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Authors

Wilbur, Sarah
Meyer, Hilary B
Baker, Matthew R
et al.

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Sarah Wilbur^a, Hilary B. Meyer^b, Matthew R. Baker^{cf}, Kristen
Smiarowski^d, Christine A. Suarez^e, Donna Ames^{fg} & Robert T.
Rubin^{fg}

^a PhD Program in Culture and Performance Studies, UCLA – World
Arts and Cultures/Dance, Los Angeles, CA 90095, USA

^b PhD Program in Clinical Psychology, Palo Alto University, Palo
Alto, CA 94304, USA

^c PhD Program in Clinical Psychology, Alliant International
University, Alhambra, CA 91803, USA

^d Department of Theatre Arts and Dance, Loyola Marymount
University, Los Angeles, CA 90045, USA

^e Suarez Dance Theater, 621 California Ave, Santa Monica, CA
90403, USA

^f VA Greater Los Angeles Healthcare System – Psychiatry, 11301
Wilshire Blvd, Los Angeles, CA 90075, USA

^g Department of Psychiatry and Biobehavioral Sciences, David
Geffen School of Medicine, UCLA, Los Angeles, CA 90095, USA
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Dance for Veterans: A complementary health program for veterans with serious mental illness

Sarah Wilbur^a, Hilary B. Meyer^b, Matthew R. Baker^{c,f}, Kristen Smiarowski^d,
Christine A. Suarez^e, Donna Ames^{f,g} and Robert T. Rubin^{f,g*}

^aPhD Program in Culture and Performance Studies, UCLA – World Arts and Cultures/Dance, Los Angeles, CA 90095, USA; ^bPhD Program in Clinical Psychology, Palo Alto University, Palo Alto, CA 94304, USA; ^cPhD Program in Clinical Psychology, Alliant International University, Alhambra, CA 91803, USA; ^dDepartment of Theatre Arts and Dance, Loyola Marymount University, Los Angeles, CA 90045, USA; ^eSuarez Dance Theater, 621 California Ave, Santa Monica, CA 90403, USA; ^fVA Greater Los Angeles Healthcare System – Psychiatry, 11301 Wilshire Blvd, Los Angeles, CA 90075, USA; ^gDepartment of Psychiatry and Biobehavioral Sciences, David Geffen School of Medicine, UCLA, Los Angeles, CA 90095, USA

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Background: *Dance for Veterans*, composed of physical, psychological and social elements, is a new patient-centered and recovery-oriented treatment modality for veterans diagnosed with serious mental illness; that is, chronic and functionally impairing psychoses, traumatic stress disorders, and mood and anxiety disorders. This report outlines the development of *Dance for Veterans* over the past several years within the VA Greater Los Angeles Healthcare System, including curricular rationale, training model and program evaluation. **Methods:** Participation was voluntary and required only a mental illness diagnosis. Survey data and qualitative feedback ($N = 88$), as well as verbal reports of stress ($N = 35$), were collected over 3-month periods to assess effects of the class on veterans' well-being. **Results:** Verbal reports of stress before and after class showed significant decreases ($p < 0.001$), and subjective responses to the classes were overwhelmingly positive. Significant longer-term trends in stress reduction, however, were not demonstrable. **Conclusions:** The *Dance for Veterans* program shows promise as an interdisciplinary resource for veterans diagnosed with serious mental illness. Future program development will include more detailed evaluation of its effects on veterans' well-being and extension to additional VA venues and populations.

Keywords: veterans; dance; movement; complementary medicine; holistic health

Introduction

Military personnel often return from war with both visible and invisible wounds across their physical, psychological and social domains of health (Tanielian & Jaycox, 2008; Williamson & Mulhall, 2009). Many veterans in the USA are afflicted with physical and mental illnesses because of their participation in theaters of combat, including Iraq, Afghanistan, the Gulf War and Vietnam. Newly returning veterans may have subtle central nervous system damage (traumatic brain injury) due to blast exposure, which adversely affects their movements and their emotional control. Over half of the veterans of the Iraq and Afghanistan conflicts evaluated by the VA have been diagnosed with serious

*Corresponding author. Email: rtubin@yahoo.com

mental illness, the most common being post-traumatic stress disorder (PTSD), depression and anxiety disorders (Department of Veterans Affairs, 2013a).

