

Comparative Analysis of NATO Resilience Training Programs

MAJ Suzanne M. Bailey

Directorate of Mental Health, Canadian Forces Health Services Group HQ, 1745 Alta Vista Drive
Ottawa, Ontario, Canada K1A 0K6

Tel: 613-945-6302, Fax 613-992-6095, e-mail: Suzanne.Bailey@forces.gc.ca

Dr. Amy B. Adler

US Army Medical Research Unit-Europe, Walter Reed Army Institute of Research
Nachrichten Kaserne, Karlsruherstrasse 144, 06126 Heidelberg, Germany

Tel: +49-6221-172626 Fax:+49-6221-173170 e-mail:amy.adler@us.army.mil

Dr. Roos Delahajj

TNO, P.O. Box 23, 3769 ZG Soesterberg, The Netherlands

T +31 888666004 F +31 346 353977 email: roos.delahajj@tno.nl

MAJ Carlo Van den Berge

Mental Readiness Advisor, ACOS Operations & Training, Quarter Queen Elisabeth,
Everestraat 1, B-1140 EVERE, Belgium

Tel: +32 2 7016274, Fax: +32 2 7013878, e-mail: carlo.vandenberge@mil.be

1stLT Merle Parmak

Estonian National Defence College, Riia 12, 51013 Tartu, Estonia

Tel +372 51 21 490, Fax +372 71 76 111, E-mail: merle.parmak@mil.ee

MS Vivianne Fonne

Norwegian Armed Forces Medical Service, Institute of Aviation Medicine, PO Box 14, Blindern
0313 Oslo, Norway

T +47 22 93 03 40, email. viviannf@flymed.uio.no

ABSTRACT

The goal of the NATO Human Factors & Medicine (HFM) Research & Technology Task Group (RTG-203) "Mental Health Training" is to develop prototypes of mental health and resilience training for service members. Mental health training has the potential to strengthen the ability of service members to respond to the psychological demands of military life. Ideally, this kind of mental health and resilience training should begin during basic training and be followed across the individual's military career. In order to begin developing a Training Module template for Mental Health Training during Basic or Recruit Training, RTG-203 has compiled a database of standardized mental health and resilience training programs currently delivered in member nations. The presentation reports on the core elements of mental health and resilience training across eleven member nations, summarizes the findings, and discusses how the database will be used to inform the development of a NATO Mental Health Resilience Training Module Template for Initial Basic Training. This presentation is intended for Psychological Resilience and Mental Health Training tracks.

Disclaimer: It should be noted that the views of the authors do not necessarily represent their respective Department of Defence or Government.

Report Documentation Page

Form Approved
OMB No. 0704-0188

Public reporting burden for the collection of information is estimated to average 1 hour per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. Send comments regarding this burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden, to Washington Headquarters Services, Directorate for Information Operations and Reports, 1215 Jefferson Davis Highway, Suite 1204, Arlington VA 22202-4302. Respondents should be aware that notwithstanding any other provision of law, no person shall be subject to a penalty for failing to comply with a collection of information if it does not display a currently valid OMB control number.

1. REPORT DATE APR 2011		2. REPORT TYPE N/A		3. DATES COVERED -	
4. TITLE AND SUBTITLE Comparative Analysis of NATO Resilience Training Programs				5a. CONTRACT NUMBER	
				5b. GRANT NUMBER	
				5c. PROGRAM ELEMENT NUMBER	
6. AUTHOR(S)				5d. PROJECT NUMBER	
				5e. TASK NUMBER	
				5f. WORK UNIT NUMBER	
7. PERFORMING ORGANIZATION NAME(S) AND ADDRESS(ES) Directorate of Mental Health, Canadian Forces Health Services Group HQ, 1745 Alta Vista Drive Ottawa, Ontario, Canada K1A 0K6				8. PERFORMING ORGANIZATION REPORT NUMBER	
9. SPONSORING/MONITORING AGENCY NAME(S) AND ADDRESS(ES)				10. SPONSOR/MONITOR'S ACRONYM(S)	
				11. SPONSOR/MONITOR'S REPORT NUMBER(S)	
12. DISTRIBUTION/AVAILABILITY STATEMENT Approved for public release, distribution unlimited					
13. SUPPLEMENTARY NOTES See also ADA578905. Mental Health and Well-Being across the Military Spectrum (Bien-être et santé mentale dans le milieu militaire). RTO-MP-HFM-205					
14. ABSTRACT The goal of the NATO Human Factors & Medicine (HFM) Research & Technology Task Group (RTG-203) Mental Health Training is to develop prototypes of mental health and resilience training for service members. Mental health training has the potential to strengthen the ability of service members to respond to the psychological demands of military life. Ideally, this kind of mental health and resilience training should begin during basic training and be followed across the individuals military career. In order to begin developing a Training Module template for Mental Health Training during Basic or Recruit Training, RTG-203 has compiled a database of standardized mental health and resilience training programs currently delivered in member nations. The presentation reports on the core elements of mental health and resilience training across eleven member nations, summarizes the findings, and discusses how the database will be used to inform the development of a NATO Mental Health Resilience Training Module Template for Initial Basic Training. This presentation is intended for Psychological Resilience and Mental Health Training tracks.					
15. SUBJECT TERMS					
16. SECURITY CLASSIFICATION OF:			17. LIMITATION OF ABSTRACT	18. NUMBER OF PAGES	19a. NAME OF RESPONSIBLE PERSON
a. REPORT unclassified	b. ABSTRACT unclassified	c. THIS PAGE unclassified			

