

# Tracings of Trauma: Engaging Learners and Challenging Veteran Stigma Through Collaborative Research-based Theater

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## Abstract

Military veterans are stereotyped in the media as either broken human beings or invincible heroes, often creating implicit bias and affecting medical providers' ability to establish trusting relationships. Interactive learning methods can challenge stigma and create empathic connections with veterans in a manner that conveys sensitivity. Community-engaged theater has been successfully used in health education to transfer knowledge on both emotional and cognitive levels. This article reports on a research-based theater intervention, *Tracings of Trauma*, codesigned by veterans and aimed at orienting medical/allied health students to the unique experiences of combat veterans. Early stage assessment demonstrated statistically significant improvement in students' self-perceived awareness of stigma and their ability to talk to veterans and empathize with veterans' experiences. Results suggest that interactive, performance-driven dissemination can provide deeper learning experiences regarding stigmatized groups who experience trauma. Evaluating long-term impact on practice will be critical in linking this intervention to clinical outcomes.

*Keywords: veterans, research-based theater, stigma, engaged learning, performance ethnography, veteran mental health, trauma*



**P**osttraumatic stress disorder (PTSD) is the dominant narrative our society uses to describe the effects of war (Badger, 2014; Chandrasekaran, 2014; Wood, 2012). Although initially intended to ensure that veterans suffering the effects of combat and other traumatic military experiences received the care they deserved (Young, 1995), the PTSD diagnosis sometimes devolves into shorthand for "the crazy veteran." PTSD is used to explain a range of behaviors from veteran-involved shootings (Ortiz, 2016; Philipps, 2016) to disruptions of peaceful public activities (Fox News, 2016). Stereotypes of veterans in media and the ways in which these representations allow the civilian world to compartmentalize the military experience (Katzenberg, 2018) leave many veterans feeling a lack of common ground with the general public (Conan, 2010; Zucchino &

Cloud, 2015), civilian health care providers (Lypson & Ross, 2016), and bureaucracies of care, such as Veterans Affairs (VA) medical centers (Connelly, 2014).

Societal perceptions of veterans, and veterans' perceptions of being an "outsider" group, can lead to suboptimal health care (Sharp et al., 2015) and health care access problems (Curry & Zatzick, 2014) as a result of assumptions made between health care providers and the veterans they seek to serve. One key issue is that veterans who experience stigma may perceive it to be present even when it is not, in both civilian and VA-based health care. The issues with veteran stigma are similar to those experienced by traditional minority groups (Blair et al., 2011). To mitigate this issue, medical and allied health schools need to increase their efforts to train students about the lived experience of veterans (Hinojosa et al.,

2010), just as these institutions often do for patients of color (Anderson, 2008), sexual minorities (Potter et al., 2016), or stigmatized groups such as the homeless and sex workers (Asgary et al., 2016; Balon et al., 2015). A few efforts have taken place in this arena, providing veterans' perspectives to teach students about the physical and mental injuries of this population (Fussell, 2016; Lypson et al., 2014; Lypson et al., 2016). However, these efforts are infrequent in medical student education, with few curricula addressing lived experience (Manen, 1990; Turner & Bruner, 1986), stories of the veteran stigma (Goffman, 1963), and veterans' personal struggles to reenter civilian life after military service (Sayer et al., 2014). Stigma is a process of stereotyping where negative labels (e.g., "dangerous") are attached to a category (e.g., posttraumatic stress disorder) distinguishing a group of people (e.g., veterans) as unacceptable. This results in a cycle of discrimination, loss of status, and social exclusion that leads to increased stigma that further removes its victims from being accepted by society (Goffman, 1963).

Use of theater in knowledge translation and transfer to promote new understanding and empathy in clinical education is one powerful way to bring to life the concerns of the "other" (Eisenberg et al., 2015; Kirklin, 2001; Michalak et al., 2014; Watkins, 1998). Theater-focused interventions have been used with physicians, nurses, and allied health (Gillespie & Brown, 1997; Kontos & Naglie, 2007; Kontos et al., 2010). These training modalities are thought to work in part by eliciting a deep emotional response from those who observe or participate in such immersive interventions (Colantonio et al., 2008; Delonie & Graham, 2003; Shapiro & Hunt, 2003), thereby developing ethical responsibility (Rossiter, 2012) and inclusiveness (Johnston, 2010). The present study fills a gap in medical and allied health training through translating veterans' lived experience into a theater-based education tool and stigma intervention.

For this project, the research-based theater method performance ethnography was used for its ability to disrupt stereotypes and nurture empathy (Leavy, 2015), reveal the experiences of the oppressed (Moreira, 2005), and convey rich contextual experiences that enable a deeper understanding of the human condition (Saldaña, 2011). Performance ethnography translates

qualitative data from interviews, observations, and document analysis into dramatic scripts, linking historical and social processes to individual experiences, promoting critical self-reflection and raised consciousness that can challenge dominant worldviews (Denzin, 2006). Through its power to create an emotional impact and invoke the imagination, performance ethnography induces audience reflection and critical discussion on individuals' experiences of stigma surrounding experiences of prejudice and discrimination (Goldstein, 2013).

Selections of veteran interviews from an ethnography on combat veterans' experience with PTSD (Hooyer, 2015) provided the raw data for the teaching tool *Tracings of Trauma*. It was through this original research that veterans conveyed the pressing need to educate health care providers on the unique experiences of military veterans who have lived through war and combat, particularly in a society where they feel stigmatized as either "crazy vets" (Shane, 2013) or "broken heroes" (Philipps, 2015).