As part of an integrative healthcare model, recent military and private sector initiatives have emphasized the role of arts-based programming in treating military personnel and veterans. National summits co-chaired by Walter Reed National Military Center and Americans for the Arts have highlighted (a) the longstanding role the arts, particularly synchronized movement and music, have played in the military; (b) the utility of arts-based programming in helping military personnel, particularly those with PTSD, process traumatic experiences in novel, non-verbal ways and (c) the fact that the arts are currently absent from most clinical-care programs for veterans (Americans for the Arts, 2013). *Dance for Veterans* aims to alleviate this omission by providing a nonverbal, movement- and creativity-based adjunctive healing process for veterans with serious mental illness.

Dance is one of the most synchronized activities in which humans engage, and its neural substrates are being increasingly understood (Brown & Parsons, 2008). It has been used for thousands of years across many cultures as part of physical and creative expression and in the healing arts (Chodorow, 2009; Dils & Albright, 2001; Halprin, 2003). Training programs that elicit whole-body movement, as occurring in dance, foster complex neurological coordination and are therapeutic for overall motoric function, especially in maintaining balance (Marigold & Misiaszek, 2009). Dance is beneficial in the treatment of movement disorders such as Parkinson's disease, not only promoting better balance and more fluid movement, but also fostering a sense of community and feelings of accomplishment and joy (Hackney & Earhart, 2010; Hackney, Kantorovich, Levin, & Earhart, 2007; Heiberger et al., 2011; Houston & McGill, 2013; Westheimer, 2008). In healthy elderly individuals as well, dance can delay degradation of posture, reaction time, cognitive and motor performance, and subjective well-being (Kattenstroth, Kalisch, Holt, Tegenthoff, & Dinse, 2013; Kattenstroth, Kolankowska, Kalisch, & Dinse, 2010). The attraction of abstract art forms, including interpretive dance, may be in their freeing our brains from the "dominance of reality," allowing activation of otherwise hard-to-access inner states and development of new emotional and cognitive associations (Aviv, 2014).

Recent research suggests that veterans with serious mental illness (and PTSD in particular) are at greater risk for developing medical co-morbidities such as cardiovascular disease, hypertension, obesity and diabetes, and that these problems are inextricably linked, contribute to one another and cannot be addressed in isolation (Cohen, Marmar, Ren, Bertenthal, & Seal, 2009; Maguen et al., 2013; Widome, Littman, Laska, & Fu, 2012). The Department of Defense and VA therefore are developing and testing multifaceted, integrative treatment models that acknowledge the complex co-morbidities afflicting military and veteran populations (Jonas, O'Connor, Deuster, & Macedonia, 2010). VA directives have emphasized this biopsychosocial approach to care, explaining that "the causes and outcomes of many illnesses often involve the interaction of physical and pathophysiologic factors, psychological traits and states, and social-environmental factors" and that "effective treatment planning accounts for the salience of these factors in the precipitation and perpetuation of illness and illness-related disability" (Department of Veterans Affairs, 2009). Following suit, *Dance for Veterans* aims to synergistically integrate physical components (breathing, stretching, dancing), psychological components (relaxation, creativity) and social components (group games, presenting self-developed movements to the class, synchronized movement) into a standardized and scalable program for veterans with serious mental illness.

In 2001 the Brooklyn Parkinson Group and Mark Morris Dance Group of Brooklyn, NY, began *Dance for Parkinson's Disease (Dance for PD)* (Westheimer, 2008), a program

now international in scope (<http://danceforparkinsons.org/>). One of the authors (R.T.R.) saw a presentation of *Dance for PD* at the 2008 Society for Neuroscience meeting and queried the program's Director, David Leventhal, and Mark Morris about establishing a similar program for veterans with chronic mental illness. Msrs. Leventhal and Morris indicated they had not worked with veterans, and they were enthusiastic about the idea. *Dance for Veterans* thus began in the Department of Psychiatry at the VA Greater Los Angeles Healthcare System (VAGLAHS). The rationale was that dance could help veterans with psychiatric illnesses by improving their concentration, memory, thought organization and interpersonal connectedness, as well as helping alleviate symptoms of depression, anxiety and PTSD. Mentally ill individuals recently returned from Middle East deployments were of particular interest, because they often have severe depression and PTSD complicated by alcohol and other substance abuse, leading to maladaptive behaviors such as isolation, with severe disruption or collapse of their family, social, educational and occupational lives.

