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Responses to Mantram Repetition Program from Veterans with posttraumatic stress disorder: A qualitative analysis

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Abstract—This study describes ways in which a Mantram Repetition Program (MRP) was used for managing posttraumatic stress disorder (PTSD) symptoms in 65 outpatient Veterans with PTSD. The MRP consisted of six weekly group sessions (90 min/wk) on how to (1) choose and use a mantram, (2) slow down thoughts and behaviors, and (3) develop one-pointed attention for emotional self-regulation. Critical incident research technique interviews were conducted at 3 mo postintervention as part of a larger randomized clinical trial. The setting was an academic-affiliated Department of Veterans Affairs hospital in southern California. Categorization and comparison of the types and frequency of incidents (i.e., triggering events) were collected. Participants reported a total of 268 triggering events. Content analysis of the outcomes resulted in 12 discreet categories, including relaxing and calming down, letting go of negative feelings, thinking clearly and rationally, diverting attention away from triggering events, focusing attention, refining mantram skills, dealing with sleep disturbances, coming back from flashbacks, slowing down, communicating thoughts and feelings more effectively, feeling in touch spiritually, and letting go of physical pain. The study shows that the MRP was helpful in managing a wide range of emotional reactions in Veterans with PTSD.

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INTRODUCTION

As conflicts continue around the world, there are more opportunities for Active Duty servicemembers and combat Veterans to experience acute trauma abroad and endure symptoms of posttraumatic stress disorder (PTSD) when they return stateside. In addition, multiple deployments to Iraq and Afghanistan have influenced the increased prevalence of trauma in returning Veterans [1]. The RAND Corporation reported in 2008 that the risk of

Abbreviations: BSS = Building Spiritual Strength, CAPS = Clinician-Administered PTSD Scale, CI = confidence interval, CIRT = critical incident research technique, MRP = Mantram Repetition Program, PTSD = posttraumatic stress disorder, RCT = randomized clinical trial, RR = relative risk, UC = usual care, VA = Department of Veterans Affairs.

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acquiring PTSD was twice as high in discharged and retired Operation Iraqi Freedom/Operation Enduring Freedom Veterans as in Active Duty servicemembers [2]. Veterans with PTSD and depression were associated with higher suicide rates (relative risk [RR]: 5.6, 95% confidence interval [CI]: 3.6–8.7, and RR: 6.5, 95% CI: 4.1–10.1, respectively) [3].

Studies of the health and functioning of older Veterans from the Vietnam and Korean war eras have indicated that 10 to 15 percent of those who were in combat still experience severe PTSD symptoms up to 30 yr later [4–5]. These Veterans with chronic PTSD symptoms also have higher rates of mortality and comorbidities that result in using nearly twice the amount of medical healthcare services than Veterans without PTSD [6].

In a meta-analysis of 24 studies that represented 1,742 participants who received a variety of psychotherapeutic interventions, Goodson et al. noted that overall, "treatments with significant exposure-based components were effective in treating combat-related PTSD" [7, p. 592]. Although significant strides have been made in developing evidence-based treatments for PTSD in Veterans, not all treatments are effective and not all Veterans benefit equally from them. There are many who drop out or refuse mental healthcare due to the stigma of mental illness [8] or the difficulty coping with increased distress from revisiting the trauma [9–10].

A significant number of studies have found that religious means of coping "are the most common forms of coping utilized by individuals in times of stress" [11, p. 392]. Results of studies are equivocal regarding trauma's negative or positive effects on an individual's religious beliefs and behaviors [12–16]. Harris et al. developed an intervention called Building Spiritual Strength (BSS) to assist those who experienced military trauma in reducing PTSD symptoms by exploring spirituality as a source of support [17]. This 8 wk (2 h/wk) interfaith group intervention was designed to help participants find meaning in their traumatic experiences and to minimize distress resulting from a disconnection with their Higher Power. The BSS was tested in a sample of Veterans with military-related trauma (n = 26) compared with a wait-list control (n = 28). Findings demonstrated statistically significant reductions in self-reported PTSD. Limitations of the study included a modest sample size, no objective measures of PTSD, and the lack of an active placebo group.

Another spiritually integrated program called the Mantram Repetition Program (MRP) has adapted the ancient, universal practice of repeating a mantram or "sacred word" into a method for symptom management. It is a portable, meditation-like, mind-body-spiritual technique that transcends cultures and religious beliefs. Mantram repetition is supported by intentionally slowing down one's thoughts and practicing one-pointed attention, concentrating on the mantram with awareness. The MRP has been found to be an effective method for managing psychological distress and improving quality of life in a variety of groups, including both Veterans and non-Veterans [18–23]. The Veteran repeats a mantram, a word or phrase with a spiritual meaning [24], silently and frequently throughout the day during nonstressful times so that it can be habitually employed to regulate emotions during triggering events. The method is innovative, portable, immediately accessible, invisible, and nonpharmacologic—thus, nontoxic.

