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Post-Deployment Military Mental Health Training: Cross-national Evaluations

Heather M. Foran<sup>1</sup>, Bryan G. Garber<sup>2</sup>, Mark A. Zamorski<sup>2</sup>, Mariane Wray<sup>3</sup>, Kathleen Mulligan<sup>4</sup>, Neil Greenberg<sup>4</sup>, Carl Andrew Castro<sup>5</sup>, & Amy B. Adler<sup>1</sup>

<sup>1</sup> US Army Medical Research Unit-Europe, Walter Reed Army Institute of Research, Nachrichten Kaserne Karlsruher Str, 144, 69126 Heidelberg, Germany

<sup>2</sup> Canadian Forces Health Services group, 1745 Alta Vista Drive, Ottawa, ON K1A 0K6, Canada

<sup>3</sup> HQ Joint Forces, 2 Seddul Bahr Road, Trentham, Upper Hutt, Wellington, New Zealand

<sup>4</sup> Academic Centre for Defence Mental Health, King's College London, Weston Education Centre, Cutcombe Road, London SE5 9RJ, UK

<sup>5</sup> Military Operational Medicine Research Program, US Army Medical Research and Materiel Command, Frederick, MD

Author Note

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### **Abstract**

Deployments increase risk for adjustment problems in service members. To mitigate this increased risk, mental health training programs have been developed and implemented in several nations. As part of a coordinated effort, three nations adapted a US mental health training program that had been validated by a series of group randomized trials demonstrating improvement in post-deployment adjustment. Implementation of evidence-based programs in a new context is challenging: How much of the original program needs to remain intact in order to retain its utility? User satisfaction rates can provide essential data to assess how well a program is accepted. This paper summarizes service member ratings of post-deployment mental health training and compares ratings from service members across four nations. The participating nations (Canada, New Zealand, United Kingdom, and the US) administered mental health training to active duty military personnel in their respective nations. Following the training, military personnel completed an evaluation of the training. Overall, across the four nations, more than 70% of military personnel agreed or strongly agreed that they were satisfied with the mental health training. Although some differences in evaluations were observed across nations, components of training that were most important to overall satisfaction with the training were strikingly similar across nations. Fundamentally, it appears feasible that despite cultural and organizational differences, a mental health training program developed in one nation can be successfully adapted for use in other nations.

Key words: military personnel, prevention, mental health training, deployment, user satisfaction.

### Post-Deployment Military Mental Health Training: Cross-national Evaluations

Military personnel are frequently exposed to significant stressors during deployment (Hoge et al., 2004), and military personnel are at risk for a variety of mental health problems such as post-traumatic stress disorder, depression, alcohol abuse, and relationship difficulties following deployments (Fear et al., 2010; Iversen et al., 2009; Milliken et al., 2007; Jacobson et al., 2008; Sareen et al., 2007; Smith et al., 2008; Thomas, Wilk, Riviere, McGurk, Castro, & Hoge, 2010). The transition from deployment to home is also characterized by increased reporting of symptoms over time in US troops (Bliese, Wright, Adler, Thomas, & Hoge, 2007, Milliken et al., 2007) and to a lesser degree in UK military personnel (Fear et al., 2010). Thus, developing mental health training to better prepare military personnel to navigate the post-deployment transition is a priority for nations deploying military personnel.

While many nations conduct mental health training with service members, few of these programs were scientifically validated (Mulligan, Fear, Jones, Wesseley, & Greenberg, 2010). One noted exception is post-deployment Battlemind Training, developed by the US. Three group randomized trials demonstrated that Battlemind Training resulted in significantly fewer mental health symptoms over the four to six months following return from a combat deployment, although effect sizes were small (Adler et al., 2007; Adler et al., 2009; Thomas et al., 2007).

Given this evidence of efficacy and the need to address the psychological difficulties associated with deployments, several nations selected Battlemind Training as the basis for developing their own training packages. Core elements of Battlemind Training were identified and each nation adapted and revised the training to fit their own particular cultural and deployment context.