Methods

Interdisciplinary collaboration and recovery-oriented approach

Dance for Veterans was developed through interdisciplinary collaboration among professional dancers and mental healthcare providers, bridging the gap between traditional dance classes and traditional mental health care. As with *Dance for PD*, the curricular strategies used in *Dance for Veterans* focus on de-pathologizing the participants and promoting social and functional well-being. All collaborating staff considered dance to offer a biopsychosocial-spiritual treatment modality that would be therapeutic for targeted veteran populations.

Early development of Dance for Veterans

The first year was spent developing suitable space for the program and securing startup funding for equipment and dance instructor salaries. VAGLAHS Voluntary Services provided funds for equipment, including, flooring, barres, CD players, audio systems and digital music devices. Local foundations contributed toward the salaries of dance instructors, and three instructors with Masters in Fine Arts degrees (K.S., C.A.S., S.W.) were hired on a part-time basis. In August 2010, David Leventhal, Director of *Dance for PD*, spent 2 days with the dance instructors and program leaders, consulting on the development of class curricula and leading a demonstration class with veterans. Curriculum development derived from the types of patients initially enrolled – those with minimal physical impairment but with chronic psychological impairment.

Participation in *Dance for Veterans* always has been completely voluntary, the only requirement being that participants must have a mental illness diagnosis. Although collection of demographic information was attempted, confidentiality considerations and logistical issues related to initiation of the classes made it difficult to obtain useful data. In line with the ratio of male-to-female veterans enrolled in VAGLAHS programs, the class participants were mostly male (Figures 1–3).

The first weekly class was held in January 2011, with eight participants. Because veterans with chronic mental illness have different infirmities than Parkinson's patients have, the curriculum for their progression in *Dance for Veterans* had to be developed *de novo* and tailored to their needs. An early issue was interpersonal contact – the patients with chronic schizophrenia initially were not receptive to holding hands with other

Figure 1. David Leventhal (Mark Morris Dance Group) and Sarah Wilbur lead the inaugural class in stretching exercises. (Permission to reproduce provided by Mr. Leventhal and Ms. Wilbur; other participants' faces are blurred).

participants, so dance exercises were developed that did not require touching. Indeed, some patients with paranoia initially had difficulty sitting in a circle close to others; for the first several sessions, one patient took his chair from the circle and moved it into a corner of the room. After becoming familiar with the group and with gentle encouragement, however, over a period of 1–3 months, all veterans comfortably joined the group.

Curriculum development

Having begun in the West Los Angeles Psychosocial Rehabilitation and Recovery Center (WLA PRRC) (Department of Veterans Affairs, 2011), *Dance for Veterans* now is being conducted in eight mental health programs at four VAGLAHS sites and in one affiliated Vet Center. During the inaugural year, Dr Ames, the psychiatrist in charge of the WLA

Figure 2. Inaugural class performing stretching exercises. (Participants' faces are blurred).

Figure 3. Inaugural dance class in progress. (Participants' heads are blurred).

PRRC, and the dance instructors worked with veterans enrolled in the WLA PRRC to test curricular strategies and document the success of class components, focusing on (a) increasing bodily awareness, (b) building a sense of movement mastery, (c) expanding individual/collective creative expression through movement and dance and (d) fostering a sense of community/social integration through creative dance-making activities. *Dance for Veterans* builds upon the progressive seated-to-standing class structure of *Dance for PD*, with emphasis on creativity, group sharing of authority over class content and social interactions. The class combines social and popular dance traditions, including Latin social dance forms, disco line dances and tap dance steps, with somatic movement concepts aimed at cultivating body–mind connectedness. This integrated approach is appealing to several generations of veterans, from recently deployed young men and women to those from the Vietnam era.

Curricular rationale

Dance for Veterans employs three dance pedagogical strategies: somatic principles, social entrainment and collaborative dance making. These principles, which stem from the professional dance literature and nomenclature (Chang, 2009; Halprin, 2003), address physical, psychological and social wellness, and were incorporated in the following ways:

1. To promote awareness of the mind–body connection, class content is focused on *somatic principles*, which emphasize unity of mind, body and spirit. This approach should be particularly applicable to veterans with mental illness, who often experience both physical and psychological difficulties (International Association for Dance Medicine and Science, 2011). Heightened awareness is achieved through breathing and stretching sequences that ask participants to minimize verbal “chatter,” recognize tension and focus on the efficient movement of the body with ease and without pain. The class then moves into an integrative and neurologically informed series of seven exercises presenting various coordination challenges that reinforce brain–body connections. This somatic sequence is based on BrainDance, a framework that emphasizes sensory awareness of how movement happens versus what movement looks like (Gilbert & Rossano, 2006). The practice of honing positive sensory perceptions

carries particular significance for veterans living with serious mental illness, many of whom hold traumatic experiences and violent physical encounters in their bodies and daily thoughts. The *Dance for Veterans* team commits to the integration of these somatic principles as a means of decreasing anxiety and enhancing mood, as documented in the Pilot Testing and Results section and veterans' testimonials cited below.

