Teaching Mental Skills for Self-Esteem Enhancement in a Military Healthcare Setting

Jon Hammermeister, Michael A. Pickering and LTC Carl J. Ohlson

The need exists for educational methods which can positively influence self-esteem, especially in demanding military healthcare settings. Warrior Transition Units (WTU's) are tasked with the challenging mission of caring for seriously injured or ill U.S. Army Soldiers. This paper explored the hypothesis that an educationally-based Mental Skills Training (MST) intervention can enhance self-esteem in members of a Warrior Transition Unit in the U.S. Army. The sample was comprised of 27 WTU cadre members who participated in an Army Center for Enhanced Performance (ACEP) MST educational workshop at a large Army installation on the West Coast. Instruments included the Ottawa Mental Skills Inventory (OMSAT-3; Durand-Bush & Salmela, 2001) and the Self-Esteem Rating Scale (SERS; Wagnild, 1993). Results showed that SERS scores were significantly higher following the intervention. Furthermore, the ACEP instructional components of self-confidence, imagery, and mental practice were significant predictors of self-esteem. Results suggest that MST might be a viable educational approach for enhancing self-esteem in the WTU cadre.

Introduction

Although the U.S. military is responsible for fighting and winning the nations' wars, caring for and rehabilitating Soldiers who become seriously injured or ill while serving their country is also of prime importance. To address this concern the Army has developed "Warrior Transition Units" (WTU's) to aid wounded warriors through their recovery process and their transition either back to Army units or to civilian life. Not surprisingly, as engagement in the War on Terror continues, the number of injuries to Soldiers, and therefore the number of Soldiers being assigned to WTU's, is increasing. For example, approximately 6000 Soldiers were assigned to WTU's in 2007, but this number is projected to grow to over 20,000 in 2008 (Kennedy, 2008). This greater than three-fold rise in Soldiers assigned to WTU's substantially increases the workload and the associated amount of job-related adversity experienced by the WTU cadre members (Kennedy, 2008).

Positive self-esteem is an important attribute for workers wishing to cope effectively with worksite adversity in any demanding situation (Folkman, 1998). This is especially true in healthcare settings as workers with high self-esteem are likely to affect patient care in positive directions (Abraham, 1999; Browning, et al., 2006; Chen, Thomas and Casper 2004). Having high self-esteem means healthcare providers feel good about themselves. As individuals become more positive about themselves, they generally become more positive about others, resulting in a more positive "bedside manner" which is essential for caregiver success (Andersson 1993).

While it is difficult to argue the need for good self-esteem among healthcare workers, little is known about how to enhance this attribute within the military healthcare community, and more specifically, with members

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of Warrior Transition Units.

Mental Skills Training (MST), developed primarily for enhancing mental fitness and performance in sport settings, represents a potentially innovative educational approach for enhancing attitude-related cognitions such as self-esteem. However, to date, no studies have investigated its potential for impacting cognitions within military healthcare environments. Therefore, the focus of this study was to explore the possible utility of using this type of instructional approach to enhance self-esteem among the WTU cadre.

Warrior Transition Units

In October of 2007 the Army established 35 WTU's at major installations across the force to streamline care for wounded, injured, and seriously ill Soldiers. The WTU mission is to facilitate the healing and rehabilitation of Soldiers, return them to duty when possible, or to prepare them for a successful life as a veteran in their community. A typical WTU company will have a Commander, Executive Officer, First Sergeant, six Platoon Sergeants and 18 Squad Leaders. A key element of the WTU framework is the "Triad of Support" which consists of a Primary Care Manager, who is a physician; a Nurse Case Manager, who is a registered nurse; and a Squad Leader, usually at the rank of Staff Sergeant, who will oversee 12 patients.

The Army Medical Command currently staffs WTU's with a cadre of approximately 2500 personnel. This includes approximately 750 active-component Soldiers, 380 National Guard Soldiers, 380 Army Reserve Soldiers, and 915 Army Civilians (Sheftick & Holzer, 2007).

Self-Esteem

Rosenberg (1965) provided a broad and frequently cited description of self-esteem as a favorable or unfavorable attitude toward the self (p. 15). The mechanisms which facilitate the development of self-esteem are complex, however, Petlichkoff (2004) identified the importance of an individuals' mental "skill-set" (e.g., self-confidence, ability to concentrate, goal-setting skill, ability to control emotions, etc.) as being an important contributor to psychosocial health, and self-esteem in particular. Similarly, Bandura (1997) and Flammer (1990) found that individuals with high self-efficacy beliefs, a construct strongly related to self-confidence (Feltz, 1988), also report strong feelings of well-being and high self-esteem in general.

Self-esteem and healthcare worksite outcomes. Self-esteem is positively associated with work-related outcomes in healthcare settings. Chen, Thomas and Casper (2004) identified self-esteem as an attribute that predicted increased job satisfaction, organizational commitment, and job involvement in a sample of 159 healthcare employees. Improvement in self-esteem has also differentiated employees who exhibit long-term job burnout from those who do not (Browning, et al., 2006). Evidence also suggests that self-esteem may mediate the antecedents of job complaining behavior (Heck, Bedeian & Day, 2005) as well as the relationship between actual job inequity, job satisfaction and intended job turnover (Abraham, 1999). Finally, in a qualitative study of nurse hospice workers, Olthuis and colleagues (2007) identified self-esteem as an important contributor to a nurses ability to positively view themselves and their world. Olthuis argues that a nurses' view of themselves is intertwined with how they view and interact with their patients and will ultimately influence the quality of their job performance.

