

**Supporting the Education Goals
of Post-9/11 Veterans with
Self-Reported PTSD Symptoms:
A Needs Assessment**

Marsha Langer Ellison

Center for Health Quality Outcomes and
Economic Research, ENRM Veterans
Hospital, Bedford, MA, and University
of Massachusetts Medical School

Lisa Mueller

VISN1 Mental Illness Research,
Education, and Clinical Center,
ENRM Veterans Hospital, Bedford, MA

David Smelson

National Center for Homeless
Veterans—Bedford Node,
ENRM Veterans Hospital
Department of Psychiatry, University
of Massachusetts Medical School

Patrick W. Corrigan

Illinois Institute of Technology

Rosalie A. Torres Stone

Center for Mental Health
Services Research
Department of Psychiatry, University
of Massachusetts Medical School

Barbara G. Bokhour

Center for Health Quality, Outcomes &
Economic Research, ENRM Veterans
Hospital, and Boston University
School of Public Health, Department
of Health Policy & Management

Lisa M. Najavits

VA Boston Healthcare System
Boston University School of Medicine

Jennifer M. Vessella

Center for Health Quality Outcomes
and Economic Research, ENRM
Veterans Hospital, Bedford, MA

Charles Drebing

VISN1 Mental Illness Research,
Education, and Clinical Center,
ENRM Veterans Hospital, Bedford, MA

Purpose: The influx of young adult veterans with mental health challenges from recent wars combined with newly expanded veteran education benefits has highlighted the need for a supported education service within the Veterans Administration. However, it is unknown how such a service should be designed to best respond to these needs. This study undertook a qualitative needs assessment for education supports among veterans with post-9/11 service with self-reported PTSD symptoms. *Methods:* Focus groups were held with 31 veterans, 54% of whom were under age 30. Transcripts were analyzed and interpreted using a thematic approach and a Participatory Action Research team. *Results:* Findings indicate a need for age relevant services that assist with: education planning and access, counseling for the G.I. Bill, accommodations for PTSD symptoms, community and family re-integration, and outreach and support. *Conclusions and Implications for Practice:* The veterans recommended that supported education be integrated with the delivery of mental health services, that services have varied intensity, and there be linkages between colleges and the Veterans Health Administration.

Keywords: supported education, young adults, veterans, needs assessment

Introduction

The opportunity to obtain an education through the Department of Veterans Affairs (VA) benefits is a strong motivation among young people for joining the military (Kleykamp, 2006; Wilson et al., 2000). Given the previous success of the GI Bill program and the recent conflicts in the Middle East, the Post 9/11 GI Bill was passed. This legislation greatly increases veterans' educational tuition and related

benefits (Department of Veterans Affairs, 2011b). There are a rapidly increasing number of applicants for GI Bill benefits (Sabo, 2010) as well as a growing number of veterans with psychiatric disabilities on college campuses (Vance & Miller, 2009). However, war related trauma and consequent impairments can hinder educational attainment among veterans with disabilities including those with post-

traumatic stress disorder (PTSD) (Kraus, 2010). Supported education (SEd) is an emerging evidence-based practice that has successfully addressed disability-related educational challenges for adult civilians with serious mental illnesses (Cook & Solomon, 1993; Hoffman & Mastrianni, 1993; Mowbray, Collins, & Bybee, 1999; Nuechterlein et al., 2008). However, little is known about how such a service should be designed or adapted from civilian models to be used in the VA. Also unknown are the educational barriers that veterans with PTSD symptoms perceive themselves to need. This study attempted to fill this knowledge gap by performing qualitative interviews to examine the perceived educational needs of younger (age 18 – 29) and older adult veterans (age 30+) with self-reported PTSD, and to thus inform consideration of an age-tailored supported education service in the VA.

This research pays specific attention to young adult veterans and does so for two reasons: 1) their substantial proportion (41%) among post-9/11 veterans who are seeking VA health care (Dept. of Veterans Affairs, 2011a; VA Office of Public Health and Environmental Hazards, February, 2010); and 2) literature and research supports that young adults differ from mature adults in treatment needs and responses (Arnett, 2000; Davis 2003; Haddock et al., 2006; Uggen, 1999; Rice, Longabaugh, Beatties, & Noel, 1993; Clark & Unruh, 2009). This research includes Veterans with self-reported PTSD symptoms because studies have shown elevated rates of PTSD among recently returning service members (Hoge et al., 2004), with the youngest among these being at greatest risk for receiving a PTSD diagnosis (Seal, Bertenthal, Miner, Saunak, & Marmar, 2007). It is anticipated that the mental health needs of veterans will be substantial in the decades

ahead (Wells et al., 2011). In addition, PTSD is associated with various co-occurring disorders, social role, functional, and cognitive impairments that can impact educational attainment (Thomas et al., 2010; Stein & McAllister, 2009; Najavits, Highley, Dolan, & Fee, in press; Sareen et al. 2007; Vasterling et al. 2008; Vasterling, Verfaellie, & Sullivan, 2009; Kotler, Iancu, Efroni, & Amir, 2001; Church, 2009). Despite recent advances in VA and Department of Defense (DoD) treatments that have resulted in earlier and stronger attempts to address PTSD (National Center for PTSD, 2009), PTSD and its sequelae can be chronic and impairing for a substantial number of veterans.