2. To enhance feelings of social integration and connectedness, a portion of each class is dedicated to rhythm exercises that emphasize *social entrainment* (Phillips-Silver, Aktipis, & Bryant, 2010). This is achieved through "rhythm dances" – such as the two-step, cha-cha-cha and disco-based dances like the "Electric Slide" – that include marching and social dance traditions relying on metered and syncopated footwork. Such synchronous movement and marching are familiar to veterans accustomed to drill exercises and are used to foster positive cultural identifications as well as social cohesion.
3. To encourage a democratic and participatory ethos, the class culminates in *collaborative dance making* in which each participant is cast as the leader and "expert" authority over the various movements learned by the group. A popular group movement exercise used by the *Dance for Veterans* teaching team is "Build-a-Phrase" (Lerman, 2011), which introduces basic movement sequencing by accumulating simple movements initiated by participants based on a common theme or prompt. The team leader generates a topic, usually through the form of a question to the class (e.g., "where were you born?"), and the participants create, teach and learn original movements in a sequence, largely through call-and-response. When veterans are new to the class, this concept is introduced via the "Name Game," a movement prompt that asks each participant to speak his/her name while initiating a representational gesture that indicates mood, or a memorable area of interest that strikes this participant as interesting on a given day. Once the entire class has generated and rehearsed these accumulative gestures, the sequence is performed to a musical selection as an original dance that recognizes the unique creative contributions of each participant. Witnessing and enacting each other's movements encourages risk-taking and builds group trust; building social support is a goal of particular importance to veterans with serious mental illness.

Musical accompaniment

Whereas the *Dance for PD* curricular model calls for live musical accompaniment, this was neither feasible nor desired by veterans in the program. Owing to differences in cultural background, age and socioeconomic status, participating veterans preferred familiar music that did not exacerbate anxiety or have negative connotations. Musical accompaniment for the class has included instrumental music from a range of sources, jazz and pop standards from the 1940s, and popular music from the 1960s to the present, assembled on digital playlists and played through a sound system. As class sessions progressed, the team incorporated musical selections suggested by the participants, notably disco and classic rock. As veterans encountered new and challenging movement experiences, familiar music that fostered a sense of ease and belonging was thus provided.

Subsequent program development

Between the second and third years of *Dance for Veterans*, the program shifted focus from weekly class facilitation by independent dance instructors to teacher training for VA clinicians and staff. This transition was facilitated by a VA Patient Centered Care, Integrative Health and Healing (IHH) grant (Sandra Robertson, RN, MSN, PH-CNS,

Principal Investigator). This support enabled the team to expand operations to eight mental health programs at four sites within the VAGLAHS. The original program developers held an introductory, 3-hour Train-the-Trainer session to introduce interested parties to the project via a 3-minute video and 120-page Teacher Training Manual developed during the first year of classes. Following a half-day training session for prospective teachers, several phone meetings were held. Each teacher then had a dance mentor assigned for 8 weeks to help introduce and develop classes at new sites.

Nine additional teachers from several mental health disciplines – social work, psychology, nursing and psychiatry – now have been trained. The IHH grant funding also provided funding for digital sound systems at the new sites. After permanent class space was secured, flyers were developed to attract veterans to the classes. Medical clearance was obtained for each participating veteran.

Training materials

The *Dance for Veterans* Teacher Training Manual emphasizes the temporal flexibility of the program by offering both 15- and 30-minute lesson-plan progressions, each of which is designed for an 8-week intervention. Adaptability of content is emphasized by inclusion of both seated and standing protocols to accommodate a range of physical mobility among participants. In addition to the manual, the team is completing final edits on a 60-minute teaching video for instructors that will visually break down each step of class progression, including “cut-to’s” of veterans participating in class exercises. The training video will offer a visual learning strategy that accommodates a variety of learning styles for VA teacher trainers who have little or no prior dance or movement experience. The video will also help trained instructors continue to rehearse their role as facilitators. Online access to these training tools will be provided to engage a broader cross-section of VA personnel and other interested parties.