Bormann et al. conducted a randomized clinical trial (RCT) to explore the efficacy of the MRP on PTSD symptoms in 146 outpatient Veterans in southern California between 2005 and 2010 [25]. Volunteers who represented Veterans predominantly from the Vietnam and gulf war eras were randomly assigned to receive either usual care (UC) for 6 wk, consisting of medication and case management (n = 75), or UC plus a 6 wk (90 min/wk) MRP group intervention (MRP+UC) (n = 71). Findings showed that PTSD Checklist scores were reduced an average of −5.62 points in the MRP+UC group compared with −2.47 points in UC alone ($p < 0.05$). Similarly, the MRP+UC group had an average reduction in Clinician-Administered PTSD Scale (CAPS) scores of −16.9 points compared with −10.2 points in the UC group ($p < 0.05$). When a clinically meaningful change is defined as a total CAPS score less than 45 with at least a −10 point reduction, then 24 percent of those in the MRP+UC group compared with 12 percent in the UC group had clinically meaningful improvements in PTSD symptoms over a period of 6 wk [25]. Other improvements included a significant decrease in depression and improvements in levels of mental health quality of life and existential spiritual wellbeing. Because of the unique and innovative approach of the MRP, an additional qualitative substudy was conducted to probe the uses and outcomes of mantram repetition [26]. Using the critical incident research technique (CIRT) method, we asked the MRP+UC participants about their use of the mantram intervention at 3 mo postintervention.

This article will describe the application and use of a spiritually integrated, meditation-based MRP in managing

PTSD symptoms in a Veteran sample. Specifically, the primary aim of the study was to identify types of situations and ways that mantram repetition was used to manage symptoms of PTSD.

METHODS

Setting and Sample

The study was conducted by Department of Veterans Affairs (VA) personnel in San Diego, California. It was a qualitative study nestled in a larger RCT.

In the original RCT, participants were randomly assigned to MRP+UC (n = 71) or UC (n = 75) groups. The focus of the current study is only on the MRP+UC participants, who attended six weekly 90 min sessions for the primary test of treatment efficacy. The intervention consisted of how to (1) choose and use a mantram, (2) practice slowing down one's thinking process, and (3) develop one-pointed attention to manage stress. "Participants were given *The Mantram Handbook* [24] with weekly reading, a course manual with exercises, and a list of recommended mantram representing various spiritual traditions" [20, p. 363]. Assignments were given each week, such as practicing mantram repetition at nonstressful times (i.e., each night before sleep or while waiting in lines). Other assignments included slowing down both cognitively and behaviorally, making wiser choices, setting new priorities, noticing hurried behavior, and practicing one-pointed attention to increase one's ability to repeat the mantram or engage in one thing at a time. For a more complete description of the intervention, see Bormann et al. [20]. We conducted telephone interviews using the CIRT at 3 mo postintervention to identify the uses and outcomes of mantram practice.

The original RCT showed that Veterans reported clinically significant reductions in PTSD symptoms as measured by blinded CAPS raters and by self-reported PTSD symptoms [25]. We anticipated that results from this current qualitative analysis might provide a context for understanding and explaining these quantitative outcomes of the larger RCT. Furthermore, the subjective value of qualitative interviews can capture the perceptions, reactions to, and use patterns of the MRP in Veterans with PTSD.

Research Technique and Data Collection

The CIRT was selected to analyze brief interviews, approximately 10 to 15 min in length, that focused on facts related to uses of MRP skills and the resulting outcomes [27]. Interviews were conducted to obtain specific information and minimize generalizations [27–28]. As such, this method is considered reliable and valid for analyzing qualitative data and providing information about topics that are novel or not well known, such as mantram repetition [28]. The CIRT has been applied in a variety of healthcare settings to examine patients' met and unmet psychological needs [29], predict patient perceptions of nurse behaviors [30], and gain perspectives on female spouses/intimate partners of returning combat servicemembers with PTSD [31].

A research nurse trained in CIRT contacted participants via telephone 3 mo after the last group session. Participants were reminded, as discussed in the initial consent, that interviews would be tape-recorded for analysis. They were asked to discuss specific occasions during which they had used their mantram. Each participant was asked these two questions:

1. Can you think of a time that you used the mantram to manage your PTSD symptoms?
2. Can you tell me about any other situations (unrelated to PTSD) in which you used the mantram?

The same questions were repeated until there were no longer responses from the participants. Next, participants were asked to discuss specific examples of occasions when they successfully used their mantram. Standardized, structured probing questions were used to obtain a detailed description of these incidents. CIRT interviews lasted an average of 30 min, ranging from 15 to 45 min depending on the number of triggering events that a Veteran was able to spontaneously recall. All interviews were individually transcribed for scientific documentation and analysis. A medical anthropologist served as the CIRT expert and was consulted throughout the study to ensure adherence to CIRT methods and data analyses.

Data Preparation and Analysis

Inductive classification, developed by Flanagan [27], was utilized for data analysis. This method facilitated understanding of behaviors associated with mantram use [32]. Interviews were audiotaped, transcribed, and coded to identify and categorize the number of stressful incidents reported and how participants responded to those incidents.