At its core, Battlemind Training was designed to target individuals in a high-risk occupational context and was tailored to address the specific needs of service members returning from combat. In keeping with the key training principles described by Castro and Adler (2011), the training was focused on concerns identified in a systematic assessment of service member mental health (e.g., Hoge et al, 2004) and used examples that were relevant to soldiers. Rather than simply review stress management principles, the core training was designed to focus on what to expect during the transition home, what actions to take to facilitate the transition, and how service members and leaders could support one another. The emphasis was on safety, relationships, and common physical, social and emotional reactions to combat. The key message throughout the one-hour training was that while certain skills served individuals well during a combat environment, these skills needed to be adapted for the transition home. By reframing the transition in this way, the training emphasized soldier strengths that could be used to adjust to the home environment (see Adler et al., 2009 for a review).

Using the Castro and Adler (2011) principles as a guide, the UK adapted the training for use with their service members returning from deployment while preserving core training components. The UK version (also called Battlemind) was then tested in a group randomized trial and found beneficial in terms of reducing binge drinking, but not with regard to overall mental health or PTSD symptoms (Mulligan et al., 2012).

While other randomized trials were not conducted with Battlemind, other studies have supported the finding that brief behavioral health training following deployment could be helpful (e.g., McKibben et al., 2009; Garber & Zamorski, in press; Jones, Burdett, Wessely, & Greenberg, 2010). Recognizing the importance of post-deployment transition training, Technical Panel 13 of The Technical Cooperation Program (TTCP) established the goal of developing

evidence-based, standardized, mental health training for military personnel. This working group, composed of five member nations (Australia, Canada, New Zealand, the UK, and the US), initiated a comparison study of post-deployment training. The Canadian, New Zealand and UK training were based on the original US Battlemind Training (Australian data not available). Although only two nations had conducted a randomized trial (US and UK), all four conducted a program evaluation. In an effort to be consistent across nations, each nation administered a brief post-training evaluation survey targeting overall satisfaction with training as well as user acceptability of facets of the training.

### Program Evaluation

While efficacy research is critical to determining the impact of a training program on service members, user acceptability research is also important because positive views of a particular training program may result in greater attention, support, and enthusiasm for that program which, in turn, may have more positive implications for long-term implementation and organizational acceptance. Assessment of user acceptability can also provide information on perceptions of training which can lead to training improvements and benefit program dissemination and implementation (Greenberg, Langston, Iversen & Wessely, 2011; Castro & Adler, 2011; Walter, Coulter, Hilton, Adler, Bliese, & Nicholas, 2010). The present study is the first to systematically examine user acceptability ratings of comparable post-deployment mental health training across several nations. The first goal of this study was to examine the pattern of overall satisfaction with mental health training across nations.

It is likely that the positive evaluations of the training are influenced by two inter-related components – training content and training process. Training content reflects the skills learned, logistics of the training, and new knowledge conveyed. Training process can be conceptualized

as reflecting relational process factors such as the group interaction, emotional experiencing, trust, and rapport. Factor analytic results of post-deployment training evaluation items administered to US soldiers returning from Iraq have identified that content and process components are correlated, but independent components of post-deployment training satisfaction (Foran et al., 2012). Further, these two components were both important predictors of soldier behavioral health outcomes several months later. The present study systematically assesses content and process component ratings of post-deployment mental health training relative to overall positive appraisals across nations. If specific components are identified that relate strongest to overall satisfaction are similar across nations, this provides further support for the generalizability of the training. Thus, a second goal of the present study was to identify which content and process components of the training relate most strongly to overall positive appraisals across nations.

## **Method**

### Study Overview

Military personnel from four of the TP-13 nations (New Zealand, United Kingdom, Canada, and the USA) participated in the current study. Data were collected independently by each nation, and details regarding each sample and procedure are described below. Demographic characteristics for each sample are presented in Table 1. Across all nations, military personnel received post-deployment mental health training and then completed a questionnaire to assess perceptions of the training.

