The Receptiveness of Stress Management Techniques by Military Personnel

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Abstract. Many military service members suffer from stress. Sixty Soldiers participated in a study designed to test receptivity to stress management techniques. Preliminary analyses of surveys and a focus group suggested that participants not only liked practicing relaxation techniques but would also continue practicing these after completion of the present study.

Keywords. Stress Management Techniques, Military Service Members

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Introduction

Anxiety (or “stress”) is one of the most prevalent psycho-physiological problems in the USA, costing the nation up to $300 billion a year [1]. Military personnel may also experience stress as they tend to operate in very stressful environments. Stressed individuals tend to tense their muscles and breathe in a very shallow manner. A few stress management techniques (SMT) have been designed to alleviate these psycho-physiological reactions. Progressive Muscle Relaxation (PMR) [2] is designed to help individuals tense and then relax their muscles in a progressive manner (head-to-toe or toe-to-head). Similarly, Controlled Breathing (CB) helps show individuals how to use their diaphragms when breathing. Both of these techniques have proved efficacy to help treat anxiety [3–4] and other disorders. Sadly, the number of times that military service members spend in highly-stressful environments tends to outnumber the minutes invested in SMT. Furthermore, military service samples tend to be mainly composed of males who might perceive SMTs as “soft tools” for a rough world.

Therefore, the purpose of this study was to test the perception of cost and time-effective SMT by military medical personnel.
1. Method/Tools

This study’s sample was composed of 60 participants randomly assigned and equally distributed to either an Experimental Group (EG) or a Control Group (CG). As a screening method, all participants answered both the Post Traumatic Stress Disorder Checklist for Military personnel (PCL-M) [5] and the State-Trait Anxiety Inventory (STAI) [6]. From Days 01-03, the EG would look at a different (but equivalent) video of an island zone (“Dream Island”) [7] that contained an embedded script explaining how to practice both PMR and CB (see Figure 1 a and b for examples of one of the video screen shots and scripts). In the mornings, this group would practice these techniques while watching a video displayed on a screen (see Figure 2). During each of those three nights, they would watch the same video watched earlier in the day, but via a portable play station.

Finally, on Day 4, all participants answered the following questions as part of a Focus Group (see Figure 3): “How did you feel while practicing these relaxation techniques?; Which one did you like the best?; What did you like better, the verbal/written instructions, the video, or the virtual reality environments?; Would you use these techniques upon graduation?; How can we improve this relaxation program?; and How can we improve this relaxation program?”

2. Results

Most of the sample (n = 60) was composed of Caucasian (n = 43, 72%), males (n = 39, 65%), under the age of 33 (n = 30, 60%), married (n = 39, 65%) and with at least one child (n = 34, 59%). They were mainly officers (n = 36, 60%) in the Regular Army (n = 45, 75%) that had been previously deployed (n = 31, 52%) and were getting ready for another deployment (n = 38, 63%). Most of them (n = 48, 80%) had previous experience “…playing w/games, virtual reality, etc.” Scores form both the STAI and the PCL-M suggested that our sample was similar to non-clinical normative samples.

During the focus groups, 21 participants from the EG expressed feeling either the same or more relaxed while practicing the relaxation techniques. Sixteen of them also

![Figures 1. a and b. An example of one of the “Dream Island” zones and scripts](image)

“Lift up your eyes to the blue sky where you see the rainbow. The colors shimmer in the light. It’s a beautiful day. Now, gently tighten your abdomen and lower back and take a deep breath through your nose, counting from 5, 4, 3, 2, 1. Hold for 2; and then relax your abdomen and lower back and exhale: 5, 4, 3, 2, 1. Your body is beginning to feel heavy...”

1 The Dream Island software has been used previously in clinical/research efforts [7] However, for this study, these scripts were (a) translated from Italian to English and (b) the PMR and CB simultaneously practiced.
seemed to like the video experience more than just written instructions about how to relax.

Interestingly, the question: “Which one did you like the best?” developed different type of answers. That is, some talked about the SMTs while others talked about the video scripts. Most of the participants seemed to like the CB technique followed by those that liked the PMR, and those that liked both. Most of them liked the first video (which included a rainbow), followed by those that liked the third, and those that liked the second one. Finally, half of the sample (n = 29) considered practicing these techniques after this study.

3. Conclusion

The present study was designed to investigate more about the receptiveness of SMT by military service members. Despite of a potential psychological “denial” or “Army Strong” mentality, the sample appreciated the importance of taking control of their minds and bodies. Further analysis by gender and rank might provide more information on visual preferences (e.g., rainbow) and SMTs. Gladly, even though participants did not seem to be especially stressed or anxious (per either the PCL-M or the STAI) at the beginning of this study, most of them did suggest wanting to continue SMTs for years to come.

References