Given that interview transcripts are inherently subjective and thus not uniform in nature, several preparatory steps were taken prior to initiating analysis. Transcript data were first audited and memoed by the research team to ensure the transcripts contained complete behavioral descriptions of a triggering event and demonstrated a linkage between the response to that event, the participant's behavioral response to the event, and outcome of the participant's response. A preliminary coding hierarchy was created by thematically organizing relevant responses from each of the interviews into primary root categories: (1) triggering events, (2) symptomatic responses to triggering events, (3) manner of coping with symptoms, and (4) associated outcomes. Subcategories of each root category were also delineated to acknowledge important differences comparing the experiential responses and perceptions of participants.

To further enhance the robusticity of the coding template, two nonstudy expert nurses were asked to coreview identical transcript sections from 10 percent (n = 26) of the participant interviews. Using the "percent agreement" method, the objective was to measure for potential interpretive shift in the meanings of codes between coders that could contribute to alternative understandings and alert researchers to all potential competing explanations of individual coding frames. Such exercises encourage credibility and transferability, as well as an accounting of how the analysis developed. These interviews contained a total of 50 incidents. Following the independent reviews, raters from the research team then rated and compared the 50 incidents for intercoder agreement. The comparison resulted in 80 percent (n = 40) that were in 100 percent agreement, and the remaining 20 percent (n = 10) of incidents resulted in 66 percent agreement. Although 80 percent or more agreement is considered good, additional time was spent by the study investigators to review the specific lack of concordance noted (20%) between quality control reviews until consensus of the codes and their definitions was reached by the research team. Following this process, the final template of coding themes was solidified and then used by a medical anthropologist and expert qualitative researcher (S.H.) to review all interviews in accordance with the standard qualitative analytic technique [33].

RESULTS

Subjects

Table 1 shows demographic and clinical characteristics for the participants included in this analysis. In the original RCT, 71 participants had been randomly assigned to the MRP+UC group and 66 (93%) completed it. The five who dropped out before completion did so because of scheduling conflicts (n = 2), incarceration (n = 2), and illness (n = 1). When conducting the interviews at 3 mo postintervention, one participant could not be reached for follow-up, leaving 65 for this analysis. When comparing demographic and clinical characteristics between those who completed the intervention and those who dropped out, no significant differences were found.

The majority of the sample was male (98%) and aged 56 ± 5.5 yr (mean ± standard deviation), ranging from 39 to 75; 37 percent were non-white. Of the participants, 74 percent had an education after high school, and the majority were married/cohabitating (n = 32, 49%), followed by separated/divorced (n = 29, 45%), and single (n = 4, 6%). Only 9 percent were employed more than 35 h/wk. Baseline PTSD symptom severity as measured by CAPS total score was 81 ± 16.57, ranging from 48 to 121. Of the participants, 80 percent (n = 43) had experienced war zone combat trauma and 42 percent (n = 27) had been wounded in combat. Duration of PTSD symptoms was 35 ± 0.11 yr. The majority of participants (68%) identified as "both spiritual and religious."

Critical Incident Research Technique Analysis

A total of 268 triggering events were collected for analysis from 65 participants who completed the MRP (**Table 2**). An average of 4.27 ± 2.09 (median = 4.00) triggering events were reported per person, ranging from 1 to 15 events. The classification of these triggering events resulted in 11 mutually exclusive categories and 47 subcategories. Triggers included social interactions, driving, sleep disturbances, interpersonal relationships, reminiscence, environmental sounds, health problems, personal issues, media violence, dealing with death, and VA group discussions. Of these categories, the largest number of triggering events fell into the social interactions category (n = 62), where examples included difficulty waiting for service in restaurants or banks, difficulty or discomfort being in crowds, and conflicts with strangers. Driving (or traffic) was the next most frequently reported triggering event (n = 37), where rude

Table 1.
Demographic data (n = 65).

Variable	Range	Mean ± SD	Frequency (%)
Age (yr)	39–75	56 ± 5.5	—
Years of Combat	0.5–2.5	1 ± 0.7	—
Sex			
Male	—	—	64 (98)
Female	—	—	1 (2)
OIF/OEF Veteran	—	—	3 (5)
Ethnicity			
White	—	—	41 (63)
African American	—	—	17 (26)
Latino	—	—	3 (5)
Other	—	—	4 (6)
Education			
High School or Less	—	—	17 (26)
Some College	—	—	28 (43)
College Degree or Higher	—	—	20 (31)
Marital Status			
Single	—	—	4 (6)
Married/Cohabitating	—	—	32 (49)
Separated/Divorced	—	—	29 (45)
Employment (h/wk)			
<35	—	—	59 (91)
>35	—	—	6 (9)
Identifies as Spiritual/Religious			
Spiritual (not religious)	—	—	7 (11)
Religious (not spiritual)	—	—	10 (15)
Both	—	—	44 (68)
Neither	—	—	4 (6)

OIF/OEF = Operation Iraqi Freedom/Operation Enduring Freedom, SD = standard deviation.

drivers and traffic congestion were the most common. The third highest category was sleep disturbances (n = 36) and included difficulty falling asleep or dealing with nightmares.