### Intervention

**Core training concepts.** As each nation adapted Battlemind Training for use with their own active duty military personnel, efforts were made to maintain the essential elements of the training. The first key component was that the training emphasized adapting existing strengths

during post-deployment. That is, the training framework took a positive psychology approach, emphasizing that if deployment skills were adapted for home, the transition would be smoother. Without adapting these skills, the transition would be more difficult. For example, developing strong bonds with unit members was a critical combat skill but needs to be adapted upon return home; without adapting this skill of connecting to include family members, there will be increased family conflict. Second, the training normalized typical deployment-related reactions such as being highly vigilant, having difficulty sleeping, and being intolerant of minor hassles. This training objective was enhanced by encouraging unit members who had been through a deployment before to share their experiences. Third, the training emphasized the importance of re-establishing relationships and tried to set realistic expectations, and encouraged service members to be patient with the transition. Fourth, the training debunked myths related to mental health problems and seeking care. Finally, the training emphasized specific actions that service members could take to address transition challenges and identified what reaction to look for in themselves, their fellow unit members and those they lead.

Despite the linguistic and cultural similarities across the four nations, the mental health training was tailored to cultural-specific challenges and relevant operational demands (Table 2). These adjustments included adapting the training focus to post-deployment reactions most relevant to each nation. Notably, for three nations, the training was following a combat-deployment, whereas for New Zealand it was following a peace-keeping deployment. Adaptations were also made based on operational relevance. For example, the UK emphasized “operational duties” whereas the US version emphasized the “combat mission.” Certain words were also adjusted and pictures were replaced where possible to ensure their relevance. For example, although the underlying concept of cohesion was emphasized by each nation, the word



“buddy” was used in Canada and the US while New Zealand, and the UK used the term “mate.” And while relationships were emphasized by each nation, in Canada and the US, the term “spouse” was used whereas “partner” was used in New Zealand, and the UK. In addition, while each nation described mental health resources, specific references were by necessity adapted.

Besides consistency in the general material covered, the training was designed to be an interactive presentation and conducted in units that had deployed and worked together. Training generally lasted about an hour. The timing of the training varied across the different nations, occurring at various points as service members departed the theater of operations. Some of the training included video-based vignettes of service members experiencing transition difficulties. Specifics of the adaptation of the training are described below. The focus is on the unique application of the training the core concepts were addressed in each training version.

**Canada.** In the Canadian version, the US Battlemind Training video was shown during third location decompression in which service members spent five days in Cyprus on the way home from a combat and peace support mission in Afghanistan (Garber & Zamorski, 2012). The video was paused after each of four vignettes and a discussion ensued. A dubbed version of the video was used for French language training sessions. The four scenarios included (1) two sergeants discussing mental health-related stigma while playing basketball, (2) a father and son unable to reconnect emotionally as exemplified by not playing basketball like they used to, (3) a couple dealing with a service member’s nightmares, drinking, and guilt, and (4) a service member reacting to a flashback by driving unsafely and carrying an unnecessary weapon. There were no specific adaptations made in terms of content although the discussion of each vignette emphasized different themes. For example, in the driving vignette, the emphasis was on control of aggression as opposed to the weapon.

**New Zealand.** In New Zealand, the training was adapted to focus on psychological stressors experienced during a peacekeeping mission to East Timor, such as encountering traumatized civilians, a topic not covered in other national training packages. The New Zealand version of the training also emphasized the emotional cycle of deployment, and focused on a variety of topics including how to adapt driving habits, when to seek help for adjustment problems, and the importance of comradeship. The training, conducted as service members were departing East Timor, was part of a larger transition program involving a group psychological debriefing with a one-on-one session with a psychologist.

**UK.** In the UK, the training was called Battlemind and was used as the dedicated mental health training program during third location decompression in Cyprus as troops returned from a deployment to Afghanistan. One of the training goals was to address alcohol misuse which has been identified as a particular concern in the UK Armed Forces (Fear et al., 2010). Thus, the training emphasized the need to be careful in readjusting to the use of alcohol which had been prohibited during deployment. The training also de-emphasized concerns about service member aggression and carrying unnecessary weapons given the cultural context of strict gun control laws. The UK also conducted the training with other training modules, including a video on safe driving. The training included video vignettes which were adapted from the US version but filmed from a UK perspective. Specifically, the UK filmed the two sergeants discussing stigma while playing snooker in a pub and filmed the father and son being unable to reconnect emotionally as exemplified by not playing soccer like they used to.