Expansion of Dance for Veterans network (2012–present)

In addition to the flagship program at the West Los Angeles PRRC, classes are now offered at the West Los Angeles Dual Diagnosis Treatment Program and Mental Health Intensive Case Management Program. At the Sepulveda Ambulatory Care Center, a weekly class is offered in the Mental Health Recovery and Intensive Treatment Program. At the Downtown Los Angeles Ambulatory Care Center, two weekly classes are offered, one in the PTSD Clinic and the other in their PRRC. At the East Los Angeles Ambulatory Care Center, a weekly PRRC-focused class is offered. A class and training residency at the East Los Angeles Vet Center were held in January and February 2014 for patients with PTSD. *Dance for Veterans* now encompasses eight teaching sites, with nine trained facilitators, throughout VAGLAHS. The program regularly receives letters of interest from clinicians in other VA facilities, and information on teacher training has been distributed to VA employees (clinicians, therapists, social workers, and others) who express interest in bringing the curriculum to new locations.

Sustainability

Dance for Veterans was developed to be adaptable to a range of clinical populations. The structure and content of the curriculum, presented in detail in the Teacher Training Manual, allow for program sustainability by providing VA clinicians, social workers and staff with movement-based teaching tools that enliven group processes across a variety of

mental health programs and contexts. Trained instructors have successfully folded aspects of the curriculum (e.g., creative movement exercises) into existing mental health group programming as a gentle way of introducing physical movement and personal expression. The variety of dance content and the possibility of an abbreviated class format appeal to facilitators for whom the addition of 1-hour dance classes within their regular VA responsibilities is unfeasible. Curricular adaptability also encourages facilitators to add or subtract elements based on veteran interest and response. Additional course contributions from trained instructors are welcomed, and new movement games and a veteran-initiated musical request exercise called “Memory Lane” have been added at the Downtown Los Angeles and East Los Angeles Ambulatory Care sites.

Results

Between June and August 2013, 88 veterans with serious mental illness enrolled in Greater Los Angeles *Dance for Veterans* classes participated in an Integrative Health and Healing (IHH) Innovation Quality Improvement Project to assess the effects of the program. Use of the data for publication was approved by the VAGLAHS Institutional Review Board (IRB), and each participant signed an IRB-approved, written consent for being photographed during the class and for use of their pictures for educational purposes. Illnesses of participating veterans included chronic schizophrenia, bipolar disorder, major depression and PTSD of sufficient severity to cause impairment of social and occupational functioning and to require continuous treatment. While the number of veterans with each diagnosis in the study sample was not determined, chronic psychosis, mood disorders and PTSD are represented approximately equally among the diagnoses of veterans enrolled in the WLA PRRC. Participation in the assessment was voluntary and not a condition for class participation. Veterans completed two questionnaires once a month for 3 months: the Music, Rhythm and Movement Class Survey (containing quantitative and qualitative components), developed by the staff of the PRRC, and the Perceived Stress Scale (PSS; Cohen, Kamarck, & Mermelstein, 1983). Owing to inconsistent attendance, different number of veterans completed questionnaires at different time points. As well, some veterans did not fill out their questionnaires completely and thus were not included in the analyses. The number of veterans included in each analysis is given below. Veterans also offered verbal pre- and post-class ratings of stress on a 0–10 (low-to-high) scale once a month for 3 months, which were recorded anonymously by the program leader.

Music, Rhythm and Movement Class Survey

The Music, Rhythm and Movement Class Survey, given to 81 veterans, indicated that classes were very well received. On a five-point Likert scale (1, extremely negative; 3, neutral; 5, very positive) asking “How do you feel about attending this class?” veterans rated their enjoyment at an average of 4.5. Comments about what they liked most included, “the breathing and music,” “I move all parts of my body,” “bodily awareness, centering music, and coordination,” “finding my comfort zone more easily”, and “this is the highlight of my week.” Comments about what they liked least included, “the pain I experience,” “memory is very difficult,” “some veterans did not participate” and “sometimes it’s embarrassing to create ‘improv’ moves.” To the question, “Do you feel this class has helped you develop in your own recovery?” 96% of participants answered “yes.” Responses to the question, “How has it helped you develop in your recovery?” included, “being active in participation as frequent as possible,” “it lessens my stress

levels,” “self esteem through friends in classes,” “to not take myself and issues too seriously” and “my mind will today dance.” Most responses to the question, “How could it *better help* you in your recovery?” were “more classes” and “more often.”