1.0 INTRODUCTION

The NATO HFM-203/RTG ‘Mental Health Training’ was established in December 2009 to target the development of mental health resilience training in a military environment. In recognition of the need to develop scientifically validated mental health training that will sustain the service member throughout their military career, as well as prepare them for the rigors of military operations, the RTO Task Group (RTG) will: (1) identify appropriate skills targeted for mental health training, (2) identify how to train those skills, and (3) establish criteria for demonstrating the effectiveness of training these skills.

RTG 203 White Paper 001 (Delahajj and van Tussenroek, 2010) specifically addresses the benefits of and requirement for mental health training in military organizations. The authors of the White Paper acknowledge that military service places tremendous demands on the mental health of service members, and that mental health training has tremendous potential for improving military effectiveness. In order to determine what that mental health training should consist of, and how it should be delivered, it is important to know what is currently being delivered, how it was developed, what evidence there is to support it, how and when it is being delivered, and if it has demonstrated any effectiveness.

In order to accomplish the aforementioned objectives and answer some of these questions, an environmental scan of current mental health training modules that are delivered during basic training in participating NATO countries has been conducted, and the results compiled in a database. The information garnered from the basic training database will subsequently be used to inform the development of mental health training modules for basic training as well as the deployment cycle.

Concurrently, the RTG is also surveying recruits in NATO nations to determine what specific aspects of basic training are perceived as stressful, which skills the recruits are using to cope with the stress, and how effective they are in coping with these stressors. Together with the analysis of the database, this information will be used to develop evidence based mental health training that meets the identified needs of recruits in NATO nations.

2.0 FINDINGS

Eleven member nations responded to the request for information pertaining to their mental health and resilience training content during basic recruit training. The information requested included: objectives of the training; knowledge and targeted skills; practical application and resources; program standardization and evaluation; implementation details; and, strength of evidence for content and skills. Five of the responding nations reported that they have no systematic or standardized mental health training during basic recruit training. They indicated that some units provide the training, while others do not. For the purposes of this paper, we will consider the programs that are standardized and implemented system-wide, including those that are targeted to a specific branch of the military or occupation, such as the Belgian training program for student pilots and air traffic controllers (ATC). It should also be noted that the information included which refers to the United States is representative only of the US Army, as training packages from the US Air Force, US Navy and US Marine Corps were not reviewed for this paper. The participating nations are listed in Table 1.

Nation	Standardized Mental Health Training
Belgium	Yes *
Canada	Yes
Czech Republic	No
Estonia	No
Germany	No
Latvia	Yes
The Netherlands	Yes
Norway	No
Spain	No
United Kingdom	Yes
United States	Yes

Table 1: Participating NATO Nations

* For student pilots and ATC only

2.1 Standardization:

Of the eleven countries that provided data for this paper, six countries deliver standardized mental health training programs during basic recruit training. While five of these six countries deliver the training systematically, there are some caveats. In Belgium the standardized mental health training reviewed for this paper was specifically designed for student pilots and air traffic controllers, while in the United Kingdom mental health training for recruits has consistent objectives across Services, but the delivery differs depending on the Service. The remaining countries have local initiatives or separate Academy programs, and are therefore neither standardized nor systematic. While it is not included in the analysis or database for this RTG, the Australian Defence Force has also recently implemented a standardized mental health training program for recruits (Cohn and Pakenham, 2008). This program has been evaluated, and has demonstrated that it is feasible to increase mental health during basic training.

