included articles were scanned for references and were entered into Search Corporation. Searches were conducted in the Web of Science electronic database, Social Science Citation Index. Abstracts for additional references were thus obtained and reviewed. Finally, requests for relevant unpublished papers and conference presentations or proceedings were made to mental health professionals involved in supported education and employment for OIF/OEF veterans, and results were evaluated for inclusion criteria.

Inclusion criteria and study selection

Inclusion criteria specified full text papers, books, and presentations. From 2005 to 2010 in English and report on the provision of educational services and supported education—type psychosocial rehabilitation programs for veterans with PTSD and other mental disorders, higher education/postsecondary education/college and PTSD (and variants) and veterans, and PTSD and supported education. Included articles were scanned for references and were entered into Search Corporation. Searches were conducted in the Web of Science electronic database, Social Science Citation Index. Abstracts for additional references were thus obtained and reviewed. Finally, requests for relevant unpublished papers and conference presentations or proceedings were made to mental health professionals involved in supported education and employment for OIF/OEF veterans, and results were evaluated for inclusion criteria.
null
controlled studies emerging primarily in the last decade (Glyn, Dreibing, & Penn, 2009), inclusion criteria did not include study quality criteria. Electronic searches yielded no results for the key-word combination “PTSD and supported education” and no results for samples including persons with PTSD for the keywords “supported education and rehabilitation”, suggesting a dearth of recent published research in supported education for PTSD in the general population, as well as for veterans. Initial searches and professional contacts yielded 142 results. Abstracts and book précis were reviewed for inclusion criteria. One hundred twelve did not address specialized supported education programs for the target population and were excluded. Full text articles, conference presentations/proceedings and books for the remaining 32 texts appearing to meet inclusion criteria were obtained for further review. Twenty-seven did not address the target population of veterans with PTSD and related conditions and were excluded, leaving five reports which met all inclusion criteria. The flow of the literature retrieval process may be seen in Figure 1.

Results

See Table 1 for a summary of literature which met the paper’s inclusion criteria, indicated with an asterisk in the reference list. Key points from each are presented below.

Many clients with PTSD often wish to return to school to improve their vocational prospects. These clients often benefit from referrals to supported education programs, which can help them not only to navigate school regulations and policies, but also access disability services that can compensate for difficulties in attention, memory, and concentration. MacDonald-Wilson, McReynolds, and Accordo (2009) present issues for psychiatric rehabilitation posed by the co-morbid physical and psychiatric conditions experienced by many combat veterans of Operation Iraqi Freedom (OIF) and Operation Enduring Freedom (OEF). These include four major areas for future research and practice improvement. In the first, they identify the need for research to test the application to veterans with PTSD of rehabilitation techniques which have previously been found effective with other severe and persistent mental illnesses in civilian and veteran populations. Secondly, they emphasize that researchers will need to keep abreast of emerging neuroscience knowledge about interactions between brain structures and functions, and how these interact with psychological interventions and rehabilitation. Thirdly, they advocate for closely coordinating with medical treatment providers when engaging in rehabilitation practice, especially in light of these emerging neuroscientific findings. Finally, they recommend integrating supported education with the supported employment models of rehabilitation which have been tested with veteran populations.