## Background

### Purpose of Study

Theater is successfully used in the fields of mental health (e.g., Twardzicki, 2008) and cancer research (Gray et al., 2000) as a tool to communicate the often hidden and emotionally charged experiences of patients with stigmatized illness. To our knowledge, this method has not been used to teach about the sensitive topic of war trauma and veteran mental health. In practicing this method, qualitative content can closely recreate social context while interactive dialogue offers multisensory experiences that can promote emotional responses (Saldaña, 1999) and insight into others' lives (Carless & Douglas, 2017). *Tracings of Trauma* aims to engage learners as participant actors to provide a more nuanced and empathetic understanding of diverse patient experiences.

The aim of the study was to assess the intervention's ability to change students' attitudes and beliefs regarding military and war experiences. We hypothesized that an interactive theater-based approach would challenge personal assumptions, bridge cultural gaps between veterans and their civilian health care providers, and enhance empathic connections between student clinicians and their patients.

### Project Overview and Context

The intervention was designed to orient medical and allied health students to the unique experiences of military combat veterans. The choice of a theater-based methodology was grounded in the capacity of live, interactive performance to engage learners on an emotional level. Learner participation was accomplished through the reading of excerpts of veteran experiences from a script in a round-robin format. The interactive reading weaves the story of a researcher doing fieldwork with combat veterans and the verbatim scripted experiences of soldiers training for combat, going to war, and returning home. The sessions lasted 45–60 minutes, with 15–25 learners sitting in a circle. The session began with a brief introduction (3–5 minutes) that gave the backstory of the script, the source of the narratives, and directions for participation. The facilitator then passed out 51 “field notes” containing excerpts from raw interview data with veterans from Author 1’s research. The ritual of passing out field notes allowed learners time to read each of their field notes and reflect momentarily on their content. Before starting, learners were asked to consider how their own field notes differed from or paralleled their peers’ during the session, but also to consider any personal commonalities with veterans’ sentiments revealed in the interactive performance.

Acting as the lead character, the facilitator read through the script, calling off the numbered field notes for learners to recite. The following excerpt illustrates the methodology.

**Narrator:** As an anthropologist I have to be constantly aware how my thoughts, and feelings, might affect my interpretation and influence my analysis. My feelings are, in a sense, just a reflection of how others in my culture and in my community feel. I learned how to react through observing all of you. Field note #9.

**Learner:** (Field note # 9) Before people learn I’m gay it’s “Thank you for your service.” After they learn I’m gay they say I shouldn’t have been there at all.

**Narrator:** Field note #10.

**Learner:** (Field note #10) My friend just straight up asked me, “Is it ok if you drink with us and stuff?” I was like “Yeah.” And she said “Well, you are a big dude and you are like a veteran and I don’t know if you are going to go crazy.” As if I was going to lose my mind and start pounding on girls or something like that . . . I was like, “Its fine, I can have a drink.”

**Narrator:** Field note #11.

**Learner:** (Field note #11) I am proud of my service but there are situations where I just don’t tell people because being a vet is equal to having PTSD in most civilian eyes.

The researcher’s story (i.e., reflections and surplus text from fieldwork) bridges the transitions between topics and veteran excerpts (Hooyer, 2017). The performance is accompanied by slide projections of tracings Author 1 made of photographs and military honors from veterans’ deployments.

The full performance took an average of 25 minutes. At the close students were asked to take a retrospective pre–post survey (see Methods section). This was followed by a facilitated discussion where students first took a couple of minutes to reflect inwardly on any unfolding emotional reactions to the diversity of veteran experiences that the performance evoked. Students were asked if any of the excerpts evoked an emotional or visceral response, were challenging to read or hear, or if they could relate to any of the field notes. The discussions lasted 15–30 minutes, depending on the class time available for the activity, and were guided by input from facilitators with extensive backgrounds in veteran issues who are involved in formal community–academic partnerships in veteran health (all three authors, as well as others named in the Acknowledgments). The original research that informed the intervention was approved by the University of Wisconsin–Milwaukee Institutional Review Board, and the intervention was approved by the Medical College of Wisconsin Institutional Review Board.

### Community Engagement and Collaborative Design

Community partnerships with local veteran

organizations informed the entire design of this intervention. These partnerships included a nonprofit, veteran-led service agency and a major federal institution with ties to local veterans. These partnerships are still active after 8 years. These agencies assisted in introducing Author 1 to individual veterans in ways that ensured appropriate trust and rapport, an integral step to the community engagement in research approach (Michener et al., 2012), as combat veterans often experience mental health-related stigma and can be distrustful of civilians. This distrust is compounded by the large gaps in cultural values, practices, and experience between military and civilian worlds (Hooyer, 2015). Although the informal researcher-to-agency connections were important in the initial phases, the work was carried out in conversation between the researcher and individual veterans who dedicated themselves to every phase of the project. This method contrasts somewhat with formalized community-based participatory approaches that often work through agency relationships for the duration of a project (Franco et al., 2015). Once the veteran participants were identified, they took part in Author 1's original research, and some continued to assist in the design of the script and development of the evaluation (see below).

To maintain the authenticity of veterans' voices, Author 1 collaborated with veterans to accurately convey the diversity of war experiences in a way that was sensitive and respectful of the conflicting horror and beauty of military service. Veterans reviewed the narratives for diversity and accurate representation. Notably, veterans wanted to remain anonymous after sharing these intimate experiences and declined authorship for the intervention and this article, contrasting somewhat with a traditional view of community partner inclusion in collaborative academic artifacts.