Responses to the triggering events resulted in six mutually exclusive categories of symptoms. We found an average of 5.12 ± 2.84 (median = 5.00) responses per person, ranging from 1 to 21. Three of the six symptom categories represented the PTSD diagnostic criteria of re-experiencing (n = 56, 18%), avoidance (n = 16, 5%), and hyperarousal (n = 222, 70%), as listed in the *Diagnostic and Statistical Manual of Mental Disorders-Fourth Edition-Text Revision*. The other three symptom categories included depression (n = 13, 4%), survivor guilt (n = 7, 2%), and physical pain (n = 3, 1%). Examples of hyperarousal were most frequently reported and included irritable and/or angry outbursts, anxiety and/or panic, and inability to calm down or relax.

Following the responses to events, eight major categories captured ways of managing triggering events (**Table 3**). The two largest categories were related specifically to mantram use: using mantram effectively and mastering mantram practice, for a total of 241 out of 302 coping incidents (80%). Using mantram effectively was operationalized as having a favorable outcome following a triggering event. Mastering mantram practice was operationalized as having developed a habit of repeating the mantram so that it easily came to mind when needed. There were also 20 incidents (7%) of using mantram inconsistently with little or no effect. These 20 incidents were reported by 20 different Veterans (31%) who also reported some positive outcomes of mantram use. The remaining categories that were unrelated to mantram practice included using medications, using other spiritual practices, using breathing exercises, using other therapies, using skills from anger management, not using

Table 2.
Categories of triggering events (n = 268).

Category of Events	No. of Incidents (%)
Social Interactions	
Waiting for service (bank, restaurant, etc.)	14 (5)
Difficulty/discomfort in crowd	12 (4)
Conflict with stranger	7 (3)
Conflict with acquaintance	7 (3)
Conflict with fellow employee	5 (2)
Medical appointment	5 (2)
Difficulty participating in social event	4 (1)
Being ignored/not listened to or acknowledged	2 (0.7)
Dental appointment	2 (0.7)
Recreational sport	2 (0.7)
Being in unsafe or threatening neighborhood	1 (0.3)
Subtotal	62 (23)
Driving	
Traffic congestion	17 (6)
Rude driver/road rage	15 (6)
Driving violation/ticket	3 (1)
Driving	2 (0.7)
Subtotal	37 (14)
Sleep Disturbance	
Sleep disturbance	35 (13)
Sleep disturbance caused by mantram prior to sleep	1 (0.3)
Subtotal	36 (13)
Interpersonal Relationships	
Spouse/former spouse, girlfriend/boyfriend/partner	14 (5)
Relative	11 (4)
Offspring	3 (1)
Close friend	1 (0.3)
Lack of relationships and “feeling alone”	1 (0.3)
Fearful of making friendships	1 (0.3)
Subtotal	31 (12)
Reminiscence	
Remembering events of military service	18 (7)
Remembering flashback	7 (3)
Remembering events of previous personal life	3 (1)
Subtotal	28 (10)
Environmental Sounds	
Aircraft noise	7 (3)
Car backfiring	3 (1)
Fireworks	3 (1)
Fire flash from grill	2 (0.7)
Heavy machinery noise	2 (0.7)
Subtotal	17 (6)
Health Problems	
Chronic illness	8 (3)
Chronic pain	4 (1)
Surgery/having operation	1 (0.3)
Recovering from surgery	1 (0.3)

Table 2. (cont)
Categories of triggering events (n = 268).

Category of Events	No. of Incidents (%)
Depression	1 (0.3)
Working in consultation with psychologist	1 (0.3)
Subtotal	16 (6)
Personal Issues	
Financial concerns	9 (3)
Disability issues	3 (1)
Housing	2 (0.7)
Sexual function	1 (0.3)
Observing others who are disabled or disfigured	1 (0.3)
Subtotal	16 (6)
Media Violence	10 (4)
Television/news with violence in storyline	2 (0.7)
War movies	1 (0.3)
Subtotal	13 (5)
Dealing with Death	
Death of family member	5 (2)
Death of close friend/associate	3 (1)
Subtotal	8 (3)
VA Group Discussions	4 (1)
Subtotal	4 (1)

VA = Department of Veterans Affairs.

Table 3.
Ways of managing triggering events (n = 302).

Category of Managing Events	No. of Incidents (%)
Using Mantram Effectively*	217 (72)
Mastering Mantram Practice†	24 (8)
Using Mantram Inconsistently (little or no effect)	20 (7)
Using Medications	14 (5)
Using Other Spiritual Practices (i.e., meditation or prayer)	11 (4)
Using Breathing Exercises	7 (2)
Using Other therapies (i.e., cognitive behavioral therapy, anger management)	6 (1.7)
Other (i.e., not using mantram, using alcohol, using sleep to avoid thinking)	3 (0.3)

*Repeating mantram to manage symptom that resulted in favorable outcome as defined by participant.
†Repeating mantram to extent that it becomes habit that is easily implemented when needed.

mantram, using alcohol, and using sleep to avoid thinking. There were an average 4.89 ± 2.45 (median = 5.00) coping responses per person, ranging from 1 to 16.