Smith-Osborne (2010) reports preliminary findings from pilot supported education projects being implemented by community colleges and universities to reintegrate veterans with disabilities, including mild TBI and PTSD, into academic settings. Arkansas State University has initiated the Beck PRIDE Center for America’s Wounded Veterans (Arkansas State University, n.d.). This personal rehabilitation, advocacy, and education program for PTSD and TBI veterans injured in combat. The program’s defined scope of rehabilitation does not explicitly include previously tested models of psychiatric rehabilitation, but extends the university’s prior infrastructure in physical therapy, speech and language pathology, and mental health counseling to support injured veterans, most of whom are student veterans. Syracus University has developed the Entrepreneurship Bootcamp for Veterans with Disabilities (Needleman, 2010). This initiative provides a combination of online and face-to-face non-credit training and mentoring program for veterans, family caregivers, and surviving spouses who want to start their own small businesses; this project has now extended to five other campuses across the country (Syracuse University, n.d.). Although it provides one on one mentoring and accommodations, it does not provide certain elements of a supported education program, such as psychoeducation focused on managing symptoms while in the university’s prior infrastructure in physical therapy, speech and language pathology, and mental health counseling to support injured veterans, most of whom are student veterans. Some colleges now have other services “bundled” to provide targeted or enhanced services for student veterans. Examples include community colleges such as St. Phillips College in San Antonio, Texas (St. Phillips College, n.d.), and universities, such as the University of Texas-Pan American (University of Texas-Pan American, n.d.), which have added veteran-specific clinical and/or special education staff to one-stop advising and referral services for offices to approach supported education models in providing enhanced supportive services. These approaches typically stop short of providing ongoing direct therapy, personal academic and vocational goal-setting, psychoeducation focused on managing symptoms while in the student role, and assertive case manage ment services which are often incorporated in full PRP models (Mowryh, Brown, Furlong-Norman, & Soydan, 2002).

In California, a Troops to College Program (Burnett & Segorsa, 2009, Troops to College, n.d.) has been initiated by the California Governor in all public universities/colleges in the state. The program includes a unified state level website and companion media campaign, initiation of student veteran groups/clubs on each campus, initiation of online student veteran support services, state policy implementation of college fee waivers for veterans, initiation of an orientation event just for student-veterans, and initiation of information provision on vocational assistance through the Veterans Benefits Coordination Offices.

Several colleges have introduced veteran-only introductory classes or cohort classes for credit, similar to study-focused classes for probationary freshmen which have been available for traditional civilian students for decades, with enhanced ancillary services. One example of this supportive services model is the Combat2Classes program at Montgomery College in Maryland (Montgomery College, n.d.). The University of Texas at Arlington (University of Texas at Arlington, n.d.) has initiated a randomized controlled intervention trial of supportive education models for veterans adapted from the evidence-based civilian models. The trial includes any veteran considering pursuing an undergraduate degree (or already enrolled in college) who will agree to participate in at least 4 contact sessions over a two-semester active service period and complete data collection instruments at pre-test, first post-test, 6 months post-test, and 12 months post-test; participants may be anywhere in the country. Models being tested include an adaptation of a manifoldized civilian SEID model and a technology-mediated information, referral, and case management model (Smith-Osborne, 2010, in press). Pilot phase participants in the clinical trial included 50% who had PTSD, 33% who reported blast exposure, 11% who reported pre-service learning difficulties or other conditions affecting cognition, and 10% who required concrete crisis services (e.g., emergency food, housing, transportation, child care) during their period of participation. Pilot phase outcome data suggest that intervention groups com-

6 Journal of Rehabilitation, Volume 78, Number 2
pared to control group experienced decreased PTSD symptoms, increased health and mental health treatment engagement, increased grade point averages, and increased scores on measures of social support and resilience. The majority of these veterans were retained in college during their period of participation in the pilot phase of the study (Smith-Osborne, 2010, in press).

Crowder et al. (2010) presented results of a study conducted by the national VA Supported Education Standards Workgroup to identify and describe pilot supported education projects being implemented by local VA medical centers in coordination with colleges and universities, and directly by VA Compensated Work Therapy programs. Project SERV (Supportive Education for Returning Veterans) has worked with local VA clinicians to develop a non-residential learning community of full-time, general education (for credit), self-contained cohort classes for the first semester, followed by phased-in mainstreamed classes thereafter. This model is analogous to “freshman interest group” learning communities that are becoming increasingly common for traditional college students on 4-year and university campuses (Golde & Pribbenow, 2000). Project SERV, which started at Cleveland University, Ohio, has now expanded to Youngstown State College, Ohio, and the University of Arizona, and involves VA clinicians as adjunct co-instructors with regular college faculty (Cleveland University, n.d.). They report increased retention in college and increased grade point averages among participants (Crowder, 2010).