Methods

Participants and Data Collection This needs assessment collected data primarily through focus groups held in 2009 - 2010. Study participants were recruited from the housing and mental health services at the Bedford, Massachusetts VA Medical Center (VAMC) and Boston area Veterans Upward Bound programs (a federally funded program that provides academic preparation services for veterans in the community). The study was approved by the Institutional Review Board of the VAMC and all participants were compensated \$25 for their participation. Eligibility criteria for the study included: (a) military service since 2001 and deployment in the Middle East; and (b) an educational goal (to either continue education if enrolled or to begin or go back to school or training). In the interest of preserving a very brief screen on entry to the study, we used the following questions to determine likely presence of PTSD: “Do you consider yourself to have war related problems that may be signs of PTSD (for example: having flashbacks, trou-

ble sleeping, feeling edgy or easily angry, feeling numb or withdrawn)”; and “Have you even been diagnosed as having PTSD by a mental health professional?” Although we do not presume these self-report questions to be equivalent to an actual diagnostic interview for PTSD, it indicates a notable presence of likely PTSD in our sample.

A total of 29 veterans participated in eight focus groups and two veterans participated in individual interviews (for reasons of scheduling at their convenience) using identical questions.

The focus group protocol and interview guide was developed by the research team and brought to the PAR team (described below) for review. During each data collection session, participants were asked about their military service, their educational background and goals, steps they had taken to pursue their education, facilitators and barriers in pursuing their education and goals, and what types of VA services would help them to achieve educational goals.

The study also used a Participatory Action Research (PAR) approach in which a team of stakeholders collaborated with researchers in a “co-learning” context that can ensure relevant meaningful and actionable findings (Danley & Ellison, 1999; Rogers & Palmer-Erbs, 1994; Minkler & Wallerstein, 2003). A PAR team was convened of 12 individuals consisting of 7 veterans (3 were young adults all were employed as service providers to other veterans in varying capacities), a VA mental health practitioner, 2 community college academic Deans and an administrator, and another state veteran service provider. The PAR team consisted with Investigators of this study as well as group five different times in person and via phone. Meetings were used to review project procedures and materi-

data analysis and interpretation, and recommendations.

Data Analysis Focus groups were audio recorded and transcribed by a professional transcription service and reviewed for accuracy. The research investigators and PAR team reviewed the transcriptions to code passages and organize categories. Initially each passage was “open coded” to identify the concept it represented using QSR NVivo (ver. 8) software. Researchers met to review the transcripts, and consensus meetings were held with three independent coders in order to establish the open codes for the first three transcripts. Subsequently, consensus meetings with two coders were held for the remainder of the open coding process. This process resulted in 23 codes (e.g., education strategies, reintegration to civilian life, unmet education needs).

Our interest was to understand the unique needs of younger veterans as well as issues that were common to both age cohorts. We chose a cut-off of age 30 for age group division. The actual age of stabilization of developmental changes among young adults is an empirical question and is unknown for young adult veterans. However, this cut-off is consistent with developmental psychology that suggests that early adulthood launches adult role functioning and is completed by age 30 (Arnett, 2000). Initial open coding was across age groups because transcripts were de-identified for the name or the age of the veteran speaking. Open codes were then classified as belonging either uniquely to younger veterans that were not expressed by older veterans, to older adults, or as ones that were common to both groups. For the next step codes were organized into larger or axial categories of meaning (e.g., clinical related issues, reintegration context, school related challenges).

Portions of transcripts and coding categories were distributed to the PAR team and discussed in team meetings to finalize interpretation. Subsequently, axial categories were then grouped into three larger headings: 1) barriers to educational attainment, 2) recommendations for supported education services, and 3) other needs related to educational support.

Results

Demographics of focus group participants The demographic data on the participants are displayed in Table 1. Slightly more than half of the total sample was under age 30, (54%, $n=17$). Most young adults were male (88%),

white (82%), single (64%), and roughly half (47%) had a high school diploma only. In contrast, older adult participants (46%, $n = 14$) had a smaller proportion that were single (29%) and that had only a high school diploma (36%). For both age groups roughly one quarter were currently enrolled in school, the remaining had a goal to begin or return to school. In keeping with our inclusion criteria, all veterans were on active duty since 2001 with 30 out of 31 having served in Iraq or Afghanistan.

Barriers to educational attainment among potential GI Bill beneficiaries The barriers to education centered on four codes, two of which were especially relevant to young adults: educational planning and reintegration challenges.