Finally, the outcomes of managing triggering events resulted in 12 categories: relaxing and calming down, letting go of negative feelings, thinking clearly and rationally, diverting attention away from triggering events, focusing attention, refining mantram skills, dealing with sleep disturbances, coming back from flashbacks, slowing down, communicating thoughts and feelings more effectively, feeling in touch spiritually, and letting go of physical pain. There were an average of 6.00 ± 4.14 (median = 6.00) outcomes per person, ranging from 1 to 32. We based definitions on a review of incidents, which we categorized. **Table 4** delineates our taxonomy of these categories and outcomes.

Of the 65 participants, 60 (92%) reported using mantram repetition effectively. Mantram repetition was used most effectively for relaxing and calming down (n = 143), letting go of negative feelings (n = 58), thinking

Table 4.
Taxonomy of major mantram repetition outcomes (n = 379).

Category of Outcomes	No. of Incidents (%)
Relaxing and Calming Down	143 (37.7)
Letting Go of Negative Feelings*	58 (15.3)
Thinking Clearly and Rationally	46 (12.1)
Diverting Attention Away from Triggering Events	28 (7.4)
Focusing Attention	26 (6.8)
Refining Mantram Skills	22 (5.8)
Dealing with Sleep Disturbances	22 (5.8)
Coming Back from Flashbacks	13 (3.4)
Slowing Down	7 (2.3)
Feeling in Touch Spiritually	4 (1.1)
Letting Go of Physical Pain, Controlling Blood Pressure	4 (0.8)

*Negative feelings included "anger," "anxiety," "fear," and "bad feelings."

clearly and rationally (n = 46), and diverting attention away from triggering events (n = 28). These four categories together composed almost three-fourths (72.5%) of outcomes from using mantram repetition.

Relaxing and Calming Down

The largest category of outcomes from using mantram repetition was relaxing and calming down, accounting for nearly 40 percent (n = 143) of the total number of incidents. Veterans reported a variety of uses and situations where mantram repetition was a useful tool. Examples are depicted in the following quotes.

> The mantram was just totally new to me and it works, you know . . . if you just calm down, say your mantram and try to relax, try to deep breathe, it does calm me down.

> It's hard to explain what's going on with me now, because if I go back to prison again, I'm there for life, you know. I have that hanging on me as sort of a mantram thing, so I gotta watch what I do and I don't want to get to the point I was before, to where nobody could tell me anything . . . I can't really explain how much [the mantram] does help you. Even though I have to back off a little way, you know, where before I'd be right there up in their face; but it's calmed me.

Letting Go of Negative Feelings

The second category of outcomes, letting go of negative feelings, reflected incidents where subjects used mantram repetition to release negative feelings as a form of emotional regulation, which often led to avoiding conflicts. Example quotes related to letting go of anger and letting go of anxiety or panic follow.

> **Letting go of anger.** I'm glad I learned the mantram. I don't stay mad. I'm not angry. I'm not all stressed out. So I try to use the mantram the best I can to relieve the pressure, you know, 'cause we're like . . . it's like steam, you know, once you turn the fire up . . . you got to get rid of it, you know, and the mantram really works well.

> Well, once in a while, I get involved with my wife of 40 years and I lose my temper. And I right away can get the mantram to help me out of that situation and it blends things real well.

> **Letting go of anxiety or panic.** Yeah, it helps me cope with anxiety. You know [the mantram] was described at one point as being kind of like a pause button and it is, you know, when things are getting out of hand . . . as a result of my PTSD, I go to inappropriate places with it . . . it helps me stop that, if I remember to [repeat the mantram].

> Anxiety is a big issue for me. Emotions [inaudible] coping issue for me and I haven't had a lot of flashbacks lately. Nightmares have been infrequent, but . . . so those are two big issues where I found myself using [the mantram].

> I use it when I get up . . . first thing when I wake up. I don't know why I . . . I usually wake up in sort of a panic mode, you know, I feel anxious or something in the morning before I even get up. I don't know what brings that on, but I just, you know, mantram, and that helps me get up.

Thinking Clearly and Rationally

The third category, thinking clearly and rationally, included 46 (12.1%) incidents that described the linkages between mantram use and being able to think clearly. One respondent stated—

> [The mantram] is like a security blanket, you know. Remember Dorothy said, "There's no place like home?" For me it's similar to that. It allows me to just keep getting in that secure zone and the more I'm in that zone, the more it relaxes me and the more the thoughts drift again. It doesn't cure them, but it puts them aside.

Diverting Attention Away From Triggering Events

The fourth category, diverting attention away from the triggering event, included 28 (7.4%) incidents that described the linkages between mantram use and redirecting attention in situations where behavior needed to be controlled. For an example of diverting attention, see one respondent's quote:

> Oh yeah, and I was training myself mentally before I even went into this study, to somehow manage to think other things when those [traumatic] events took place, but the mantram sort of helped me to center them up and they give me one train of thought rather than just diverting to other thought. It gave me one train of thought to focus on, you know, repetition of course, you know, allows you to center your mind. We learned about that in the study—that in group situations, where you know your mind will tend to disconnect, so to speak, and [the mantram] allows you to keep your thoughts focused in one area and that allows the amygdala to not kick in as hard.

Focusing Attention

The fifth category, focusing attention, included 26 (6.8%) incidents that described how mantram was used to focus attention.