**USA.** A version of this training was used during reintegration and again three to six months post-deployment with soldiers returning from deployment in Iraq and Afghanistan. The training for three to six month post-deployment was designed to be delivered as an interactive

PowerPoint presentation, as a video followed by discussion, and as a PowerPoint presentation featuring the four scenarios. In the present study, however, the training assessed was the interactive PowerPoint presentation conducted with soldiers returning from Iraq at four months post-deployment. The US version of the training emphasized all the core elements described. In particular, the training themes emphasized anger, intolerance for small frustrations, carrying unnecessary weapons, hyperarousal, difficulty sleeping, and re-establishing relationships.

#### Participants and Procedure

Immediately following the training in each nation, participants completed the post-training evaluation measures. Other procedures differed in terms of who administered the training, whether the survey was anonymous, and when the data collection occurred in the deployment cycle. Each nation followed routine procedure in terms of getting approval to conduct the study from an Institutional Review Board or equivalent.

**Canada.** The survey, conducted in 2006-2009, was part of a routine evaluation of an educational intervention. The survey was anonymous and voluntary; 12,122 service members completed the survey for a response rate of 92%. The sample was a mix of combat and combat support units returning from a 6-7 month combat and peace support mission in Afghanistan, and the training was not consistently conducted in small intact units that deployed and worked together. The one hour training consisted of the US version of the Battlemind Training video and was followed by a discussion after each vignette. The training was conducted by uniformed and civilian mental health professionals as part of third location decompression.

**New Zealand.** The survey was conducted in 2010. The survey was not anonymous, it could be linked to a psychological screening survey, but the form itself did not have any identifying information on it and it was separated from the rest of the screen upon receipt.

Informed consent was obtained and completing the survey was voluntary. The survey was administered to service members in combat arms units and augmentees from combat support units returning from a 6 month peacekeeping mission in East Timor. In all, 132 of 149 service members completed the survey for a response rate of 88.6%. The training, a 40-minute interactive PowerPoint presentation, was conducted before the group psychological debriefing and individual screens. The training was conducted by uniformed psychologists during force extraction.

**UK.** The UK surveyed 1,108 personnel who had just returned from a high intensity operational deployment to Afghanistan in 2009. Personnel were asked to complete a short questionnaire before the mental health training was delivered and were asked to complete a few final questions after the training had finished. There was a strict time limit for the training and the survey, thus only a few items were able to be included because of additional research and training priorities. All participants were fully informed about the study and those who did not wish to participate in the study did not have to do so.

**USA.** The US data come from a larger study on the efficacy of post-deployment mental health training (Adler et al., 2007). The study, conducted in December of 2005, was approved by the Walter Reed Army Institute of Research IRB. Of those eligible to participate in the larger study, 76% consented for their data to be used for research purposes. Following the consenting process, platoons from a Brigade Combat Team that had returned from deployment to Iraq four months earlier were randomly assigned to receive one hour of post-deployment mental health training or to a different study condition. The platoons that received the mental health training (n = 859) were included in the present analysis. The training was conducted by Army mental health officers, civilian mental health professionals, and enlisted mental health specialists.

## Measures

**Overall Training Appraisal.** The post-training questionnaire for all nations included 3 items that assessed usefulness, relevance, and satisfaction. Participants rated the degree to which they positively evaluated the training on a four-point scale from “not at all = 1” to “very much = 4”.

**Training Evaluation Scale.** Canada, New Zealand, and the US administered a training evaluation scale that included content and process items. The training content items consisted of 11 statements that assessed mental health skills taught during the training as well as logistical aspects of the training (e.g., “The training made it clear that certain emotional reactions during deployment are normal”). The training process items consisted of 5 statements that assess the interactive, team-focused nature of the training (e.g., “The training was best done as a group with buddies from my unit”). One item was dropped from this measure because it was worded differently across nations and could not be compared, resulting in a total of 4 items assessing the process component of training. All items were rated on a 5 point scale from “1 = strongly disagree” to “5 = strongly agree”. The training evaluation scale has been examined in post-deployment U.S. military samples and has good internal consistency, a stable factor structure, correlates with other measures of training, and is predictive of behavioral health outcomes 6 months later (Foran et al., in press).