In addition to these enhancements of supportive services for student veterans, some programs are explicitly building on the evidence base in supported education. They have been initiated within a few VA programs and by universities. Several of the VA programs have been extended from supported employment components of PRPs already available in Veterans Health Administration (VHA) networks, typically within Compensated Work Therapy (CWT) programs and offices of Local Recovery Coordinators. These SEd approaches include the placement of VA CWT staff in local community colleges’ veterans benefit offices by the Tampa, Florida VA and the provision of SEd services to local community colleges by the Cleveland VA clinicians (Crowder, 2010). Others have been funded as research pilot projects by VHA research offices, such as the collaboration between the Edith Nourse Rogers VAMC, Bedford, Massachusetts, and Middlesex Community College, designed to explore perceived need and curricular adaptations of civilian supported education models for veterans (Crowder, 2010). The Wounded Warrior Project has founded Project TRACK in collaboration with Florida State College. This project provides a 12-month residential component of self-contained classes for credit (non-degree), followed by an employment externship. Outcome data are not yet available in published form from these innovative projects.

The Rehabilitation Research and Training Center of Virginia Commonwealth University (Virginia Commonwealth University Rehabilitation Research and Training Center, n.d.) has extended their existing supported education program for adults with sustained TBI and spinal cord injury to include a mobile veterans’ component, the Vets in College Program. A Richmond VA representative sits on the board of this program and facilitates VA patient referral and coordination of services to this trust fund supported project (Crowder, 2010).

Discussion

These findings suggest several future trends with implications for rehabilitation counseling practice. Wellness/resilience-oriented Department of Defense (DoD) behavioral health programs for active-duty (Department of Defense Task Force on Mental Health, 2007; Morales, 2009; Vaughn, 2010), and campus-based supported education programs for veterans, regardless of disability status, are proliferating, although they vary greatly in their rigor and range of impact (Smith-Osborne, 2010). Other supported education initiatives have been recently added to previously existing physical rehabilitation or educational support services in universities and community colleges or are being newly pilot-ed by university-based rehabilitation research centers or the Veterans Health Administration Compensated Work Therapy programs. Such programs refer to and receive referrals from DoD and VA entities as well as providing direct services themselves. Psychiatric rehabilitation programming, particularly the Individual Placement and Support supported employment model, has been tested for prior cohorts of veterans and incorporated into Veterans Health Administration services, and supported education services have sometimes been embedded within these services. While the extant literature suggests applicability of available supported education models to the prevalent mental disorders in this current veteran population, high quality studies are needed to investigate their effects for this population. Current trends in military mental health programs and the civilian recovery movement suggest that supported education programming for veterans of this current combat era must incorporate resilience theory-based concepts and approaches and avoid diagnostically-driven and restrictive eligibility criteria.

This paper identified promising initial results from limited research on supported education and supportive services which are being reported in conference proceedings and through this new VA Work Group on Supported Education Standards (Crowder, 2010) as well as in descriptive and conceptual journal articles, but published results in peer-reviewed journals are awaited to establish the evidence base in supported education for these new applications. Dissemination of such evidence could lead to increased commitment on the part of higher education and the Veterans Administration to collaborations in implementing ongoing, formal supported education programs, both in newly initiated free-standing models and embedded within existing VA supported employment programs. Free-standing models housed in university settings could prove more effective in reaching the veterans of current conflicts, especially those with higher health status who may not be eligible for, or seeking services from, VA supported employment programs. In such instances, out-placement of VA clinical staff to the free-standing programs and to university health services could provide part of the staffing and facilitate engagement of veterans with VA health and mental health treatment services.