To assess the initial impact of the *Tracings of Trauma* performance in higher education, Author 1 codesigned a retrospective pre-post survey with three veterans (who took part in the original research) and three medical education experts. Veteran collaborators met with Author 1 to discuss their most pressing concerns regarding their experiences with health care providers, and these concerns were translated into survey questions with input from medical education experts. The evaluation tool was approved by the veteran

collaborators and focused on their desired outcomes: (1) challenging students' existing assumptions and stereotypes that are predominant in the media; (2) developing empathic understanding for combat veterans beyond students' personal politics surrounding war; (3) creating stronger social/emotional connections with future providers to potentially enhance future clinical encounters; and (4) bridging cultural gaps between military and civilian worlds that are the source of stereotypes and misunderstanding.

## Method

### Study Setting

The study took place at one urban public research university and one private medical school in the Midwest. The public university houses one of the state's largest collaborations of health sciences, nursing, and public health and has over 27,000 students from 92 countries. The private medical school is home to a national institute dedicated to transforming medical education and is focused on academic-community medicine. Notably, both institutions hold Carnegie Foundation community engagement classifications. Professors were recruited via email to department chairs in social work, nursing, medical humanities, and occupational therapy, and flyers were placed in faculty lounges and mailboxes. However, ultimately our established relationships with academic members in a veterans' health partnership facilitated recruitment of professors who incorporated the session into their curriculum. The social work and occupational therapy sessions were performed in the university's art gallery; medical student sessions took place in traditional classroom settings.

### Data Collection

A survey included four Likert-type items (5 = *strongly agree* to 1 = *strongly disagree*) and three open-ended questions regarding the content and form of the one-time intervention. The Likert-type items were offered as a retrospective pre- and postassessment to measure attitudes before and after the performance (Klatt & Taylor-Powell, 2005). The survey, measuring changes in knowledge, attitude, beliefs, and human connection, was administered electronically through Survey Monkey and was delivered immediately after the performance to avoid



the influence of postsession discussion. One class of occupational therapy students ( $n = 16$ ) used paper surveys, and a member of the research team entered data by hand. Students were also asked to answer demographic questions.

### Data Analysis

**Quantitative Data Analysis.** Because the data obtained were based on Likert-type items that are technically ordinal in nature, we first performed a chi-square test for each item in order to assess change between the posttest rating and the retrospective pretest rating (i.e., how the participant reflectively rated their attitudes prior to the intervention). Next, because Likert-type data can also be viewed as forced options superimposed on a continuum of attitudes, and because it is often easier to interpret change using mean difference scores, we also performed paired  $t$  tests on these items. Results of both tests are presented, but we focus our discussion on the  $t$  tests.

**Qualitative Data Analysis.** The qualitative method of conventional content analysis (Hsieh & Shannon, 2005) was used to code the text from open-ended questions. This type of coding allows categories to emerge from the data in order to make sense of a phenomenon that is not well understood; in this instance, emotional and cognitive reactions to reciting narratives of military veterans. Survey data from these questions were reviewed three times to establish categories and then organize these categories into dominant themes. To establish reliability of themes, a second coder conducted an informal cross-check and inquiries by reviewing the text and emerging themes to confirm findings (Barbour, 2001). No concerns were raised regarding observer drift.

## Results

### Quantitative Analysis

A total of 143 students participated in the learning intervention over five sessions (see Table 1). A majority of the students were female (69%), and most students were in their 20s (88%). Medical students represented the majority of learners (60%). Many students indicated that they had previously participated in other educational offerings on veteran issues (70%). Across all offerings, only three students were veterans (2%). The mean age for learners was 26.18

years.

Paired-sample  $t$  tests revealed statistically significant differences in attitudes and beliefs on all four Likert-scale items (see Table 2), demonstrating improvement in students' self-perceptions about their ability to connect emotionally and socially with military veterans. The largest effect was in the variable of connection, illustrating the performance's ability to bridge the shared and common human experiences of loss, hope, love, and social suffering. Students also self-reported an increased confidence in their ability to comfortably talk with veterans about their military service. Preassessment data indicated a high level of empathy with the sacrifices that veterans made in their service ( $M = 3.99$ ), and students were able to better empathize with these sacrifices after the intervention ( $M = 4.37$ ). Results for most items showed increases, but the item addressing assumptions showed a reduction in assumptions made toward veterans after the intervention.

Analysis of variance (ANOVA) was performed to explore for potential differences in mean scores by educational program (social work, medicine, occupational therapy), gender, and age category at retrospective pretest, posttest, and for mean difference for each outcome variable. No significant differences between learners from the different programs or by gender were found. Age was collected as years, but categorized for analysis into early 20s (24 years or less), late 20s (25–29 years), or 30+ (30–59 years) to reflect the distribution of the data obtained and facilitate analysis. Those in their early 20s reported being significantly less comfortable talking to a veteran than the learners from the older 20s group,  $F(2,139) = 4.06$ ,  $p = .0194$ , difference between means = 0.40. Small sample size for the 30+ category makes pairwise comparisons between the youngest and oldest groups unreliable.