**Future Considerations for Training.** Canada, New Zealand and the US also asked two items regarding recommendations for improvements in future training. One item assessed whether the program should be offered to spouses or family members. A second item evaluated whether military personnel believed more time was needed for the training. Both items were rated on a 5 point scale from “1 = strongly disagree” to “5 = strongly agree”.

## Results

### Descriptive Statistics

Overall Training Appraisal results are provided in Figure 1. Items assessing training usefulness, relevance, and satisfaction were available for all 4 nations (i.e., Overall Appraisal items). As can be seen from Figure 1, most military personnel evaluated the training positively. For example, over 70% of military personnel across the four nations reported they were satisfied with the training. Interestingly, while most nations reported similar rates of relevance (75.7% to 89.0%), 53.4% of respondents from New Zealand perceived the training as relevant.

Items assessing Future Considerations for the Training (Figure 1) also suggest the training was well received; most military personnel across the three nations recommended this training be offered to spouses or family members. In addition, few military personnel across the three nations believed more time was needed for the training.

We then examined training content and training process items in two different ways. First, we examined the average percent agreement for each subscale. For example, on average, 69.2% of US respondents endorsed the content items positively (agree or strongly agree). Similarly, on average 71.6% of respondents from New Zealand endorsed the content items as did 78.2% of respondents from Canada = 78.2%. In contrast, on average 48.9% of US respondents endorsed training process items, and 49.9% of respondents from New Zealand and 62.2% of respondents from Canada endorsed the training process items positively. Notably, across all three nations, training content scores were substantially (16% - 22%) higher than training process scores.

Second, to further examine perceptions of training across nations, means and standard deviations of the training content and training process items were calculated (Table 3). Overall,

ratings tended to be high across nations with means close to 4 on the 5 point scale. The top five highest rated items can be seen in boldface type in Table 3. There was a considerable degree of consistency across nations in which items were rated the highest. Military personnel across all three nations agreed that the training was clear about when personnel may need mental health and what to do if one needs help (rated in top 5). Across nations, the highest rated items were all components of training content. In addition, the same training process item (“It was helpful to me to share my thoughts and feelings about the deployment with others in my unit”), was rated the lowest for all three nations. This is consistent with the overall training content and training process scale findings mentioned in the previous paragraph and indicate satisfaction with the training content items tended to be higher relative to training process.

#### Do Different Aspects of Training Relate to Overall Training Appraisal across Nations?

A measure of overall training appraisal was computed by averaging the items assessing usefulness, relevance, and satisfaction with training. Pearson’s correlations between the overall training appraisal score and training content and process items were calculated to determine whether specific components of training were relevant to overall training perceptions. These results are detailed in Table 4. As can be seen from the table, the pattern of correlations was similar across nations.

In order to determine whether the size of the correlations between overall training appraisal with specific training components differed across nations, Fisher’s  $r$ -to- $z$  transformations were computed (Table 4). In general, there were few differences in the magnitude of the correlation between overall training appraisal and training component items across the three nations. The only difference between the American and Canadian results was in correlations with trust in confidentiality of the discussion and helpfulness in hearing others speak

about their deployment experiences. Both of these items were more strongly associated for U.S. soldier overall training appraisal than for Canadian military personnel. Correlations of the importance of good examples, presenter style, and normalizing emotional reactions with overall training appraisal were significantly larger in magnitude for US and Canadian respondents than from respondents from New Zealand. However, the differences in sample size across the three nations should be considered when interpreting the comparison results in Table 4.

### **Discussion**

Using the same core mental health training, four nations implemented a variation of the Battlemind Training with service members returning from deployment. Cross-national results indicated that the majority of military personnel viewed the training they received positively. In general, respondents across all nations felt the amount of training time was adequate, and they were satisfied with the training. Furthermore, the majority of military personnel across nations agreed that the training should be offered to their spouse or family members. This overall satisfaction across nations may represent both the importance of the core training concepts and the success with which these concepts were adapted for the needs of each nation.