Of interest to rehabilitation counselors, cognitive remediation, integrated as a psychosocial rehabilitation component, is being tested with supported employment services delivered to traditional PRP populations, with promising results (Lindenmayer, et al., 2008; McGurk, Mueser, DeRosa, & Wolfe, 2009), and trials with veterans with PTSD are planned (Bronx VA Medical Center, n.d.). Future research with veterans could utilize the same software to test cognitive remediation with supported education services and compare them, with neuropsychological measures, to investigate and compare its effects with participation in either self-contained or mainstreamed/inclusion college classes only. By using the same software, researchers can compare effects of

Table 1

<table>
<thead>
<tr>
<th>Author/publication year</th>
<th>Research Aim, Target Group, Design</th>
<th>Outcomes/Recommendations</th>
</tr>
</thead>
<tbody>
<tr>
<td>Glynn, Drebinger, &amp; Penk (2009)</td>
<td>To present standards for psychosocial rehabilitation for veterans with PTSD, including supported education, practice guidelines based on systematic review of the evidence</td>
<td>*Comparisons of PRP with other PTSD treatments *PRP cost analyses and reimbursement strategies *Criteria for levels of care for each type of PRP *Functional measures for referral to each type of PRP technique</td>
</tr>
<tr>
<td>MacDonald-Wilson, McDermid, &amp; Accordin (2009)</td>
<td>To highlight new issues in psychosocial and physical rehabilitation posed by the needs of OIF/OEF veterans with disabilities; conceptual</td>
<td>*Testing the application of rehabilitation techniques for PTSD which have previously been found effective with other severe and persistent mental illnesses *Integrate neuroscience knowledge about interactions between PTSD and TBI *Closely coordinate with medical treatment providers *Integrate supported education and supported employment models of rehabilitation</td>
</tr>
<tr>
<td>Smith-Osborne (2010)</td>
<td>To review efforts by colleges and universities to aid reintegration of current veterans, including veterans with disabilities and conditions, into the student role</td>
<td>*Many colleges are enhancing existing student support services for veteran students as non-traditional students *Some colleges with preexisting TBI SEd programs are adapting them for veterans *One-stop veterans’ programs are expanding beyond veterans’ financial aid offices in some colleges which include special education and assistive technology services *Self-contained non-credit classes are being offered by two projects (TRACK and Entrepreneurship Boot Camp) *Randomized controlled trial (RCT) of a full supported education program for veterans is underway</td>
</tr>
</tbody>
</table>

SEd groups experienced decreased PTSD symp-toms, increased health and mental health treatment engagement, increased grade point averages, and increased scores on measures of social support and resilience.

Crowder (2010) | To report the findings of a national study of supported education for veterans, particularly those recent veterans with mTBI and PTSD, done by a national VA Supported Education Standards Workgroup, expert panel | *The VA is involved in multiple SEd projects, most embedded within pre-existing compensated work therapy/supported employment programs, and some in joint endeavors placed within local colleges |
of interest to rehabilitation counselors, cognitive remedia-
lation, integrated as a psychosocial rehabilitation component, is,
being tested with supported employment services delivered to tra-
ditional PRP populations, with promising results (Lindemann, et
al., 2008; McGrath, Mueser, DeRose, & Wolfe, 2009), and trials
with veterans with PTSD are planned (Bronx VA Medical Center,
n.d.). Future research with veterans could utilize the same soft-
ware to test cognitive remediation with supported education serv-
ces and compare them, with neuropsychological measures, to
investigate and compare its effects with participation in either
self-contained or mainstreamed/inclusion college classes only.
By using the same software, researchers can compare effects of

<table>
<thead>
<tr>
<th>Table 1</th>
</tr>
</thead>
<tbody>
<tr>
<td>Details of Included Reports</td>
</tr>
<tr>
<td>Author (publication year)</td>
</tr>
<tr>
<td>Glynn, Drebings, &amp; Penk (2009)</td>
</tr>
<tr>
<td>MacDonald-Wilson, Reynolds, &amp; Accordini (2009)</td>
</tr>
<tr>
<td>Smith-Osborne (2010)</td>
</tr>
</tbody>
</table>

The Rehabilitation Research and Training Center of Virginia Commonwealth University (Virginia Commonwealth University Rehabilitation Research and Training Center, n.d.) has extended their existing supported education program for adults with sus-
tained TBI and spinal cord injury to include a mobile veterans’ component, the Vets in College Program. A Richmond VA repre-
sentative sits on the board of this program and facilitates VA patient referral and coordination of services to this trust fund sup-
ported project (Crowder, 2010).