**Level of Veteran Interaction.** Importantly, but not surprisingly, a number of differences were found between learners with different levels of exposure to veterans. An ANOVA performed on the item "I have many assumptions about veterans" at retrospective pre shows no variation by the level of learner's interaction with veterans. However, postintervention scores for assumptions varied significantly by level of learner to veteran interaction,  $F(3,135) = 3.87$ ,  $p = 0.0108$ . A post hoc Tukey test

**Table 1. Student Demographics**

Characteristic	<i>n</i> = 143	%
<b>Gender*</b>		
Female	99	69.72
Male	43	30.28
<b>Age</b>		
Early 20s	65	45.45
Late 20s	61	42.66
30+	17	11.89
<b>Program</b>		
Social work	25	17.48
Medicine	86	60.14
Occupational therapy	32	22.38
<b>Veteran status*</b>		
Veteran	3	2.11
Nonveteran	139	97.89
<b>Veteran interactions per month</b>		
0 days	50	34.97
1–5 days	67	46.85
6–20 days	9	6.29
21–30 days	17	11.89
<b>Education in veterans' issues</b>		
Yes	100	69.93
No	43	30.07

\**n* = 142 due to a participant declining to respond

showed that the no interaction level (zero days per month) was significantly lower on the assumption score than the intensive interaction level (21–30 days per month),  $p < .05$ . Notably, visual inspection of the box plots showed that although those in the two lower interaction levels (zero days and 1–5 days per month) reported fewer assumptions after the intervention, those with higher level interaction (6–20 days and 21–30 days per month) reported that they had *more* assumptions. This may reflect the ability of the retrospective pre–post design to reduce assumptions about veterans in the uninitiated while simultaneously allowing those with greater exposure to develop a deeper appreciation of the assumptions they held about veterans prior to the intervention.

An ANOVA performed on feelings of connectedness to veterans at retrospective pretest found that learners varied significantly by level of veteran interaction,  $F(3,138) = 2.92$ ,  $p = 0.0363$ . A post hoc Tukey test showed that the no interaction group was significantly lower on feelings of connectedness compared to those with intensive interaction,  $p < .05$ . However, there were no significant differences by level of learner to veteran interaction for feelings of connectedness at posttest,  $p < .05$ .

An ANOVA performed on feelings of empathy toward veterans at retrospective pretest found that learners varied significantly by level of veteran interaction,  $F(3,138) = 2.69$ ,  $p = 0.0490$ . A post hoc Tukey test showed that the no interaction group scored significantly lower on feelings of empathy com-

**Table 2. Assessment of Attitudes Before and After the Tracings of Trauma Performance**

Variable	Retrospective pretest mean (median)	Posttest mean (median)	Mean difference <sup>a</sup>	Mean of paired differences (SD)	Paired <i>t</i> ( <i>df</i> )	<i>p</i> value <sup>b</sup>
I can see <i>connections</i> between experiences of vets and issues in my own life.	2.96 (3)	3.54 (4)	+0.57	0.60 (1.09)	6.43 (138)	<.0001
I would feel comfortable <i>talking</i> to a veteran about their service.	3.52 (4)	3.93 (4)	+0.40	0.37 (0.73)	5.90 (138)	<.0001
I can <i>empathize</i> with the sacrifices that veterans have made in their service.	3.99 (4)	4.37 (5)	+0.38	0.44 (0.77)	6.70 (138)	<.0001
I have many <i>assumptions</i> about veterans' experiences.	3.30 (3)	2.91 (3)	-0.37	-0.28 (1.10)	3.02 (138)	<.0031

<sup>a</sup> Mean differences presented to illustrate degree of change based on the assumption that Likert categories offered are superimposed on a continuum of attitudes. Medians are also provided, given that these data can also be viewed as ordinal.

<sup>b</sup> *p* values for Wilcoxon signed rank (nonparametric equivalent of paired *t* test) and paired *t* tests were <.01 for all items; paired *t* statistics are reported here for ease of interpretation. For clarity, positive/negative signs reflect direction of actual change in mean difference from retrospective pre to post, not signs from *t* tests.

pared to those with intensive interaction,  $p < .05$ . However, there were no significant differences by level of learner-to-veteran interaction for feelings of empathy at posttest,  $p < .05$ .

An ANOVA performed on willingness to talk to veterans at retrospective pretest found that learners varied significantly by level of veteran interaction,  $F(3,138) = 2.89$ ,  $p = 0.0377$ . A post hoc Tukey test showed that the no interaction and the little interaction groups scored significantly lower on willingness to talk to veterans compared to those with intensive interaction,  $p < .05$ . In contrast to other tests, variability in comfort in talking with veterans persisted postintervention,  $F(3,135) = 3.28$ ,  $p = 0.0231$ . A post hoc Tukey test showed that the no interaction group was still significantly less willing to talk to a veteran compared to those with intensive interaction,  $p < .05$ . However, the mean scores for all groups increased significantly, and visual analysis of the results showed that those with low interaction levels at posttest scored very close to the

original mean of the high veteran interaction group at pretest; all groups noted more comfort in talking to a veteran at posttest.

Overall, this pattern of results across the learner-to-veteran interaction levels suggests that exposure to this intervention makes even those learners with low prior levels of veteran interaction more comfortable in engaging with veterans.

The sample size was based on what was obtainable using reasonable methods and connections with instructors who were willing to engage their classes in this intervention. Because of the lack of estimates of mean differences and standard deviations at the beginning of the process, an a priori power calculation was not conducted. In order to provide some guidance on appropriate sample size for future replication, we also provide the retrospective pre-post mean difference and standard deviations of the difference for each outcome variable in Table 2. These values suggest that minimum samples required to obtain 80% power for a two-side, paired *t* test with a *p* value

< 0.05 would range from 27 pairs (for the empathize with veterans item) to 123 pairs (for the assumptions about veterans item).