Interestingly, the pattern across Overall Training Appraisal items was strikingly consistent (Figure 1). Service members universally gave high overall ratings to the training. One exception to this pattern was that training relevance was rated relatively low by participants from New Zealand. It may be that the training, originally designed for a post-combat transition home, was less appropriate for addressing the concerns of peacekeepers returning from a relatively nonviolent deployment to East Timor.

Training content was rated 16 to 22 percentage points higher than Training process across nations. Given that training process was rated lower, the question emerges as to whether training



process and training content are equally important in establishing overall positive appraisal of the training. As was shown in Table 3, both training content and training process significantly correlated with overall appraisal of the training, suggesting that both content and process are important to positive evaluations. However, given training process was rated lower than training content across nations, this may signify an area in need of further improvement for future mental health training programs across nations.

The degree to which military personnel agreed that the training was best conducted with their unit buddies showed only modest correlations with overall training appraisal. It may be that Battlemind training is effective in a variety of different group formats. Past research with US soldiers found that both large group and small group Battlemind training were effective for reducing risk for mental health problems among those with high combat exposure (Adler et al., 2009). Although the group format only evidenced modest correlations, other group variables were strongly correlated with overall training appraisal. It may be that the group interaction inherent in the training is an important component of training efficacy; the moderate to strong associations between the active group process variables (hearing others, sharing, and confidentiality) and overall training appraisal support this theoretical framework.

### Limitations

There are several limitations of the present study that deserve mention. First, although all nations used a variant of the same mental health training program, there was no systematic assessment of the differences in training materials and implementation fidelity across nations. Second, as is endemic to cross-cultural research, there were numerous differences between the studies across nations in terms of timing of data collection, length of deployment, country of deployment, type of mission, and demographics of the samples (namely rank and age). Hence, it

is difficult to determine whether the differences (or similarities) that emerged in the present study are due to variables such as different missions or levels of combat experiences, cultural differences, mental training program differences, or sample size differences. In particular, three deployments were combat-related and one was a peace-keeping mission. Although user acceptability was similar across nations, ratings of relevance of the training were lower among participants following a peace-keeping deployment. Unfortunately, in the current study we are unable to determine whether lower user acceptability ratings are indicative of the efficacy of training. Further, we did not assess the more distal intended outcomes of the program, namely improvement in post-deployment well-being and thus, are unable to determine whether adaptation of the Battlemind training across nations is efficacious and generalizable to different types of combat missions and settings. Rather, randomized clinical trials are necessary to address the question of the efficacy of the Battlemind training and longitudinal studies of the predictive validity of user acceptability ratings are necessary to demonstrate the importance of ratings for actual mental health outcomes. Finally, although a variety of components of user acceptability was assessed in the present study, there are likely other components important that were not assessed.

#### Implications and Future Directions

The present study represents one example of an ongoing multi-nation collaborative effort to develop and evaluate standardized mental health training for military personnel. Given real-world demand for mental health interventions, it is not always feasible to replicate randomized controlled trials for every adaptation and context. This multi-nation collaboration demonstrates the feasibility of developing interventions that can be applied across different national contexts and allows for information sharing to help strengthen each nation's respective program. The

approach used here – adapting the US Battlemind program for use with different militaries – describes a real-world example of translating an intervention from one nation to another while attempting to preserve the core elements of the original empirically evaluated program.

A key finding from the current study indicates that future mental health training should target improving components of training process, and this finding was consistent across nations. The relatively lower satisfaction with group process variables suggests that exploration of the conditions that maximize personal discussion of deployment experiences, trust and group interaction should be examined in follow-up studies. Future training process items could also assess the role of leaders in facilitating the group discussion. Assessment of mediating variables (e.g., stigma) that are targeted by the program could be measured immediately before and after the program in order to determine whether the program is having the intended effects.

There is a continued need to improve training to address needs of returning service members as well as training for across the career cycle and deployment cycle. These improvements should not only incorporate the content and process factors identified here, and integrate concepts across training platforms, but should also lead to further efficacy studies. Indeed, the TP-13 collaboration has already resulted in a UK group randomized trial of their version of Battlemind Training at post-deployment (Mulligan et al., 2012) and a quasi-experimental study of training impact in the New Zealand Defence Force (Wray, personal communication). Findings from these kinds of studies can be used to broaden our collective understanding of training efficacy and how to improve training for the benefit of service members.