> I used [the mantram] today to help me this evening to do a little bit more focus, because when I focus, I can write stuff down and put that note in my bag and follow through, you see. I've got a lot of stuff tomorrow.

Refining Mantram Skills

A sixth category contained incidents that described the effect of mantram repetition on refining mantram practice. Within this category, 22 incidents (5.8%) described the use of mantram and recognition that practicing when you do not need to is necessary to make mantram repetition a habit. One respondent stated—

> Sometimes I . . . not necessarily for my symptoms . . . sometimes I'll use [the mantram] just, you know, like I was saying, a security blanket, to let myself know that everything's going to be okay.

Dealing with Sleep Disturbances

A seventh category representing another 22 incidents (5.8%) related to dealing with sleep disturbances. The remaining categories are shown in **Table 4**, with examples shown in **Table 5**.

Categories of Triggering Events and Responses to Events

The most frequently reported triggering events were social interactions, which consisted of 62 out of 268 (23%) incidents (**Table 5).** These included events related to strangers in community settings rather than interactions with close personal relationships. The second most frequently reported triggering event was related to driving (i.e., road rage and traffic congestion), representing 37 (14%) incidents. These participants reported that mantram repetition was helpful for reducing negative feelings toward other drivers and creating a sense of inner peace and calmness. Although the MRP may be helpful for reducing anger or road rage, it discourages using the mantram while driving if it leads to unsafe driving practices, such as falling asleep or becoming distracted from defensive driving. Overall, however, for these participants, mantram repetition appeared to be more helpful than harmful. No one in this study reported accidents related to mantram repetition while driving.

The third most frequent triggering event was sleep disturbance (13%). These events included nightmares, trouble falling asleep, and waking up in the middle of the night and not being able to fall back to sleep. Repeating a mantram was used to center and calm oneself, to aid in falling asleep, and to terminate nightmares.

In contrast with social interactions, the fourth most frequently reported triggering event involved interpersonal relationships (12%). Often, comments related to

Table 5.
Categories of triggering events and example responses to events.

Category	Verbatim Quote
Social Interaction	The mantram though, I've used that pretty much when I interact with people and if I get into a situation which I can become angry or that, I usually throw in the mantram and it seems to help me to contain my innermost anguish feelings of anger and I'm able to smooth things over a lot easier.
	When I am sitting at the doctor's office at the VA, I use [the mantram] and some people will come up, you know, some of the Vets will come up and start, you know, talking to me about their problems and sometimes I'm not interested in what they are talking about, but I learned to calm down and just sit there and listen. They really don't know that I'm, you know, chanting something.
	A [supermarket] woman rolled her cart into me in line, blood pressure went up; used mantram and I turned away and got in another line. Really wanted to yell at her, but didn't.
Driving/Traffic Related	Yeah, while driving. I use it all the time because there's so many nondrivers in this world and every time somebody makes an idiotic mistake, it puts me in danger and I end up using [the mantram] instead of road rage. I use the mantram to calm me down to handle the situation.
	I had a situation where I was on the freeway and this guy about ran me over and I, I uh, I got really upset and he stopped and didn't get into a physical altercation, but we got into a verbal altercation and normally it takes me days to get over that, but I said my mantram and, you know, I was able to get over it within hours.
	I use it when driving, cut off by young kids who were laughing at me. Used mantram to keep from going after them.
Sleep Disturbance	Then I'll wake up sometimes with nightmares about my military incidents and stuff and other traumatic things in my life, a beating and a robbery that took place in 2003, so different things, and you know I'll wake up and I'll be in a sweat and stuff; and I'll use the mantram to help me center and get back to sleep again.
	I use [the mantram] often when I have trouble falling asleep because, you know, I just, my mind just gets going and going and going and going and so, what I do is, I concentrate on my mantram and ah, ah also my breathing and then I can finally settle down to go to sleep. Otherwise, I just lay there and my agitation just won't, won't go away.
Interpersonal Relationships	I use mantram often but it depends on the situation. Situations I use it in are when I am upset with my wife or for disagreements. I sit back and use mantram to calm myself and not get angry.
	If I have a fight with my girlfriend or something like that, instead of just getting all bent out of shape when she's on the attack, I'll use [the mantram] to just sort of relax and get back on a firm level footing again so I don't have spikes.
	Basically I think what [the mantram] does is it gives me pause, to think about doing what I would think would be the correct thing in a situation with relatives or friends or whatever, when I could say something, you know, just throw it out there and hurt someone's feelings or I can think about it and not say it, or should I say it or whatever, but [the mantram] gives me time to think about what I could do under the, you know, circumstances.
	Well, once in a while, I get involved with my wife of 40 years and I lose my temper. And I right away can get the mantram to help me out of that situation and it blends things real well.
	The big issue for me, to just not isolate and not shut down emotionally and to remain in the moment. Those are really the issues that I've struggled with and [the mantram's] been helpful.
Reminiscence	Specifically the one [trauma] . . . I don't know if I can discuss that [trauma] with you, it's that airborne one. But also other events, you know, in training and stuff like that, when there are accidents and I was responsible for, but they were sort of out of my control. [The mantram] just focuses. It puts my mind in the proper framework, in that I don't dwell, and just focus on the mantram and it helps thoughts pass.