Mental Skills Training

Although the notion that self-esteem can positively influence healthcare worksite performance seems apparent, little inquiry has examined the most effective methods of enhancing this attribute in military settings. One possible approach may lie in the application of Mental Skills Training (MST). MST refers to the systematic and consistent prac-

tice of techniques and strategies designed to enhance mental skills that facilitate optimum performance (Vealy & Campbell, 1988). MST is typically taught in an education context, as opposed to a clinical one. MST programs have been used extensively in sport settings to develop psychological dexterity (e.g., self-confidence, attention control, appropriate management of energy) that enhance individuals' ability to use his or her mind effectively in a variety of performance situations (Gould & Damarjian, 1998).

The Army Center for Enhanced Performance (ACEP) is a new Army program tasked with improving Soldier functioning through the delivery of MST-based educational curricula. ACEP provides instruction to Soldiers in six primary areas related to performance enhancement: 1) mental skills foundations, 2) self-confidence, 3) goal-setting, 4) energy/emotion control, 5) attention control, and 6) imagery.

Petlichkoff (2004) has suggested that mental skills training can influence components of psychological well-being, including self-esteem. However, no studies have appeared that suggest how MST might enhance well-being of individuals working in military healthcare settings, nor does any data exist showing which MST skills may be the most appropriate to target. Thus, the purposes of this study were (1) to describe changes in self-esteem scores reported by WTU cadre members before and after an ACEP MST educational intervention, and (2) to identify mental skills that most effectively predict self-esteem.

Method

Participants

Participants in this study were 27 individuals from Warrior Transition Units (WTU's) located at a large military base on the west coast. The sample was comprised of 14 males, 12 females, and one individual who did not identify his or her gender. There were 16 military enlisted personnel ranging in grade from E-5 to E-7, 5 civilian nurses, 4 civilian social workers, and 2 civilian occupational therapists. Ages ranged from 24 – 57 with a mean of 38.3 years.

Instruments

Demographic and Physical Health Questionnaire. The demographic questionnaire was designed specifically for this study and assessed basic demographics such as age, rank, gender, and occupation.

Ottawa Mental Skills Assessment Tool-3. Durand-Bush and Salmela (2001) developed The Ottawa Mental Skills Assessment Tool-3 (OMSAT-3) to measure a broad range of mental skills thought to be relevant for sport performance. It includes 48 items, and assesses 12 mental skill scales that are grouped under three broader conceptual components: (a) foundation skills (goal-setting, self-confidence, commitment), (b) psychosomatic skills (stress reactions, fear control, relaxation, activation), and (c) cognitive skills (imagery, mental practice, focusing, refocusing, and

Table 1
Summary of Stepwise Selection in Multiple Regression Analysis of OMSAT-3 Variables Predicting Self-Esteem

Variables Entered	Step Entered	Partial R^2	Model R^2	Beta	*F*	*p*
Self-Confidence	1	.41	.41	.41	15.30	.0004
Imagery	2	.08	.49	.60	3.40	.08
Mental Practice	3	.06	.55	-.33	2.50	.13

competition planning). The OMSAT-3 was selected for use in this study because it assesses a set of mental skills that are similar to those targeted by the ACEP educational program.

Each item on the OMSAT-3 is answered on a "strongly disagree" to "strongly agree" 7-point Likert scale (e.g., "I am determined to never give up"). Durand-Bush & Salmela (2001) have reported acceptable internal consistency and temporal stability of the OMSAT-3.

In our study, internal consistency estimates of the OMSAT-3 subscales varied from .66 to .92, with a mean value of .80.

Self-Esteem Rating Scale. The Self Esteem Rating Scale (SERS; Nugent & Thomas, 1993) is a 40-item instrument designed to provide a clinical measure of self-esteem. Factor analysis of the SERS (Nugent & Thomas, 1993) has confirmed the uni-dimensional nature of the SERS, with all 40-items loading positively on a single factor. SERS items are answered on a "never" to "always" 7-point Likert format (e.g., "I feel that I am an attractive person"). Twenty of the items are scored positively and twenty are scored negatively yielding a possible range of scores from -120 to 120. The SERS has demonstrated strong internal consistency as well as evidence of content and factorial validity, and construct validity (Nugent & Thomas, 1993).

In our study, the SERS demonstrated strong internal consistency displaying an alpha coefficient of .97.

Procedure

Following United States Military Academy (USMA) Institutional Review Board approval, WTU cadre members were asked to participate in the study prior to their engagement in a regularly scheduled Army Center for Enhanced Performance (ACEP) educational workshop. Participation in the study involved completion of the survey instruments described above prior to and following the delivery of the 12-hour ACEP curriculum.