Ninety-seven percent of the veterans answered “yes” to the question, “Did you find the information and skills that you learn in this class to be helpful in your life?” Responses to the question, “Do you have any additional comments?” included, “At first I did not want to come, just stay isolated, now I look forward to coming every week,” “introduce a little Shaun T Hip Hop” and “The facilitators are very motivated . . . which becomes contagious through participation of the group. Love it!”

Pre- vs. post-class stress ratings

In addition to the sense of personal improvement the veterans experienced over the weeks they participated in *Dance for Veterans*, there was a significant decrease in verbal 0–10 stress ratings from the beginning to the end of each class for 35 veterans who were surveyed. Mean (SD) pre-class stress level was 5.49 (3.12), and mean (SD) post-class stress level was 2.94 (1.94), a highly significant difference (paired $t(34 \text{ df}) = 4.98$, $p < 0.001$, Cohen’s $d = 0.98$).

In contrast to the above measures, which indicated high acceptance and perceived short-term and long-term benefits from the dance classes, the PSS did not reflect these improvements. PSS scores for 76 veterans sampled at the end of months 1, 2 and 3 of class participation decreased only slightly: means (SD) for months 1–3 were, respectively, 18.3 (6.7), 18.0 (6.1) and 16.4 (9.3), a non-significant change ($p < 0.25$). As well, PSS scores were not related to the number of times per month the veterans attended class; means (SD) for 1–5 times per month were, respectively, 19.1 (6.0), 17.5 (6.5), 21.3 (5.5), 17.0 (8.2) and 20.5 (7.7), also a non-significant change ($p < 0.75$). Possible reasons for the discrepancies among measures are discussed below.

Clinician feedback

Because *Dance for Veterans* adheres to a Train-the-Trainer model, it was necessary to acquire feedback from clinicians who were trained by dance instructors to disseminate and implement the dance classes within their own clinical programs. Qualitative feedback from clinicians emphasized that *Dance for Veterans* adopts a patient-centered, recovery-oriented approach to mental healthcare, and it challenges veterans to expand beyond their current routines. Comments included, “I found facilitating the *Dance for Veterans* group to be an extremely gratifying and innovative way to encourage creativity, movement and fun with Veterans diagnosed with serious mental illness,” “Observing the Veterans take risks, master routines, laugh and encourage each other, all with great music going on in the background, presents a hopeful and fun environment for both the Veterans and staff,” and “The Veterans walk in with a bad mood and come out feeling great!”

Discussion and Conclusions

Dance for Veterans is consistent with recent VA directives for patient-centered and recovery-oriented care, and with a recent VA emphasis on stress management (Department of Veterans Affairs, 2009, 2013b). VA-mandated Patient-Centered Care requires healthcare providers to partner with veterans by incorporating veteran input into treatment planning (Department of Veterans Affairs, 2012). The VA recently identified

Recovery as the “single most important goal for mental health services” and emphasized community integration and improved quality of life as essential aspects (Department of Veterans Affairs, 2013b). In accordance with these concepts, *Dance for Veterans* aims to empower veterans to actively participate in their own treatment by challenging them to develop and present their own individualized dance movements, which are celebrated and incorporated into larger group dances. And, in a broader context, *Dance for Veterans* provides a forum for veterans to develop social and communal bonds, and it offers resources about dance classes outside the VA. In sum, *Dance for Veterans* emphasizes individual strengths, as opposed to pathology, and thereby aims to improve both self-esteem and social progress.

Though *Dance for Veterans* is aligned with VA directives for holistic, arts-based, patient-centered and recovery-oriented care, there often is delay between the formal issuing of VA directives and their wide-scale integration into clinical care. Because VA funding was not available at the time *Dance for Veterans* began, it was developed in grass roots fashion by VA clinicians and administrators. Despite minimal resources, the program sustained and scaled up by adopting a Train-the-Trainer model, in which hired dance instructors first worked with the founding group of VA clinicians to develop *Dance for Veterans* and then trained other clinicians to implement classes within their own clinical programs. This allowed for dissemination of *Dance for Veterans* via its integration into VA usual care, resulting in expansion to eight mental health programs across four VAGLAHS campuses.