### Qualitative Analysis

The survey included three open-ended items related to session delivery and content. For the purposes of this analysis, we focus on one question related to self-reflection (see Table 3): “What was the most profound thing you learned?” Response to the item was voluntary, but evoked responses from 124 students (87%). Qualitative analysis revealed three dominant themes and one subtheme: (1) a new awareness of veterans’ experiences of service, trauma, and returning home after deployment (33%); (2) the broad range of veteran experiences (27%); and (3) the impact of health-related stigma (24%). One significant subtheme related to patient care emerged separately from the main themes in this data set: the realization that the students’ own perceptions influence their actions and in turn can have an impact on veterans’ health (9%).

### Discussion

This project aimed to orient medical and allied health students to the unique experiences, perspectives, and postservice integration challenges of military combat veterans. This was accomplished through a collaborative research-based theater performance in which learners participated in reading excerpts of veteran interviews from a script in a round-robin format. After each session learners were asked to participate in a retrospective pre-post survey with Likert-type and open-ended questions administered through Survey Monkey or on paper.

In our quantitative analysis, we found that students experienced improvements in their ability to relate with military veterans in all four of the variables we studied: (1) connecting experiences, (2) comfort in talking with veterans, (3) empathizing with veterans’ sacrifices, and (4) reducing assumptions about veterans’ experiences. These results aligned on multiple levels with the project goals set out by our veteran community partners to (1) bridge cultural gaps in understanding, (2) challenge student assumptions, (3) empathize despite political views, and (4) create stronger emotional connections.

These preliminary findings are interesting

in that a high percentage (70%) of students indicated they had previous education on veteran-related issues; even so, our results showed a significant change in students’ attitudes regarding military culture and veterans’ experiences. Additionally, a majority of students had monthly interactions with veterans (65%). Notably, those students with the two lower interaction levels (0 days and 1–5 days per month) reported fewer assumptions postintervention, and those with higher level interaction (6–20 days and 21–30 days per month) reported that they had more assumptions. This may point to the capacity of the intervention to reduce assumptions about veterans in the students with low contact, while concurrently allowing those with greater exposure to develop a deeper appreciation of the assumptions they held about veterans prior to the intervention.

Given that our intervention was still able to evoke change within a group of students previously exposed to veteran-related issues and who also had personal interactions with veterans, these results suggest that performance-based strategies can change stereotyping perspectives through teaching lived experience and emotionally laden content. This is consistent with prior studies that identified performing arts as an effective learning tool to reduce stigma around mental illness, further extending such findings to the veteran population.

Qualitative findings from one open-ended reflexive question verified and expanded these quantitative results. The dominant themes of veteran diversity, stigma, and new perspectives aligned with quantitative variables. Students described ways in which their assumptions about veterans were challenged during the learning session, contributing to a new awareness of the broad range of veteran perspectives and military experiences. This expanded awareness contributed to confronting existing stigmas as reported by the quantitative findings. Students’ comments also underscored changes in their ability to put themselves in the shoes of veterans they might provide services to in the future. This was noted through reflexive remarks made by the students about their own attitudes and knowledge gaps, and how these might adversely impact their ability to provide high quality care to veterans in future clinical interactions.



**Table 3. Themes and Subthemes Emerging From the Question “What Was the Most Profound Thing You Learned Today?”**

Theme	Representative quote
Diversity of veteran experience	"That there is no one stereotypical veteran experience. Everyone seems to take something different away from their military service. . . ." <i>Male, 27, medical student, 0 days veteran interaction per month</i>
Veteran experience of stigma	"The most profound thing I learned today would have to be how others treat veterans just by making assumptions about a person when they hear that 'that person is a veteran.' It's almost like they forget they're a person and stereotype a veteran into how the public portrays them as people who suffer from PTSD, anger, social instability, and other psychological problems." <i>Female, 24, medical student, 1–5 days veteran interaction per month</i>
New awareness of veteran perspectives	"I learned about the thought processes veterans may have that I never thought about before, such as keeping one's memories as their own, words not being enough, feeling wronged by the government." <i>Female, 24, occupational therapy, 0 days veteran interaction per month</i>
Evoking reflexivity	"The most profound thing I learned was that I tend to group the veteran experience together, instead of thinking of the individuality of each experience. Additionally, I learned about how hesitant some veterans can be to share certain issues or feelings with healthcare providers because of the individual biases of health care practitioners. I really need to consider this more, as I am going into the health care field and I strive to serve my clients in the best way possible." <i>Female, 23, occupational therapy, 1–5 days veteran interaction per month</i>

### Limitations

These findings may or may not translate to practice or demonstrate long-term effect on behaviors. In fact, research on stigma shows that changes in attitudes and beliefs do not translate to changes in practice, but that personal interactions do (Corrigan et al., 2000). One of the programmatic limitations of this project is that no veterans participated directly in the intervention.

A second limitation, related to the research design, involved the survey delivery. Retrospective pre-post surveys were delivered just before the postperformance discussion specifically to assess the impact

of the performance. Possibly, these postperformance conversations influenced students further through diving deeper into issues that the performance raised. Structured discussions on how practice might be enhanced through what was learned in the session might further ground future application in the real world, but this was not evaluated in the current study.

Third, methodological limitations related to social desirability bias and self-report might have skewed the findings since a number of the questions were value-based. Students may have responded with how they aspired to view their inner world rather than honestly evaluating their beliefs and attitudes.

## Lessons Learned and Next Steps

We suspect that some of the ways the procedures were handled increased the impact of the intervention, but these components need to be isolated for future research. Students expressed that they were able to authentically relate and connect to veterans through the verbatim reading of veteran-produced quotes. These quotes were specifically chosen as a conduit to the common and shared human emotions of love, loss, grief, loneliness, and hope. Comments by students on session delivery on the retrospective pre-post surveys and facilitator observations allowed us to glean important insights regarding the overall quality of the intervention and inform next steps.