TABLE 1—VETERAN FOCUS GROUP DEMOGRAPHICS BY AGE GROUP (TOTAL N=31)

	Under age 30 ($n=17$)	Over age 30 ($n=14$)
Gender		
Male	88% ($n=15$)	100% ($n=14$)
Female	12% ($n=2$)	0% ($n=0$)
Race		
White	82% ($n=14$)	79% ($n=11$)
African American	6% ($n=1$)	14% ($n=2$)
Other	12% ($n=2$)	7% ($n=1$)
Hispanic Ethnicity		
Yes	12% ($n=2$)	14% ($n=2$)
Marital Status		
Single	64% ($n=11$)	29% ($n=4$)
Married	12% ($n=2$)	36% ($n=5$)
Divorced/Separated	24% ($n=4$)	36% ($n=5$)
Educational Attainment		
High School	47% ($n=8$)	36% ($n=5$)
Some College	35% ($n=6$)	36% ($n=5$)
Associate or College Degree	18% ($n=3$)	29% ($n=4$)
Currently Enrolled in School		
Yes	23% ($n=4$)	29% ($n=4$)
Branch of Service		
Army/Marines/Air Force	76% ($n=13$)	86% ($n=12$)
National Guard/Other	24% ($n=4$)	14% ($n=2$)

Two codes were common to both age groups including: using GI Bill education benefits, and coping with PTSD symptoms.

Educational planning. For the younger veterans, education meant starting post-secondary schooling and this presented numerous challenges. Several noted worry about meeting the demands of the academic environment and both desired and were anxious about initial assessments for academic readiness. As one veteran noted, "Let's face it, many of these guys went into the service because they were no good at school." Others didn't know what kind of program to enroll in, or where. There were discussions about the ramifications and requirements of one degree vs. another. They had not the opportunity to receive counseling about these questions; as one said, "no one ever asked him before" about his education goal. One young veteran noted how he found by chance a website about a veteran-friendly campus and moved cross county to enroll with little other information or preparation. Among the older veterans in the groups, educational planning needs were less expressed. Many had a clear occupational goal and understood the education requirements they needed to achieve that goal, and many were planning to return to schooling that had already begun.

Education goals occur in a challenging context of re-integration into civilian life. Reintegration difficulties were pronounced for the younger veterans because many went into the service straight from high school and then returned as young adults, but without having learned the skills needed for living independently as a civilian. We heard from the participants that there was no "basic training" for getting back to civilian life. The younger veterans described rapidly changing so-

cial/psychological/environmental contexts that were less pronounced for older veterans. This included homelessness, disintegrating family support, urgent clinical needs such as addiction relapses, physical injury and disability, and an adjustment process to civilian life that was at times overwhelming. For example, one veteran said:

I know four vets, they just got into school and couldn't handle it, and ended up in a major depression because they dropped out of school and had no support. And here they are back, needing to go back inpatient because they got so overwhelmed at school they couldn't handle it and had no one to talk to... a lot of these vets end up either hitting the bottle or drugs or whatever the case may be and they end up here [hospital inpatient services].

Financial issues were pressing for these veterans and many were unsure how they could balance their education goals with their living needs. As one veteran said:

Mostly everybody who is just out of the military...you're probably not going to want to go home and live with mom and dad, so you've gotta get your own place to live. ... it all comes down to having a stable place to live, transportation, bills... Because you can't focus on school if you're worrying about how you're gonna make your car payment, or how are you going to feed yourself tonight, you can't do it.

GI Bill Education benefits and VA Benefits counseling. A theme across both age groups was difficulties with accessing and using the GI Bill and related VA rehabilitation supports. Both younger and older veterans described difficulties such as: reaching a live person on the phone to ask questions, not having a knowledgeable person to answer questions or to assist with the application, not understanding the various types of GI Bill or other VA bene-

fits or the ramifications of choosing one over another. A related barrier that was described is the current GI Bill requirement for nearly full-time credit load. The veterans told stories of having to start with a full-time caseload which turned out to be too much, and then having to drop classes and finally dropping out of school altogether as stress mounted. For some of the older veterans an added difficulty was making the forced choice between the Montgomery education benefits and the Post 9/11 GI Bill as there were differing requirements and benefit packages.

Impact of PTSD on educational attainment. Veterans in both age groups reported that PTSD symptoms posed additional challenges. They described feeling overwhelming anxiety during some class time. This was set off by differing circumstances such as loud and sudden noises, encountering roadwork reminiscent of scouring for roadside bombs, or other reminders of recent combat. Some reported using substances to alleviate the anxiety, or coping by always sitting at the back of the class where no one can come up from behind. Veterans voiced a need for classes with fewer students, isolated settings for test taking, and evening or online classes to reduce anxiety. For example one veteran stated:

I couldn't be in some classrooms. It was too hard being around some people ... I dropped out because it was too much anxiety, especially during tests - because I was already stressed out, then I'd have added stress, and I wouldn't have enough time to finish what I was doing. I figured I can't do this [school] so I'd stop.