Finally, the resilience training programs in all of the nations are being developed further. This next phase of development includes a comprehensive integration of training modules across

the deployment and career cycles, greater emphasis on specific skill building and reinforcing those skills, and greater attention to the preparation of trainers. In Canada, the resilience training program has broadened to include in-depth modules across the career continuum as well as the deployment cycle. For example, the training at post-deployment has now expanded to four hours. In New Zealand, plans are underway to examine broadening resilience training initiatives under a newly formed defense-wide training command (Wray, personal communication). In the UK, the Battlemind Training principles have been incorporated into the standard post-deployment mental health training program. In the US, Battlemind training has been updated and integrated into the Comprehensive Soldier Fitness program (Lester, McBride, Bliese & Adler, 2011) and a team of master resilience trainers, primarily senior non-commissioned officers, are now responsible for conducting the training. The nations are also marketing their larger training programs to support a consistent message, govern the emergence of alternative training programs, and establish the training as part of military culture. Lessons from these developments are then being shared by TP-13 and fed iteratively into the next generation of resilience training products. The goal is to support service members across the participating nations by creating a sophisticated approach to resilience training based in science.

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Table 1

## Sample Characteristics

	Canada	New Zealand	UK	USA
Male (%)	91.7		98.9	94.5
Age (M(SD))	32.8(8.3)		27.2 (6.6)	25.3(5.4)
Age Range	18 - 60		18 - 55	18 - 48
Years of Military Service	11.8(7.9)		7.8 (6.4)	5.2(5.3)
Rank				
Junior (%)	68.8		71.3	62.3
Senior (%)	18.3		17.6	32.0
Officer (%)	12.9		11.1	5.7
Branch of Service				
Army (%)	81.4		64.0	100.0
Navy (%)	3.3		35.7	
Air (%)	13		0.3	
Civilian (%)	2.3			
Sample size (n)	12,122	132	1,047	859
Year of Data Collection	2006 - 2009	2010	2009	2005
Deployment Theatre	Afghanistan	East Timor	Afghanistan	Iraq
Data Collection Time Frame	Post-deployment (TLD)	During Return from Deployment	Post-deployment (TLD)	4-months post-deployment

Note. The New Zealand survey was conducted anonymously and no additional demographic data were collected. TLD = Third location decompression site.



Table 2

## Overview of Nation-Specific Adaptations for Training Modules

	Nation			
	Canada	New Zealand	UK	US
Operation	Afghanistan	East Timor	Afghanistan	Iraq and Afghanistan
Cultural- Specific Themes	Control of aggression	Emotional cycle of deployment Vicarious traumatization	Driving Alcohol	Driving Weapons/ aggression Grief, Guilt
Language	Buddy	Mate	Mate	Buddy
	Spouse	Partner	Partner	Spouse
Format	US Video- (English and French) with discussion	Interactive PowerPoint - followed by group debrief	Interactive video and PowerPoint presentation	Interactive PowerPoint (also developed video)
Location and Timing of Training	TLD	In-theater, preparing to return from Deployment	TLD	In garrison, Reintegration & 4 Months post
Training Group Composition	Mixture of intact small work groups and random assignment	Entire contingent	Intact small work groups	Intact small work groups

Note. TLD refers to “Third location decompression.”