We made five key observations: (1) Students need to feel that they can confidently interact with combat veterans, and the postsession discussion must address practical tools and best practices that guide the learner. (2) Some students felt uncomfortable when reciting the narratives, reducing the dramatic impact of the intervention; consequently, the emotional maturity level of the learner should be considered in this type of activity. (3) Physical space and acoustics are critical in providing an effective learning environment (e.g., use of microphones, smaller groups, and smaller private rooms). (4) Having veterans available for postperformance discussion could improve the learning experience. (5) Students may be left in a state of emotional astonishment, especially those who have experienced trauma or war conditions personally.

As next steps, we are developing a leave-behind clinic pocket card dealing with military-specific trauma-informed care to provide students with concrete actions they can implement in clinical encounters, and we are also involving veterans in postperformance discussion. We will also implement a pre-session introduction email to explain the performance and its content for those who served in the military or experienced war. The challenge continually is to provide enough time, at least 30 minutes, for a facilitator who has expertise in veteran issues, military culture, and/or trauma to debrief and for participants to engage in reflective discussion after the intervention. We observed that smaller groups of students (15) sitting in a circle, with the ability to make eye contact, contributed to more in-depth postintervention discussion.

The project will be sustained through packaging and publishing *Tracings of Trauma* as a learning tool, so others can utilize it and evaluate its impact with other types of learners. To assess whether the intervention can influence future behavior in clinical encounters, we are speaking with academic leaders to develop a strategy for tracking impact over time. Evaluating the long-term impact on practice will be critical in linking this intervention to clinical outcomes.

## Conclusion

Medical and allied health schools train students about the lived experience of various minorities, including patients of color, sexual minorities, and stigmatized groups, but few efforts have focused on the unique experiences of military veterans. Theater has successfully been used to translate the experiences of stigmatized populations and promote new understanding and empathy in education. This early stage assessment suggests that performance ethnography may fill a gap in medical and allied health training through translating veterans' lived experience into a theater-based education tool and stigma intervention. To our knowledge, this is the first collaboratively designed, research-based theater intervention on veterans' mental health that (1) uses raw interview excerpts and (2) involves audience participation. Our findings demonstrate that this approach has the potential to challenge existing assumptions about veterans and, in the short term, to positively impact practice.

This intervention resulted in reported change in the four key outcome variables of interest regardless of program type, age, gender, and level of personal contact with veterans. Our experience with this intervention suggests that this style of intervention could be generalized to a range of other complex topics for professional audiences and that some of the unique elements of research-based theater or performance may differentially impact some types of learners. Of course, future research will be needed to focus on the specific aspects of these types of interventions that produce change, and how those impacts may vary across learner types. Our sense is that the content of the script and learner participation in reciting the words of veterans informs our main finding that the intervention established an emotional connection to a group of people whose life experiences differ from those of the students. It is this emotional connec-

tion and understanding that veterans often transition back to civilian life and in rees-  
describe as missing, yet so crucial, in their tablishing their role in society.



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### Conflicts of Interest

We have no conflicts of interest to report that would bias the outcomes of this research.

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## References

- Anderson, W. (2008). Teaching “race” at medical school: Social scientists on the margin. *Social Studies of Science*, 38(5), 785–800. <https://doi.org/10.1177/0306312708090798>
- Asgary, R., Naderi, R., Gaughran, M., & Sckell, B. (2016). A collaborative clinical and population-based curriculum for medical students to address primary care needs of the homeless in New York City shelters. *Perspectives in Medical Education*, 5(3), 154–162. <https://doi.org/10.1007/s40037-016-0270-8>
- Badger, E. (2014, April 3). Why the Iraq War has produced more PTSD than the conflict in Afghanistan. *The Washington Post*. <https://www.washingtonpost.com/news/wonk/wp/2014/04/03/why-the-iraq-war-has-produced-more-ptsd-than-the-conflict-in-afghanistan/>
- Balon, R., Tait, G. R., Coverdale, J. H., Beresin, E. V., Louie, A. K., & Roberts, L. W. (2015). Stigma and empathy: Sex workers as educators of medical students. *Academic Psychiatry*, 39(3), 239–241. <https://doi.org/10.1007/s40596-015-0338-5>
- Barbour, R. S. (2001). Checklists for improving rigor in qualitative research: A case of the tail wagging the dog? *British Medical Journal*, 22(7294), 1115–1117.
- Blair, I. V., Steiner, J. F., & Havranek, E. P. (2011). Unconscious (implicit) bias and health disparities: Where do we go from here? *The Permanente Journal*, 15(2), 71–78.
- Carless, D., & Douglas, K. (2017). When two worlds collide: A story about collaboration, witnessing, and life story research with soldiers returning from war. *Qualitative Inquiry*, 23(5), 375–383.
- Chandrasekaran, R. (2014, March 29). After the wars: A legacy of pain and pride. *The Washington Post*. <http://www.washingtonpost.com/sf/national/2014/03/29/a-legacy-of-pride-and-pain/>
- Colantonio, A., Kontos, P. C., Gilbert, J. E., Rossiter, K., Gray, J., & Keightley, M. L. (2008). After the crash: Research-based theater for knowledge transfer. *Journal of Continuing Education in the Health Professions*, 28(3), 180–185.
- Conan, N. (Host). (2010, April 12). The things civilians don’t understand about war [Radio broadcast episode]. In *Talk of the nation*. NPR. <http://www.npr.org/templates/story/story.php?storyid=125859197>
- Connelly, D. G. (2014, May 28). *Why so many veterans belong to the I-HATE-THE-VA-CLUB*. <http://patch.com/minnesota/richfield/why-so-many-veterans-belong--to-the-ihatethevaclub>
- Corrigan, P., Backs-Edwards, A., Green, A., Lickey-Diwan, S., & Penn, D. (2000). Mental health stigma as attribution: Implications for research methods and attitude change. *Clinical Psychology: Science and Practice*, 7(1), 48–67.
- Curry, J., & Zatzick, D. (2014). Collaborative care: Mitigating stigma and other barriers to care through mental health service delivery in primary care settings. In C. Engel (Ed.), *Care of military service members, veterans, and their families* (pp. 203–221). American Psychiatric Association.
- Deloney, L. A., & Graham, C. J. (2003). Wit: Using drama to teach first-year medical students about empathy and compassion. *Teaching and Learning in Medicine*, 15(4), 247–251.
- Denzin, N. K. (2006). The politics and ethics of performance pedagogy: Toward a pedagogy of hope. In D. S. Madison & J. Hamera (Eds.), *The Sage handbook of performance studies* (pp. 325–338). Sage.
- Eisenberg, A., Rosenthal, S., & Schlüssel, Y. R. (2015). Medicine as a performing art. *Academic Medicine*, 90(3), 272–276.
- Fox News. (2016, August 8). Vietnam vet cited after angry confrontation with Pokemon GO players caught on video. Fox News. <http://www.foxnews.com/us/2016/08/03/vietnam-vet-cited-after-angry-confrontation-with-pokemon-go-players-caught-on-video.html>