Table 5. (cont)
Categories of triggering events and example responses to events.

Category	Verbatim Quote
Environmental Sounds	I am really close to [navy base], so once in a while a chopper overhead will trigger feelings of anguish, you know. I throw the mantram on, that's just momentarily. . . the sound of the chopper, that's what I relate to, you know. For that nanosecond or moment or minute, I think I am back in [place of combat] and then I realize I'm not there really, I'm in beautiful [city]. The mantram with that, brings me back to touch reality. . . . I get back to reality and I say, "Okay, this is not there. I'm here now and I'm okay."
	Like it's oftentimes when I like work at the football game and they have a jet fly over. And it scares the hell out of me and I really get . . . I mean, I'm really upset. With the mantram, you know, it helps me to come back to and get things in focus and be able to work, or I'd be jumping up on counters and everything else when they fly over 'cause it's so surprising.
Health Problems	I was at the dentist and, you know, they were testing to see how deep the cavity was, and he blew on it with cold air and I said my mantram. But normally I have severe pain from my back and I use it there, uh, I'll lay down and just calm myself with my mantram.
	Because of some of my health issues, I have to do exercise and sometime I can really get to the peak and it's like I need a little strength or something . . . a little more strength to complete my exercise and I use [the mantram] during those periods.
Personal Issues	I was laid off from my job and I really liked that job and for about a week, you know, I was . . . I live downtown in a residential hotel, and for about a week, I wasn't doing anything. I didn't apply for unemployment or anything. I was just sitting in my room and oh my god, oh my god, and then I thought I should use my mantram, so I did and it really calmed me down. It calmed me down and it made me go searching for a job and when I did go searching for a job, I remembered [agency name] was putting up a winter shelter. So I went over there and applied for that and got that job. So I guess using my mantram kept me rather levelheaded, down-to-earth and, you know, able to, you know, get through that ordeal.
	Yeah, when I get my bills. I have a lot of stress 'cause I have a lot of bills right now. . . . I'm not financially stable, so whenever I get [bills] now, I get kind of stressed out and I use my mantram. My mantram brings me back down to a frame of mind where I can think about a situation, reevaluating whether or not to freak out, and it kind of like, smoothes things over when that happens. It's like a crutch.
Media Violence	Sometimes when I'm watching television and some things come up that I need, that I probably don't want to see, so I have to repeat my mantram 'cause it kind of like, gets me out of the stress or whatever. Like sometimes when I watch the news they report what's going on today and that kinda gets me upset 'cause it reminds me of some of the things that happened when I was there.
Dealing with Death	I think a lot about Vietnam. I had a close friend there who passed away and died there and I think of him a lot, and when I do, I think about him for a few minutes. And then I say, "Well, you know, I don't want to do this, you know," and I start the mantram and it takes me away from those thoughts.
	I've had serious blows with death and health issues since the last meeting. Um, the death issues really cause me to repeat [the mantram]. I needed [the mantram] during that period of time to help me.
VA Group Discussions	The more things that I am doing these groups, it's bringing to the surface a lot of things that were buried for so many years because of the alcohol and drugs I used to bury those things and I'm no longer drinking or using drugs. I haven't in over three years and so all these memories are coming fresh . . . it's like I'm starting all over again from the time I got out of the military, so I constantly now am having to use the mantram.

VA = Department of Veterans Affairs.

having fights, getting upset, problems communicating, or impatience in listening to others. Feelings of loneliness and isolation were also captured in this category. For examples of remaining triggering events, see **Table 5**.

Negative Perceptions of Mantram Use

Most reported incidents (99%) of mantram use were positive and appeared to enhance the ability to cope with life stressors. However, a few negative outcomes were reported by a Veteran who also reported many positive outcomes of mantram use.

> [The mantram] doesn't work all the time though. But most of the time it will work, you know. In other words, it's taken away a lot of that mental anguish that I usually carry. . . . If I use the mantram too late in the evening, it for some reason gives me trouble through the night with bringing back nightmares and so forth. I'm not sure what the correlation is, but I'm fairly certain that that's the truth because I've done it several times and the same result has occurred each time. I'm not sure why. It must stimulate something in my mind that causes the nightmare sequences to kick in, so I don't dream like normal people dream. I have reruns. It's the same things over and over and over again and most of the time it used to be where they were, you know, I reacted to them violently, you know, thrashing and that type of thing and I don't do that anymore. But when I was using the mantram, I went back into that mode again. So I don't use it late at night. Other than that, I haven't had any problem with the mantram.

The same Veteran also reported that he used mantram successfully while driving in traffic.

> Day-to-day traffic, I like to use the mantram when I get cut off or, you know, the stupid driver syndrome, you know what that is like around here, and I use it all the time for that. I don't get excited anymore. I'm not into hand gestures as I used to be and yelling out the window and things like that. I don't do that anymore. Now I'm just a very calm, cool, collected driver and that's certainly the mantram at work.