Table 3

## Mean Levels of Training Items across Nations

Variable	CAN		NZ		US	
	M	SD	M	SD	M	SD
Training Content						
The training made it clear that certain reactions and emotions during the deployment were normal	<b>4.19</b>	0.66	3.66	0.69	<b>3.90</b>	0.60
The training was clear about when personnel might need mental health care	<b>4.10</b>	0.67	<b>3.95</b>	0.53	<b>3.86</b>	0.65
The training was clear about what the warning signs of a serious mental health problem are	<b>4.07</b>	0.67	<b>3.95</b>	0.64	3.75	0.69
I learned what to do if I need help with mental health problems	<b>4.05</b>	0.69	<b>4.08</b>	0.52	<b>3.85</b>	0.62
I learned what to do if my mate needs help with a mental health problem	3.99	0.70	<b>3.99</b>	0.60	<b>3.87</b>	0.63
I learned what to do to prevent transition problems	3.83	0.70	<b>3.90</b>	0.57	3.69	0.67
I learned specific actions I can take to make a successful transition home	3.83	0.72	3.85	0.60	3.72	0.67
The training used good examples	3.74	0.80	3.60	0.71	3.65	0.70
I like the way the presenter(s) conducted the training	<b>4.03</b>	0.74	3.68	0.69	<b>3.77</b>	0.77
The training focused on Service personnel's' strengths	3.64	0.78	3.36	0.65	3.56	0.72
The training made me realize that I had learned a lot from my deployment experiences that I can use at home	3.59	0.85	3.62	0.72	3.44	0.82
Training Process (Team-Focus)						
The training was best done as a group with buddies from my unit	3.84	0.89	3.51	0.79	3.55	0.82
It was helpful for me to share my thoughts and feelings about the deployment with others in my unit	3.46	0.82	3.23	0.82	3.27	0.84
It was helpful for me to hear what others in my unit have to say about their deployment experiences	3.64	0.79	3.47	0.73	3.37	0.82
I trust that things discussed in this training will be kept confidential	3.90	0.82	3.85	0.69	3.60	0.81

Note. Boldface type indicates the five highest rated items for each nation.

Table 4

Correlations of Specific Training Items with Overall Training Appraisal and Differences in Correlations across Nations

Variable	r			<i>Fisher's r to z</i>		
	CAN	NZ	US	CAN v. NZ	US v. NZ	US v. CAN
Training Content						
Normalize emotional reactions	<b>0.39</b>	0.16	<b>0.37</b>	<b>-2.809</b>	<b>2.378</b>	-0.691
Clear about mental health	<b>0.42</b>	<b>0.37</b>	<b>0.39</b>	-0.662	0.245	-1.010
Warning signs	<b>0.40</b>	<b>0.32</b>	<b>0.38</b>	-1.054	0.717	-0.731
Personal MH problems	<b>0.40</b>	<b>0.28</b>	<b>0.39</b>	-1.532	1.300	-0.367
Buddy MH problems	<b>0.38</b>	<b>0.30</b>	<b>0.38</b>	-0.972	0.948	0.098
Prevent transition problems	<b>0.44</b>	<b>0.31</b>	<b>0.40</b>	-1.625	1.080	-1.191
Specific actions	<b>0.45</b>	<b>0.34</b>	<b>0.45</b>	-1.430	1.368	0.070
Good examples	<b>0.48</b>	<b>0.23</b>	<b>0.50</b>	<b>-3.210</b>	<b>3.299</b>	0.776
Presenter style	<b>0.45</b>	0.14	<b>0.48</b>	<b>-3.783</b>	<b>4.001</b>	1.218
Strength-focused	<b>0.44</b>	<b>0.29</b>	<b>0.46</b>	-1.902	<b>2.060</b>	0.740
Realize what learned	<b>0.40</b>	<b>0.44</b>	<b>0.38</b>	0.501	-0.753	-0.762
Training Process						
Group format	<b>0.23</b>	0.17	<b>0.29</b>	-0.637	1.313	1.927
Share thoughts and feelings	<b>0.37</b>	<b>0.34</b>	<b>0.40</b>	-0.383	0.728	0.989
Hear others	<b>0.42</b>	<b>0.32</b>	<b>0.48</b>	-1.282	<b>2.004</b>	<b>2.151</b>
Trust/Confidentiality	<b>0.34</b>	<b>0.27</b>	<b>0.43</b>	-0.875	1.916	<b>2.939</b>

Note. The first three columns denote the correlations of each item with overall training appraisal. The last three columns denote the differences in correlation strength for different nations. Boldface type indicates  $p < .05$ . Note that UK data was not available for content and process items.

Figure 1

Percentage of Military Personnel who Agreed or Strongly Agreed with Overall Training

Appraisal Items and Future Considerations about the Training