Another common issue involved difficulties with perceived impairments in memory and concentration, and an overwhelming flow of information. The veterans reported a need for accommodations such as tape recording classes

or extensions of time for assignments. As one veteran stated:

For me, you know, my mind don't work normal anymore, it's hard for me to live in a normal situation. I always need more time because my brain works slower. In the normal case scenario, say, well, you got a term paper due Friday and you just learned about it on Monday. It's gonna take a couple of weeks for me to get that done because, you know, my brain don't function fast anymore.

Veteran recommendations for supported education and rehabilitation services.

The veterans had numerous suggestions about the context and types of services that would be beneficial to them in reaching their educational goals. Some suggestions mirrored the needs previously described (i.e., provide benefits counseling). Other additional recommendations are described below. The first of these, "outreach and services" pertained to the younger group of veterans we talked with, while the remaining recommendations were common to both groups.

Outreach and services to young veterans. Several veterans noted how existing VA services were not age appropriate for them. They reported finding it hard to relate to clinical groups composed of veterans who were old enough "to be their fathers." They preferred contact with veterans of similar age or at least of similar military experience. They noted that outreach should occur at gathering places normal for this age group, such as at "tattoo parlors and hockey games" as one noted. We found further evidence of the "generation gap" in existing veterans' services. Our recruitment efforts identified several existing veteran support groups that were composed of older veterans. Though they wished to, they had not been able to engage the younger OIF/OEF veterans. As one young veteran said,

I had gone to a couple of Vietnam veteran groups and I'm like 'Oh my G-d.' Big room. Big people. Big and loud. I didn't just go once and get a lousy opinion of it and not come back. I went a few times and it was - it was tough.

Younger veterans voiced interest in having access to technology to get information on school and benefits, particularly at VA hospitals. The veterans who were residing at the hospital or shelters complained that they did not have access to computers except under highly restrictive and monitored sessions.

Peer Support. The veterans we spoke to both young and old voiced the need to hear information and get help from other veterans who have overcome similar problems. The value of peer support is reflected here:

...when I first came to the VA I had serious problems, I was thinking, there's no help here, until a peer said they had the same problems. That was the first time I thought, well, there might be something to this ... We went to hockey games and it's comfortable because you're around people like yourself so if you have anything going on, there's support right there. It would be nice if there was someone that went through the college experience and they can say, "here's a bunch of information, this is what I had to do, this is what I went through, and this is how I got past that." Peer support is just huge because they understand... It would help a lot to make veterans feel more comfortable and more willing to go through school... I think everybody would be more comfortable with a fellow veteran.

Veterans turned to each other for information through word of mouth. Often the focus group itself turned into information-sharing activities among the veterans present. There is an immediate extension of trust between veterans who may not know each other but who have both been in combat situations. The veterans expressed an interest in

having other veterans provide counseling and supported education though some were cautious about having veterans with active PTSD provide the help.

Veteran-driven intensity of services including one to one assistance.

Both younger and older veterans in the focus groups described different levels of service needs. Some veterans desired autonomy in the process of preparing for and going back to school. "I mean I don't think people should be spoon-fed all this, at least give them the resources. ...as long as I have the resources and I know where I can go ... it's up to me to do it." Other veterans were looking for more active and intensive assistance with entering and being successful in college. These intensive supports include not only enrolling in school, but also access to follow-along supports.

Having someone who is going to mentor you, someone who is going to say: "okay, these are the courses you're going to take, this is what you've got to be prepared for." Someone who is going to have all your information and set it out for you and help you plan, I think is something that is really needed. ... This way you're not going into something and you have no idea what to expect.

SEd integration with clinical team and VA clinical programs. Many veterans in the focus groups indicated that they were interested in having the VA educational services connected with their clinical services, due to the complexity of their various needs such as therapy, case management, medical, and school related. As one said,

Well, you would need like an integrated team for this. You would need someone to help with going back to school...you would need someone to help with the case management. You need someone to help if someone's in therapy. You need all these things. These are the things we have, we're faced with. We're

in therapy, we're in doctors' appointments. It's not going to be an easy fix, but we need something like that, where it was all put together.

Some veterans mentioned that they would like their clinical and rehabilitation services at VA to offer opportunities to engage in education-oriented activities. They suggested, for example, having a location at the VA facility where school representatives could be present to answer questions about procedures, or to conduct sessions for hospital patients on topics such as educational benefits, time management, or study skills.

Recommendations for Colleges and for College/VA integration. Another theme common to both age groups was the need for the colleges and universities to be better connected to the VA. This could involve scheduled visits on campus by veteran groups, or having colleges come to VA hospitals. In the absence of these supports, several veterans spoke highly about the use of an individualized advocate who could provide the one to one support to walk them through the admissions, financial aid, and enrollment process and could run interference with professors. The following is a list of suggested activities schools can consider to support veteran education.