Discussion
These findings suggest several future trends with implica-
tions for rehabilitation counseling practice. Wellness/resiliency-
oriented Department of Defense (DoD) behavioral health pro-
grams for active-duty (Department of Defense Task Force on Mental Health, 2007; Morales, 2009; Vaughan, 2010), and campus-
based supported education programs for veterans, regardless of
status, are proliferating, although they vary greatly in
their rigor and range of impact (Smith-Osborne, 2010). Other sup-
ported education initiatives have been recently added to previously
existing physical rehabilitation or educational support services
in universities and community colleges or are being newly pilot-
ed by university-based rehabilitation research centers or the
Veterans Health Administration Compensated Work Therapy pro-
grams. Such programs refer to and receive referrals from DoD and
VA entities as well as providing direct services themselves.
Psychiatric rehabilitation programming, particularly the
Individual Placement and Support supported employment model,
has been tested for prior cohorts of veterans and incorporated into
Veterans Health Administration services, and supported education
services have sometimes been embedded within these services.
While the extant literature suggests applicability of available sup-
ported education models to the prevalent mental disorders in this
current veteran population, high quality studies are needed to
investigate their effects for this population. Current trends in mil-
tary mental health programs and the civilian intervention movement
suggest that supported education programming for veterans of this
current combat era must incorporate resilience theory-based con-
cepts and approaches and avoid diagnostically-driven and restric-
tive eligibility criteria.

This paper identified promising initial results from limited
research on supported education and supportive services which are
being reported in conference proceedings and through
this new VA Workgroup on Supported Education Standards (Crowder,
2010) as well as in descriptive and conceptual journal articles, but
published results in peer-reviewed journals are awaited to estab-
lish the evidence base in supported education for these new appli-
cations. Dissemination of such evidence could lead to increased
commitment on the part of higher education and the Veterans
Administration to collaborations in implementing ongoing, formal
supported education programs, both in newly initiated free-stand-
ing models and embedded within existing VA supported employ-
ment programs. Free-standing models housed in university set-
tings could prove more effective in reaching the veterans of
current conflicts, especially those with higher health status who may
not be eligible for, or seeking services from, VA supported employment programs. In such instances, out-placement of VA
clinical staff to the free-standing programs and to university
health services could provide part of the staffing and facilitate
engagement of veterans with VA health and mental health treat-
ment services.

Crowder (2010) | To report the findings of a national study of supported education for veterans, particularly those recent veterans with mTBI and PTSD, done by a national VA Supported Education Standards Workgroup, expert panel | *The VA is involved in multiple SEd projects, most embedded within pre-existing compensated work therapy/supported employment programs, and some in joint endeavors placed within local colleges |
including this intervention on educational outcomes with employ-
ment outcomes, which would be particularly useful since many
current domestic and international applications of supported ed-
cuation are being embedded in supported employment programs
citluches, Anthony, Massara, & Rogers, 2007; Murphy, Mullen, &
Spangolo, 2005; Nuechterlein, Subotnik, Turner, Ventura,
Becker, & Drake, 2008; Mansbach-Kleinfeld, Sasson, Silver,
& Steinmuller, 2007; Powell, Silver, Sasson, & Grindolph, 2008; Russell & Strauss, 2004; Waghorn, Still, Chance, &
Whitford, 2007). Higher intensity, specialized services such as
veterans appear to be expanding as colleges report (via local
and traditional rehabilitation settings, such as within university-
puses (McChesney, 2008). Easily implemented changes, such as
adding an item on veteran status to students’ intake forms or
setting aside a dedicated space as a student veteran lounge, may
have the potential to support veterans’ transition to the student
role and thus aid reintegration to the civilian community.