Assessment of this new program is critical and ongoing. The discrepancy between the initial pre/post class stress ratings, which indicated a significant decrease in stress after the class, and the Music, Rhythm and Movement survey, which similarly indicated positive effects of class participation, versus the non-significant PSS changes over the months of class participation, needs to be better understood. Possible explanations related to the PSS are, first, the complexity of the PSS, which has both negatively worded and positively worded items and thus must be completed with care: Some veterans may have not shifted their attention between the two sets of items, because the correlation between the two sets of item total scores was -0.32 , indicating only 10% shared variance and suggesting that some veterans did not discriminate clearly between the negatively worded and positively worded items. A second related possibility may have been fatigue among the veterans, who were asked to complete not only these specific dance class surveys but also surveys related to their participation in other aspects of the PRRC. Third, the stress reduction occasioned by the dance classes indeed may have been short-lived and, therefore, was not reflected in the PSS. In order to resolve these possibilities, clinician administration of assessments having the complexity of the PSS may be a better option than self-administration in some cohorts of veterans with severe mental illness.

Future research

The authors plan to take the following sequential steps to grow and disseminate *Dance for Veterans*:

1. Further pilot-test the program on measures of stress. Stress reduction is particularly important for veterans with serious mental illness, because psychiatric symptoms often are exacerbated by stress. Suffering from mental illness is stressful as well; thus, the relationship between mental illness and stress is multi-dimensional

(Brown & Gerbarg, 2009; Vadiraja et al., 2009). The pre-/post-dance class stress data, although indicating significant reductions in stress, were collected verbally and should be interpreted with caution. Program leaders will quantitate the program's effects on stress by asking veterans to anonymously complete Likert 0–10 (low-to-high), self-report stress scales before and after each class. Many participants offered comments, as quoted earlier, and qualitative analysis of all their comments also will be planned.

2. Pilot-test the program on measures of pain and PTSD. Managing pain and PTSD are VA priority areas (Department of Veterans Affairs, 2009, 2010). Based on participants' pain concerns to date, a simple, self-administered pain questionnaire will be developed that reflects the nature and severity of pain complaints. Veterans will be asked to complete these self-reports anonymously before and after each class. Program leaders at the Downtown Los Angeles PTSD clinic are currently administering the PTSD Checklist, DSM-5 version (PCL-5) to measure the effect of *Dance for Veterans* on PTSD symptoms.
3. Disseminate the program to additional mental health and non-mental health clinics within the VAGLAHS. Because it aims to improve both physical and psychological health, *Dance for Veterans* may have clinical applicability to veteran populations with obesity, cardiovascular disease, diabetes and psychosocial difficulties transitioning from military to civilian life. The curriculum allows for adaptability across clinical populations, and future efforts will pilot test *Dance for Veterans* in these populations. Presentations of preliminary results at national Complementary and Alternative Medicine conferences are planned, and funding for a wide-scale clinical trial within several VA facilities, with formal analysis of both quantitative and qualitative measures, will be sought. Depending on continued positive results with *Dance for Veterans*, future dissemination efforts will include a *Dance for Veterans* video that has been developed, and tele-health training and video conferencing of live dance exchanges between locations.

Finally, the authors recommend the following to facilitate development and dissemination within the VA of programs similar to *Dance for Veterans*: (a) improved mechanisms for linking mandated VA directives and the administrators issuing them with VA researchers and clinicians who wish to develop programs consistent with such directives; (b) improved mechanisms for linking cross-departmental VA administrators, researchers and clinicians collaborating to develop and evaluate programs consistent with VA directives; (c) improved mechanisms for collaboration between VA and military healthcare professionals (administrators, researchers and clinicians) and private-sector, arts-based agencies and professionals in order to facilitate best practices programming from clinical and arts-based perspectives and (d) adoption of Train-the-Trainer models in order to facilitate efficient and cost-effective program expansion and integration into VA usual care. These recommendations are consistent with those proposed at the arts-programming summits co-chaired by the Walter Reed National Military Center and Americans for the Arts, which resulted in the creation of The National Initiative for Arts & Health in the Military (Americans for the Arts, 2013), an initiative that aims to enhance collaboration across military and other federal agencies, non-profits and private sector partners to expand arts-based programming for the benefit of military personnel and veterans.

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