- Franco, Z. E., Flower, M., Whittle, J., & Sandy, M. (2015). Professional ethics and virtue ethics in community-engaged healthcare training. In D. E. Mitchell (Ed.), *Professional Responsibility* (pp. 211–229). Springer.
- Fussell, I. (2016, April 18). PCMD Medical Humanities Conference 2016. *Medical Humanities Blog*. <http://blogs.bmj.com/medical-humanities/2016/04/18/pcmd-medical-humanities-conference-2016/>
- Gillespie, D., & Brown, K. H. (1997). “We become brave by doing brave acts”: Teaching moral courage through the theater of the oppressed. *Literature and Medicine*, 16(1), 108–120. <https://doi.org/10.1353/lm.1997.0001>
- Goffman, E. (1963). *Stigma: Notes on the management of spoiled identity*. Simon & Schuster.
- Goldstein, T. (2013). *Zero Tolerance and other plays: Disrupting xenophobia, racism and homophobia in school*. Sense Publishers.
- Gray, R., Sinding, C., Ivonoffski, V., Fitch, M., Hampson, A., & Greenberg, M. (2000). The use of research-based theatre in a project related to metastatic breast cancer. *Health Expectations*, 3(2), 137–144.
- Hinojosa, R., Hinojosa, M. S., Nelson, K., & Nelson, D. (2010). Veteran family reintegration, primary care needs, and the benefit of the patient-centered medical home model. *The Journal of the American Board of Family Medicine*, 23(6), 770–774. <https://doi.org/10.3122/jabfm.2010.06.100094>
- Hooyer, K. (2015). *Mentally disordered or culturally displaced? How the PTSD label transforms personhood in US military veterans* [Doctoral dissertation, University of Wisconsin–Milwaukee]. UWM Digital Commons. <https://dc.uwm.edu/etd/878>
- Hooyer, K. (2017). Practicing heartfelt scholarship: Teaching about trauma through anthropology and art. *Public: A Journal of Imagining America*, 4(1). <https://public.imaginingamerica.org/blog/article/practicing-heartfelt-scholarship-teaching-about-trauma-through-anthropology-and-art/>
- Hsieh, H.-F., & Shannon, S. E. (2005). Three approaches to qualitative content analysis. *Qualitative Health Research*, 15(9), 1277–1288. <https://doi.org/10.1177/1049732305276687>
- Johnston, K. J. (2010). Grafting orchids and ugly: Theatre, disability and arts-based health research. *Journal of Medical Humanities*, 31(4), 279–294. <https://doi.org/10.1007/s10912-010-9119-z>
- Katzenberg, L. (2018, November 16). Debunking stereotypes around veterans and PTSD. *The New York Times Magazine*. <https://www.nytimes.com/2018/11/16/magazine/stereotypes-veterans-ptsd-newsletter.html>
- Kirklin, D. (2001). Humanities in medical training and education. *Clinical Medicine*, 1(1), 25–27. <https://doi.org/10.7861/clinmedicine.1-1-25>
- Klatt, J., & Taylor–Powell, E. (2005). *Using the retrospective post-then-pre design* (Quick Tips No. 27). Program Development and Evaluation, University of Wisconsin–Extension. <https://fyi.extension.wisc.edu/programdevelopment/files/2016/04/Tipsheet27.pdf>
- Kontos, P. C., Mitchell, G. J., Mistry, B., & Ballon, B. (2010). Using drama to improve person-centered dementia care. *International Journal of Older People Nursing*, 5(2), 159–168. <https://doi.org/10.1111/j.1748-3743.2010.00221.x>
- Kontos, P. C., & Naglie, G. (2007). Expressions of personhood in Alzheimer’s disease: An evaluation of research-based theatre as a pedagogical tool. *Qualitative Health Research*, 17(6), 799–811. <https://doi.org/10.1177/1049732307302838>
- Leavy, P. (2015). *Method meets art: Arts-based research practice*. The Guilford Press.
- Lypson, M., Ravindranath, D., & Ross, P. (2014). Developing skills in veteran-centered care: Understanding where soldiers really come from. *MedEdPORTAL*. [https://doi.org/10.15766/mep\\_2374-8265.9818](https://doi.org/10.15766/mep_2374-8265.9818)
- Lypson, M., & Ross, P. T. (2016, January 21). Veterans’ health care: Doctors outside the VA need to know more about the veterans they treat. *The Conversation US*. <http://theconversation.com/veterans-health-care-doctors-outside-the-va-need-to-know-more-about-the-veterans-they-treat-51283>