The therapeutic factors of the intervention cannot be exclusively related to the mantram repetition tools, but also to the group support provided in class meetings. When participants were asked whether they felt the group meetings were helpful, 57 (88%) reported positive comments about being in a group, 3 (5%) reported the group was not helpful, and the remaining 5 (7%) did not respond. An example of how group support was received—

> Well, I learned there's other people like me out there and I can talk to them, you know. At least I started talking to the guys in the groups, whereas before, I didn't even say hi to people or, you know, just . . . it's easier not to say anything, but now I can talk a little bit.

DISCUSSION

As more of our wounded warriors return home, the VA will be challenged to provide care for the estimated 25 percent who seek treatment for PTSD [30]. Since stigma continues to be associated with mental illness and mental healthcare [8], it is critical that interventions be proposed that are less stigmatizing for those seeking mental health treatment. It is also important to offer support and treatment as soon as possible to avoid long-term duration of PTSD. However, some Veterans refuse treatment and are not yet ready to engage in trauma-focused, evidence-based treatments. In such cases, programs such as MRP or BSS may be valuable alternatives and serve as an adjunctive support for Veterans.

As part of a larger RCT related to the effect of an MRP on Veterans in reducing PTSD symptoms [25], researchers conducted a qualitative study that probed the use of mantram repetition. Using the CIRT method, Veterans were asked about their use of the mantram intervention. Of the 71 study participants who completed the MRP, 65 (92%) described 268 triggering events where they used the mantram to manage their responses to these events. Ninety-nine percent reported instances where the intervention enhanced their coping. Mantram repetition was mostly effective with symptoms related to hyperarousal, including elevated anger and irritability, sleep disturbances, and inability to relax and release emotions. Given that hyperarousal symptoms tend to be a chronic underlying problem for Veterans, the practice of mantram repetition suggests its application for ordinary everyday stressors in life to improve focus of energy and mood. This finding is validated by the quantitative data reported in the larger RCT. Decreases in hyperarousal were statistically significant compared with the control (UC) group

[25]. The most striking observation from these interviews is the wide range and variety of situations where mantram repetition was applied and resulted in a positive outcome. Some of the outcomes prevented violence or harm to others. Mantram also appeared to improve interpersonal relationships with both strangers and family or friends.

Another notable observation was the importance of consistent, everyday practice and repeating the mantram when not in distress. Many reported using the mantram like a "security blanket" to keep themselves calm and centered. Some used it in anticipation of stressful events, indicating that the practice appeared to have a prophylactic effect in managing PTSD symptoms. Some reported using it upon waking up in the morning as a way to start the day and also at night before going to bed to help alleviate sleep disturbances. Because this practice can be used silently, at any place and any time, it appeared to be integrated into these Veterans' lives.

On the other hand, for those who used it inconsistently or who didn't make an effort to practice regularly, the mantram was less or not at all helpful. Without regular practice, Veterans forgot to use it when needed or remembered it after the event. As with any behavioral intervention, consistent practice and making a habit of mantram repetition is necessary for good outcomes. With this knowledge, it would be advantageous to provide monthly group refresher sessions or encourage email and telephone text reminders to practice. These additional supports might be added to the current intervention.

The study had some limitations. The demographics of this sample were primarily male, middle-aged, and with chronic PTSD, which limits generalizability. Since this study was on Veterans as a specific subpopulation, it is not possible to generalize these positive findings to other populations. Future research efforts must also be directed toward women and recent cohorts of returning Veterans from Iraq or Afghanistan to synthesize research with all eras of Veterans for patterns of similar reactions. Nevertheless, similar mantram stories describing the effect of calming and letting go of negative feelings have been found in other studies conducted in Veterans without PTSD [18], in adults living with human immunodeficiency virus [19], in family caregivers of Veterans with dementia [34], and in healthcare workers [35–36].

Another possible limitation stems from the way in which reliability of the codebook was assessed using the percent agreement method versus the kappa coefficient (Cohen kappa) to validate the reliability of the coding schema used to analyze the CIRT interviews. Percent agreement does not take into account chance agreement and base rates.

CONCLUSIONS

In conclusion, these findings show that mantram repetition is a versatile tool that can be used in a variety of situations for managing PTSD symptom severity that gets triggered from a wide variety of events. Findings demonstrate that Veterans are open and willing to participate in a nontraditional spiritually integrated program. These qualitative findings also support the quantitative results of MRP reducing self-reported and clinician-assessed symptoms of PTSD [25]. Using a mixed-methods approach further validates the outcomes of the MRP.

The MRP appears to provide an adjunctive, nonpharmacologic, and therapeutic form of emotional self-regulation. For those who refuse or drop out of other trauma-focused therapies, MRP may offer a unique set of coping skills that might assist Veterans in regulating their emotions to where they are more capable of receiving evidence-based treatments. It has the advantage of being safer, with no reported side effects, and can be taught in the form of education rather than therapy, which may help with reducing the stigma of mental health treatment. Finally, this substudy, along with the larger RCT, on MRP provides an example of how to conduct research on complementary therapies in a Veteran population located in a government setting. As the science in this area advances, new complementary therapies for PTSD may embrace a more holistic, comprehensive perspective toward health and wellbeing.

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