- College counselors and veterans' representatives having specific VA contacts for medical or mental health services for veterans who request it
- a VA benefits information session at the beginning of the semester
- a formal student veteran organization
- informal student veteran social events
- veteran-specific floors in dorms
- veteran support groups run by peers on campus
- academic and administrative services having drop-in hours for the veterans' representative

- professors and college administrators having knowledge about PTSD symptoms
- educational accommodations for attending needed health care appointments

Other needs related to educational attainment. Three other related findings are described here, the first two being unique to young veterans.

Adjusting from military to civilian culture. A theme that was unique to young veterans was that that military life fostered a kind of dependency where you were not encouraged to ask questions and you could rely on commanding officers to be told what to do. Civilian life in contrast was less structured, and relied more on personal persistence to get information and make decisions. Veterans described a difficult adjustment to the myriad of choices facing civilians and frustration at not having simple and clear information on which to base decisions. As one said,

I mean we used to be told to go here, there, and everywhere, but if you don't know really what you're looking for, it's kind of hard to find it. ... (In the military) there was always a commanding officer to tell you what to do and how to do it.

Loss of social networks. Having gone through a life-changing experience of combat and trauma, veterans had trouble "fitting in" with prior social networks. While the older veterans tended to have some civilian family or social supports and were returning to established lives, many of the younger veterans seemed to have none and were returning to the tumultuous years that are common for young adults. The following statements exemplify this:

Someone who just came back, that has enough problems to readjust, hasn't been able to fit in with his friends, his family, nothing, and is faced with all this stuff and making these deci-

sions....it's – forget about it, it's way too much.

That's why my wife divorced me, was my PTSD. ...I've pretty much abandoned my family. I don't consider them family. My family is my veteran friends and my friends that I was actually in combat with. They're friends, my family for life.

Need for outreach and support to access and use clinical services, though once accessed VA clinical services were valued. Despite significant clinical challenges veterans both young and older told us that upon returning home, they were unaware of the clinical supports that were available to them, that they didn't know where to go for help, or that when such information was given they were not ready or able to hear it. Many spoke of "finding the VA" after crises and homelessness. For example one said,

I never really knew the VA was there. I never thought to use it, never learned about it, never got any information whatsoever even through discharge from the military and all that, and so it's really poor on their part to just send me out and not have any knowledge of where I should go, what I should do, or what is available.

They also spoke about how current military procedures to identify veterans who need help would backfire, such as when screenings were held at the point of demobilization, when veterans were simply seeking the fastest way home. Other obstacles with using the VA clinical system were voiced. One was the substantial amount of documentation and paperwork encountered when accessing services. They described how the smallest barrier or setback could elicit a response of "I'm out of here." Several of the older veterans and PAR participants noted that reintegration is a process of healing that can take years. Older veterans suggested that outreach needs to persist over many years while veterans cycle through pe-

riods of recognizing needing help and of trying to “tough it out” on their own.

Although difficulties with adequate outreach to the VA was voiced, many veterans both young and old spoke with appreciation about the VA services they received. Several credited VA mental health, addiction, housing and case management services with getting them out of crises and on the road to reclaiming their lives.

Discussion

Veterans voiced several important challenges to achieving their educational goal. Some reported having limited information, support or guidance with which to navigate the large systems of the VA and community educational institutions. Additionally, results show that a new supported education program cannot be delivered in a vacuum. Other pressing life needs including clinical issues, housing, and income should be addressed in these programs. This is especially true for younger veterans who are in a rapidly changing stage of life that is normal for their age. The need for an empowered case management system that can address education needs within a bio/psycho/social framework became evident. Existing support models that combine case management and peer support service can serve as a model for a new supported education service design (Smelson, Sawh, Kane, Kuhn & Ziedonis, 2011).

Our age group analysis holds implications for designing an “age-tailored” supported education service. Research indicates that while older adults prefer face-to-face contact, young adults are satisfied with or prefer communication through texting or social media. A comprehensive array of services is indicated to meet the educational needs of post-9/11 veterans, but the content of

these needs will vary by age group. Older adults may tend to have more stable civilian lives but other needs may be pressing such as physical disabilities, cognitive impairments, family counseling and parenting. Also, although a service array is indicated the veterans suggested that the intensity of services should vary according to veteran wishes. Sometimes only simple information or guidance is needed while other times multiple services need to be accessed.

The veterans in this study expressed frustration in acquiring GI Bill information and in navigating benefits plans, and this has been found in other research (University of Arizona, 2011). There are notable recent efforts by the Veterans Administration to provide benefit counseling on campuses together with outreach and peer services as well as to streamline and improve benefit enrollment and web-based interface (Dept. of Veterans Affairs, 2011c, 2011d). This research supports the importance of these efforts.

A recurrent thread in the discussions is the importance of veterans to each other. For veterans, connection with others who have “been there” seemed essential to rehabilitation and recovery. Also it appeared that the shared experience of military service was more salient to these veterans than were any differences due to age.