The ACEP educational intervention for the WTU consisted of eight 1.5 hour educational modules designed to enhance the cadre's skills and use of performance psychology principles. The eight modules included: 1) mental skills foundations, 2) self-confidence, 3) goal-setting, 4) attention control, 5) energy management, 6) imagery for healing, 7) life-coaching theory, and 8) team building.

Results

Pre-Post Differences in Self-Esteem

Results revealed a significant effect from pre- ($M = 78.85, SD = 31.74$) to post-test ($M = 89.82, SD = 26.73$) scores on the SERS ($t(23) = -3.26, p = .003$).

Predicting Self-Esteem

Stepwise multiple regression was used of SMR was used to identify which subscales of the OMSAT-3 made significant contributions to the prediction of self esteem scores. A three variable solution was found, accounting for 55% of the variance in self-esteem scores, and included self-confidence, imagery, and mental practice as predictor variables (see Table 1. Because of the exploratory nature of this study, alpha levels were set at .15 for inclusion in the model.

Discussion

MST Training and Self-Esteem

Mean SERS scores were significantly higher following completion of the 12-hour ACEP intervention. Further, multiple regression results revealed that self-confidence, imagery, and mental practice uniquely predicted cadre members' self-esteem scores.

Self-confidence. Self-confidence training was a major part of the ACEP educational intervention and focused on teaching cadre members how to a) exercise selective perception (Gauron, 1984), b) control their self-talk (Zinsser et al., 2001), c) employ meaningful

affirmations (Rushall, 1979; Syer & Connolly, 1984), and d) to effectively interpret and attribute successes and failures (Seligman, 1991; Weiner, 1985). Of the potential OMSAT-3 predictors, self-confidence accounted for the most variation in SERS scores. This finding clearly suggests that educationally-based self-confidence curriculums may also be a viable technique for enhancing self-esteem.

As this study was correlational in nature, the mechanisms driving this finding still remain unknown. However, the well-known link between self-confidence and self-efficacy may provide some clues. Self-efficacy (Bandura, 1977) is a specific self-perception, and has been referred to as a situational specific form of self-confidence (Feltz, 1988). Confidence (defined as the firmness or strength of one's belief; Bandura, 1997) has been used as an overarching concept that encompasses self-efficacy as well as the notion of competence. Given that relationship, our finding seems consistent with Bandura's contention (1997) that self-efficacy is strongly related to self-esteem. Bandura (1997) argued that efficacy expectations to perform a given task could influence perceptions of self-esteem when the success/failure is heavily tied in with self-worth. In our study, it is possible that WTU cadre members placed a high degree of importance to their job-related activities, thus, self-esteem is likely to be derived from the cadre's efficacy expectations about their job rather than the reverse. The MST intervention, we believe, provided educational material which enhanced the WTU cadres' efficacy expectations about their ability to perform their job, thus influencing their self-esteem. Unfortunately, the cross-sectional design of this study does not allow for confirmation of the directionality of these relationships.

Imagery. Imagery's role as a significant predictor of self-esteem is also noteworthy. Numerous studies have revealed that imagery has been used effectively by outstanding performers in various settings (see Martin, Moritz, & Hall, 1999 for a review) and in a variety of ways (Rushall, 1988). One commonly used function of systematic imagery for improving performance and well-being includes motivational components for enhancing self-confidence (Callow, Hardy, & Hall, 1998).

WTU cadre members in this study were instructed to image successful execution of their jobs. They were also instructed to develop imagery scripts and were guided through the process of implementing these scripts as a tool for more systematic imagery practice. Thus, cadre members were able to refine their imagery use during the intervention by more consistently creating images that were positive, self-reinforcing, and well controlled. In turn, these types of positive images may have contributed to how the cadre members' "viewed" themselves, and thus providing a potential the link to improved self-esteem.

Mental practice. Finally, the regression results highlight the importance of mental practice (e.g., the frequency with which systematic mental training occurs) as an additional behavior that might further enhance self-esteem. Since the results of this study suggest that self-confidence and quality imagery ability appear to be related to self-esteem, it's important to note that the presence of these skills may not be enough. As self-confidence and imagery need consistent reinforcement to be optimally integrated into one's mental skill-set (Vealey & Campbell, 1988; Callow, Hardy, & Hall, 1998), the systematic and consistent practice of these skills may be an integral part of the process of maintaining self-esteem.

Limitations

The findings of this exploratory investigation were based on a small (n = 27) sample of the WTU cadre, and without a comparison group, we cannot rule out alternative explanations for the improvements reported in self esteem. Likewise, the cross-sectional nature of the design does not facilitate causal con-

clusions regarding the relationship between mental skills and self esteem, nor did this study address potential moderators of the relationship between mental skills and self-esteem. The need clearly exists for more comprehensive investigations with larger samples.

Summary

This study was one of the first to suggest that Warrior Transition Unit cadre members' self-esteem can be positively influenced by a Mental Skills Training intervention. Participants in the MST intervention reported improvements in self-esteem. The MST approach, with specific emphasis on self-confidence building, imagery use, and systematic mental practice, may be an effective tool for helping this group deal with the adversity they face in the worksite.

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