- Lypson, M., Goldrath, K., & Ross, P. T. (2016, August 27–31). *Service transformed: A focus on veteran-centered care taught through photo-elicitation* [Paper presentation]. International Association for Medical Education Conference, Barcelona, Spain.
- Manen, M. V. (1990). *Researching lived experience: Human science for an action sensitive pedagogy*. State University of New York Press.
- Michalak, E. E., Livingston, J. D., Maxwell, V., Hole, R., Hawke, L. D., & Parikh, S. V. (2014). Using theatre to address mental illness stigma: A knowledge translation study in bipolar disorder. *International Journal of Bipolar Disorders*, 2, Article 1. <https://doi.org/10.1186/2194-7511-2-1>
- Michener, M., Cook, J., Ahmed, S. M., Yonas, M. A., Coyne-Beasley, T., & Aguilar-Gaxiola, S. (2012). Aligning the goals of community-engaged research: Why and how academic health centers can successfully engage with communities to improve health. *Academic Medicine*, 87(3), 285–291. <https://doi.org/10.1097/ACM.0b013e3182441680>
- Moreira, C. (2005, May 5–7). *Made for sex* [Paper presentation]. First International Congress of Qualitative Inquiry, Urbana-Champaign, IL, United States.
- Ortiz, E. (2016, May 31). *Gunman in Houston shooting rampage ID'd as Army veteran, fired 212 rounds: Cops*. NBC News. <https://www.nbcnews.com/news/us-news/gunman-houston-shooting-rampage-id-d-army-veteran-fired-212-n583466>
- Philipps, D. (2015, February 6). Coming home to damaging stereotypes. *The New York Times*. <https://www.nytimes.com/2015/02/06/us/a-veteran-works-to-break-the-broken-hero-stereotype.html>
- Philipps, D. (2016, July 17). Veterans worry Baton Rouge and Dallas shootings will spread stereotypes. *The New York Times*. <https://www.nytimes.com/2016/07/19/us/military-veterans-shootings-stereotypes.html>
- Potter, L., Burnett-Bowie, S. A., & Potter, J. (2016). Teaching medical students how to ask patients questions about identity, intersectionality, and resilience. *MedEdPORTAL*. [https://doi.org/10.15766/mep\\_2374-8265.10422](https://doi.org/10.15766/mep_2374-8265.10422)
- Rossiter, K. J. (2012). Bearing response-ability: Theater, ethics, and medical education. *Journal of Medical Humanities*, 33, 1–14. <https://doi.org/10.1007/s10912-011-9162-4>
- Saldaña, J. (1999). Playwriting with data: Ethnographic performance texts. *Youth Theatre Journal*, 13(1), 60–71. <https://doi.org/10.1080/08929092.1999.10012508>
- Saldaña, J. (2011). *Ethnotheatre: Research from page to stage*. Left Coast Press.
- Sayer, N. A., Carlson, K. F., & Frazier, P. A. (2014). Reintegration challenges in U.S. service members and veterans following combat deployment. *Social Issues and Policy Review*, 8(1), 33–73. <https://doi.org/10.1111/sipr.12001>
- Shane, L. (2013, February 7). “Crazy vet” assumptions after shootings more stereotype than reality. *Stars and Stripes*. <https://www.stripes.com/crazy-vet-assumptions-after-shootings-more-stereotype-than-reality-1.206948>
- Shapiro, J., & Hunt, L. (2003). All the world's a stage: The use of theatrical performance in medical education. *Medical Education*, 37(10), 922–927. <https://doi.org/10.1046/j.1365-2923.2003.01634.x>
- Sharp, M. L., Fear, N. T., Rona, R. J., Wessely, S., Greenberg, N., Jones, N., & Goodwin, L. (2015). Stigma as a barrier to seeking health care among military personnel with mental health problems. *Epidemiologic Reviews*, 37(1), 144–162. <https://doi.org/10.1093/epirev/mxu012>
- Turner, V. W., & Bruner, E. M. (1986). *The anthropology of experience*. University of Illinois Press.
- Twardzicki, M. (2008). Challenging stigma around mental illness and promoting social inclusion using the performing arts. *The Journal of the Royal Society for the Promotion of Health*, 128(2), 68–72. <https://doi.org/10.1177/14666424007087804>
- Watkins, B. (1998). Women, AIDS, and theatre: Representations and resistances. *Journal of Medical Humanities*, 19(2–3), 167–180. <https://doi.org/10.1023/A:1025031330977>

- Wood, D. (2012, July 4). Iraq, Afghanistan War veterans struggle with combat trauma. *HuffPost*. [https://www.huffpost.com/entry/iraq-afghanistan-war-veterans-combat-trauma\\_n\\_1645701](https://www.huffpost.com/entry/iraq-afghanistan-war-veterans-combat-trauma_n_1645701)
- Young, A. (1995). *The harmony of illusions: Inventing post-traumatic stress disorder*. Princeton University Press.
- Zucchini, D., & Cloud, D. S. (2015, May 24). US military and civilians are increasingly divided. *Los Angeles Times*. <http://www.latimes.com/nation/la-na-warrior-main-20150524-story.html>