Some aspects of the findings for supported education correspond to principles of supported employment, an evidence-based practice presently implemented in the VA (Resnick & Rosenheck, 2007). These include: (a) integration of rehabilitation service with a clinical team, (b) primacy of individual preferences, (c) benefits counseling, d) use of integrated community settings for employment (Bond, 2004). Accordingly, the existing structure of supported employment in the VA may

be adapted for supported education. However, presently there is no legislative authority for the VA to implement this new service which may be needed to provide supported education as part of standard medical care.

Study Limitations. Like all qualitative studies our findings cannot purport to be generalizable in the traditional sense. Our analysis by age groups was also compromised by the fact that we could not tease apart transcripts by age group, and in hindsight we recognize that having the specific age of participants rather than age groupings would have been beneficial. Also, it is possible that were data gathered in different parts of the country or in different service systems, findings would also differ. However, using qualitative concepts of data saturation and redundancy, we found that after the first few transcripts were coded, all utterances could be categorized without creating any new categories, suggesting that we had exhausted the content. In conclusion, post-9/11 veterans with self reported PTSD symptoms describe a variety of components that will help them succeed in using GI Bill benefits and in attaining their educational goals. To respond to these needs a new age-relevant VA SEd service should include principles of supported employment, along with peer support, case management, assistance with navigating both VA and educational environment, connections between the VA and colleges, and continuous outreach at age-relevant venues.

ACKNOWLEDGEMENTS

THIS RESEARCH WAS FUNDED BY THE HEALTH SERVICES RESEARCH AND DEVELOPMENT OFFICE, OFFICE OF RESEARCH AND DEVELOPMENT, VETERANS HEALTH ADMINISTRATION, DEPARTMENT OF VETERANS AFFAIRS, RRP 09-113. THE VIEWS EXPRESSED ARE ENTIRELY THOSE OF THE AUTHORS AND DO NOT REPRESENT THE ENDORSEMENT OR POLICY OF THE VHA, THE DEPARTMENT OF VETERANS AFFAIRS, OR THE UNITED STATES GOVERNMENT.