Acknowledgement
Support for the preparation of this article was given by a UT
Arlington research enhancement grant and a grant from the Hogg
Foundation for Mental Health that supported the research that was pre-
sented in a different form at the 2nd US-Japan Goodwill “Meeting
of the Minds” Conference for the Reintegration of Veterans with
Mild TBI and PTSD into Joint University/Health/Volunteer Systems,
July 13, 2010, Columbia, Maryland and at the American Psychological Association Annual Conference, August
3, 2010, San Diego, California.

References
ReferencesContent.0,326744,00.html
Angrist, J.D. (1998). Estimating the labor market impact of voluntary military service: a unit study on mil-
Cleveland University (n.d.). Project SERV. Retrieved from http://www.csohio.edu/offices/undergraduatesudies/se rvrepresentation.html
Collins, M.E., Mowbray, C.T., Bybee, D. (1999). Establishing individual goals in a supported education interven-
tion: Program influences on goal-setting and attainment. Research on Social Work Practice, 5, 483-507.
Hutchinson, D., Anthony, A., Massara, J., & Rogers, E. S. (2007) Evaluation of a combined supported computer education and employment training program for persons with psychi-
ory.asp
ranscript.pdf
Japan Goodwill “Meeting of the Minds” Conference for the Reintegration of Veterans with Mild TBI and PTSD into Joint University/Health/National Volunteer Systems, Columbia, Maryland.
Needleman, S. E. (2010, July 15). For disabled, a job hunt alter-
ment and support for individuals with recent-onset schiz-
}
including this intervention on educational outcomes with employment outcomes, which would be particularly useful since many current domestic and international applications of supported education are being embedded in supported employment programs (Coltchuse, Anthony, Massaro, & Rogers, 2007; Murphy, Mullen, & Spagnolo, 2005; Nuechterlein, Subotnik, Turner, Ventura, Becker, & Drake, 2008; Mansbach-Kleinfeld, Sasson, Silvarts, & Grinshpoon, 2007; Ponizovsky, Shvarts, Sasson, & Grinshpoon, 2008; Russell & Strauss, 2004; Waggon, Still, Chance, & Whitford, 2007). Higher intensity, specialized services such as those for veterans appear to be expanding as colleges report (via local media outlets and college websites (McChesney, 2008). Easily implemented changes, such as adding an item on veteran status to student services’ intake forms (Becker, & Drake, 2008; Mansbach-Kleinfeld, Sasson, Shvarts, & Grinshpoon, 2005; Nuechterlein., Subotnik, Turner, Ventura, & Spagnolo, 2005; Needleman, S.E. (2010, July 15). For disabled, a job hunt alter- native. Retrieved from http://www.army.mil/~news/2009/03/23/18608-soldiers-learn-how-to-get-out-of-the-battle-mind-and-back-into-the-peaceful-mind/index.html


Troops to College (n.d.). California Troops to College Program. Retrieved from the California Troops to College website at www.troopstocollege.ca.gov

University of Texas at Arlington (n.d.). The Student Veteran Project. Retrieved from the University of Texas at Arlington website at http://www.uta.edu/ssw/research/veteran-project.php

University of Texas-Pan American (n.d.). UTPA Veterans Services Center. Retrieved from the University of Texas-Pan American website at http://portal.utpa.edu/utpa_main/vets_home/vets_home


Troops to College (n.d.). California Troops to College Program. Retrieved from the California Troops to College website at www.troopstocollege.ca.gov

University of Texas at Arlington (n.d.). The Student Veteran Project. Retrieved from the University of Texas at Arlington website at http://www.uta.edu/ssw/research/veteran-project.php

University of Texas-Pan American (n.d.). UTPA Veterans Services Center. Retrieved from the University of Texas-Pan American website at http://portal.utpa.edu/utpa_main/vets_home/vets_home