References

- Arnett, J. (2000). Emerging adulthood: A theory of development from the late teens to the early twenties. *American Psychologist*, *55*, 469–480.
- Bond, G. R. (2004). Supported employment: Evidence for an evidence-based practice. *Psychiatric Rehabilitation Journal*, *27*, 345–359.
- Church, T. E. (2009). Returning veterans on campus with war related injuries and the long road back home. *Journal of Postsecondary Education and Disability*, *22*(1), 43–52.
- Clark, H. & Unruh, D. (2009). (Eds.) Transition of youth and young adults with emotional or behavioral difficulties. Baltimore: Paul H. Brookes.
- Cook, J. A. & Solomon, M. L. (1993). The community scholar program: An outcome study of supported education for students with severe mental illness. *Psychosocial Rehabilitation Journal*, *17*(1).
- Danley, K. S. & Ellison, M. L. (1999). *A handbook for Participatory Action Researchers*. Boston University, Center for Psychiatric Rehabilitation.
- Davis, M. (2003). Addressing the needs of youth in transition to adulthood. *Administration and Policy in Mental Health*, *30*(6), 495–509.
- Department of Veterans Affairs. (2011a). National Center for Veterans Analysis and Statistics. Veterans population. Retrieved Sept 9, 2011 from http://www.va.gov/vetdata/Veteran_Population.asp
- Department of Veterans Affairs. (2011b). The Post-9/11 GI-Bill. Retrieved Sept. 10, 2011 from https://www.gibill.va.gov/benefits/post_911_gibill/index.html.
- Department of Veterans Affairs. (2011c). VA automating educational benefits under Post-9/11 GI Bill. Public and Intergovernmental Affairs. Retrieved January 31, 2011 from <http://www.va.gov/opa/pressrel/pressrelease.cfm?id=2037>.
- Department of Veterans Affairs. (2011d). VA Reaching out to veterans on campus through VetSuccess: New agreements recently reached to ease transition from active-duty military. Public and Intergovernmental Affairs. Retrieved January 31, 2011 from <http://www.va.gov/opa/pressrel/pressrelease.cfm?id=2070>.
- Haddock, G., Lewis, S., Bentall, R., Dunn, G., Drake, R. & Tarrie, N. (2006). Influence of age on outcomes of psychological treatments in first episode psychosis. *British Journal of Psychiatry*, *188*: 250–254.
- Hoffman, F. L. & Mastrianni, X. (1993). The role of supported education in the inpatient treatment of young adults: A two-site comparison. *Psychosocial Rehabilitation Journal*, *17*(1).
- Hoge, C. W., Castro, C. A., Meeser, S. C., McGurk, D., Cotting, D. I., & Koffman, R. L. (2004). Combat duty in Iraq and Afghanistan, mental health problems, and barriers to care. *New England Journal of Medicine*, *351* (1), 13–22.
- Kleykamp, M. (2006). College, job or military? Enlistment during a time of war. *Social Service Quarterly*, *87*(2), 272–290.
- Kotler, M., Iancu, I., Efroni, R., & Amir, M. (2001). Anger, impulsivity, social support, and suicide risk in patients with posttraumatic stress disorder. *Journal of Nervous and Mental Disease*, *189*(3), 162–167.
- Kraus, A. (2010). The culture of student veterans. Exploring disability dynamics. Retrieved May 10, 2011 from http://drc.arizona.edu/Veterans/NASPA's%20NetResults_%20The%20Culture%20of%20Student%20Veterans_%20Exploring%20Disability%20Dynamics.pdf
- Mowbray, C. T., Collins, M. E., & Bybee, D. (1999). Supported education for individuals with psychiatric disabilities: Long-term outcomes from an experimental study. *Social Work Research*, *23*, 89–100.
- Minkler, M., & Wallerstein, N. (2003). *Community based participatory research for health*: Jossey Bass Wiley.
- Najavits, L., Highley, J., Dolan, S., & Fee, F. (in press). Substance use disorder, PTSD, and traumatic brain injury. In J. Vasterling, R. Bryant & T. Keane (Eds.), *PTSD and mild traumatic brain injury*. New York: Guilford Press.
- National Center for PTSD. (2009). National Center for PTSD Briefing Retrieved Aug. 25, 2011 from <http://www.ptsd.va.gov/about/press-room/pdf/NCPTSDBriefingDocument2009.pdf>
- Nuechterlein, K., Subotnik, K., Turner, L., Becker, D., & Drake, R. (2008). Individual placement and support among individuals with recent-onset schizophrenia: Integrating supported education and supported employment. *Psychiatric Rehabilitation Journal*, *31*(4), 340–349.
- Resnick, S. & Rosenheck, R. (2007). Dissemination of supported employment in Department of Veterans Affairs. *Journal of Rehabilitation Research and Development*, *44*(6), 867.
- Rice, C., Longabaugh, R., Beatties, M., & Noel, N. (1993). Age group differences in response to treatment for problematic alcohol use. *Addiction* *88*, 1369–1375.
- Rogers, E. S., Palmer-Erbs, V. (1994). Participatory action research: Implications for research and evaluation in psychiatric rehabilitation. *Psychiatric Research Journal*, *18*(2).
- Sabo, R. (2010). American council on education study gauges success of new GI Bill's education benefits. Retrieved Jan. 10, 2011, from <http://www.gibill.com/news/study-gauges-success-of-new-gi-bills-education-benefits-314.html>.
- Sareen, J., Cox, B., Stein, M., Afifi, T., Fleet, G. & Asmundson, G. (2007). Physical & mental comorbidity, disability, & suicidal behavior associated with posttraumatic stress disorder. *Psychosomatic Medicine*, *69*, 244–248.
- Seal, K. H., Bertenthal, D., Miner, C. R., Saunak, S., & Marmar, C. (2007). Bringing the war back home: Mental health disorders among 103,788 US veterans returning from Iraq and Afghanistan at Department of Veterans Affairs facilities. *Archives of Internal Medicine*, *167* (5), 476–482.
- Smelson, D., Sawh, L., Kane, V., Kuhn, J., & Ziedonis, D. (2011). The MISSION-Vet Treatment Manual. U.S. Department of Veterans Affairs.
- Stein, M., & McAllister, T. (2009). Exploring the convergence of posttraumatic stress disorder and mild traumatic brain injury. *American J of Psychiatry*, *166*, 768–776.
- Thomas, J., Wilk, J., Riviere, L., McGurk, D., Castro, C., & Hoge, C. (2010). Prevalence of mental health problems and functional impairment among active component and National Guard soldiers 3 and 12 months following combat in Iraq. *Arch Gen Psychiatry*, *67*(6), 614–623.
- Uggen C. (1999). Ex-offenders and the conformist alternative: A job quality model of work and crime. *Social Problems*, *46*, 127–151.
- University of Arizona. (2011). Disabled veterans' reintegration and education project. Retrieved May 10, 2011, from <http://drc.arizona.edu/Veterans/overview.html>
- Vance, M., & Miller II, W. (2009). Serving wounded warriors: Current practices in postsecondary education. *AHEAD*, *22*(1), 18.

- VA Office of Public Health and Environmental Hazards. (2010). Analysis of VA health care utilization among Operation Enduring Freedom (OEF) and Operation Iraqi Freedom (OIF) veterans. Retrieved September 9, 2011 from http://www.sacramento.networkofcare.org/library/GWOT_4th%20Qtr%20FY08%20HCU.pdf
- Vasterling, J. J., Schumm, J., Proctor, S. P., Gentry, E., King, D. W., & King L. A. (2008). Posttraumatic stress disorder and health functioning in a non-treatment-seeking sample of Iraq war veterans: A prospective analysis. *Journal of Rehabilitation Research & Development*, 45(3), 347–358.
- Vasterling, J. J., Verfaellie, M., & Sullivan, K. D. (2009). Mild traumatic brain injury and posttraumatic stress disorder in returning veterans: Perspectives from cognitive neuroscience. *Psychology Review*, 29(8), 674–684. Epub 2009 Aug 21.
- Wells, T. S., Miller, S. C., Adler, A. B., Engel, C. C., Smith, T. C., & Fairbank, J. A. (2011). Mental health impact of the Iraq and Afghanistan conflicts: A review of U.S. research, service provision, and programmatic responses. *International Review of Psychiatry*, 23(2), 144–152.
- Wilson, M., Greenlees, J., Hagerty, T., Helba, C. et al. (2000). *Youth Attitude Tracking Study 1999 Propensity and Advertising Report*. Arlington, VA: Defense Manpower Data Center.
- MARSHA LANGER ELLISON, PHD**, HEALTH RESEARCH SCIENTIST, CENTER FOR HEALTH QUALITY OUTCOMES AND ECONOMIC RESEARCH, ENRM VETERANS HOSPITAL, BEDFORD, MA, AND RESEARCH ASSISTANT PROFESSOR OF PSYCHIATRY, UNIVERSITY OF MASSACHUSETTS MEDICAL SCHOOL, WORCESTER, MA
- LISA MUELLER, PHD, CPRP**, CLINICAL PSYCHOLOGIST, VISN1 MENTAL ILLNESS RESEARCH, EDUCATION, AND CLINICAL CENTER; ENRM VA HOSPITAL, BEDFORD, MA
- DAVID SMELSON, PSYD**, DIRECTOR OF TRANSLATIONAL RESEARCH AND NATIONAL CENTER FOR HOMELESS VETERANS-BEDFORD NODE, ENRM VETERANS HOSPITAL DIRECTOR OF CO-OCCURRING DISORDERS, VA NEW ENGLAND HEALTHCARE SYSTEM (NETWORK 1) PROFESSOR AND VICE CHAIR OF CLINICAL RESEARCH, DEPARTMENT OF PSYCHIATRY, UNIVERSITY OF MASSACHUSETTS MEDICAL SCHOOL, WORCESTER, MA
- PATRICK W. CORRIGAN, PSYD**, DISTINGUISHED PROFESSOR OF PSYCHOLOGY, ILLINOIS INSTITUTE OF TECHNOLOGY, CHICAGO, IL
- ROSALIE A. TORRES STONE, PHD**, ASSISTANT PROFESSOR, CENTER FOR MENTAL HEALTH SERVICES RESEARCH, DEPARTMENT OF PSYCHIATRY, UNIVERSITY OF MASSACHUSETTS MEDICAL SCHOOL, WORCESTER MA
- BARBARA G. BOKHOUR, PHD**, SENIOR RESEARCH HEALTH SCIENTIST, CHQOER, ENRM VETERANS HOSPITAL, BEDFORD, MA ASSOCIATE PROFESSOR OF HEALTH POLICY & MANAGEMENT, BOSTON UNIVERSITY SCHOOL OF PUBLIC HEALTH, BOSTON, MA
- LISA M. NAJAVITS, PHD**, PROFESSOR OF PSYCHIATRY, BOSTON UNIVERSITY SCHOOL OF MEDICINE RESEARCH PSYCHOLOGIST, VA BOSTON HEALTHCARE SYSTEM, BOSTON, MA
- JENNIFER M. VESSELLA, BS**, CENTER FOR HEALTH QUALITY OUTCOMES AND ECONOMIC RESEARCH, ENRM VETERANS HOSPITAL, BEDFORD, MA
- CHARLES DREBING, PHD, CPRP**, CO-DIRECTOR FOR CLINICAL RESEARCH, VISN1 MENTAL ILLNESS RESEARCH, EDUCATION, AND CLINICAL CENTER, ASSOCIATE DIRECTOR OF MENTAL HEALTH, ENRM VETERANS HOSPITAL, BEDFORD, MA ASSISTANT PROFESSOR OF PSYCHIATRY, BOSTON UNIVERSITY SCHOOL OF MEDICINE

CORRESPONDING AUTHOR

MARSHA LANGER ELLISON, PHD
 HEALTH RESEARCH SCIENTIST
 CENTER FOR HEALTH QUALITY OUTCOMES
 AND ECONOMIC RESEARCH
 ENRM VETERANS HOSPITAL, BEDFORD, MA,
 AND RESEARCH ASSISTANT PROFESSOR OF
 PSYCHIATRY UNIVERSITY OF MASSACHUSETTS
 MEDICAL SCHOOL, WORCESTER, MA
 PHONE: 508-856-2816 FAX: 508-856-8543
Marsha.Ellison@umassmed.edu