2.2 Timing of the training:

There was wide variation with respect to when the mental health training was conducted during the course of basic recruit training. While one country delivers the mental health and resilience training during the first week of a thirteen-week basic recruit training program, two countries deliver it during week 3, another in week 5, one within the first 8 weeks, one at the 2/3 point of basic training, and another country at some point during the first three months of service.

Given the wide variation in the timing of the mental health training, it may be useful to evaluate whether or not the timing of the training has an impact on effectiveness and outcomes. It may also be beneficial to add questions about the timing of this training to the survey and interview being conducted concurrently by this RTG.

The other area for further examination may be whether the training should be delivered all at one time, or at regular intervals throughout basic training. Canada is currently considering modifying

their mental health training for recruits and dividing the current block into 3 separate modules to be delivered during weeks 1 (3 hours), 5 (2 hours) and 12 (3 hours) of a 13-week training cycle. The intent is to train recruits on the skills that would be most useful in helping them succeed in their training at the beginning of the training cycle, to reinforce and mentor those skills during week 5, and then to provide additional mental health knowledge and skills for their military careers just before completing basic training. A pilot implementation of this approach will be evaluated to determine if there is any significant difference in application of skills, coping ability, as or attrition during basic training.

2.3 Duration of the training:

Again, there were significant differences in how many hours each country devotes to mental health training for recruits. While most of the countries surveyed deliver between one and four hours of mental health training, there were two notable exceptions. The program in Belgium consists of 15 hours of training, which includes 30 minutes for the application of each skill, while recruits in The Netherlands devote 2-3 days to learning and applying stress coping skills with graduated exposure training through adventure activities, followed by group debriefings. These last two programs place significant importance on the practical application of the mental health skills being taught, and consider it an integral part of the training package.

This may be another area to consider when developing the mental health training modules and implementation guidelines, as it is well known that knowledge and skills are more likely to be retained and applied affectively if they are practiced regularly.

2.4 Trainers/Instructors:

The training is delivered by either trained soldiers/peers (4), military or sports instructors (2), chaplains (2), mental health professionals (4) and physicians (3). Mental health professionals include psychiatrists, psychologists, aviation psychologists and sports psychologists. Several countries do not limit delivery to any one group or profession, but rather choose among the professions listed. Several countries also have standardized training for the instructors who deliver the mental health training, while others assign the task on the basis of occupation or profession and do not require the completion of a train the trainer program.

As the RTG will be developing a train the trainer package for mental health and resilience training, it will be beneficial to examine the structure, content and evaluation data of these existing programs.

2.5 Strength and Quality of Evidence:

Each country was asked to indicate the strength and quality of evidence upon which the content of the training was based. Table 2 provides a description of the categories applied to the training programs. The specific references and research that were consulted in the development of each of the training programs were not requested for the purposes of this paper, but will subsequently be added to the database in order to better inform the development of the final RTG products.

Categories for strength of recommendation	
A	Good evidence to support a recommendation for use
B	Moderate evidence to support a recommendation for use
C	Poor evidence to support a recommendation for or against use
D	Moderate evidence to support a recommendation against use
E	Good evidence to support a recommendation against use
Categories for quality of evidence on which recommendations are made	
I	Evidence from at least one randomized control trial
II	Evidence from at least one well-designed clinical trial without randomization, from cohort or case-controlled analytic studies, preferable from more than one centre, from multiple time-series, or from dramatic results in uncontrolled experiments
III	Evidence from opinions of respected authorities on the basis of clinical experience, descriptive studies, or reports of expert committees

Table 2: Strength and Quality of Evidence

Four of the NATO countries have mental health training programs that are based on AI evidence, while one other has a program based on BII evidence. Some of the other programs reviewed may be evidence-based, but have not yet been formalized or evaluated, and as such there is very little information on their research or development.

2.6 Evaluation

Only four of the programs that were reviewed have a consistent and robust evaluation strategy. One other country is in the process of evaluating their mental health training program, and should have results in spring 2011. While two of the countries indicated that they administer pre and post training evaluations for each serial, the other two countries did not specify their evaluation methodology. This highlights the importance of including an evaluation strategy in the development and implementation of all mental health training programs in order to assess effectiveness, identify areas for improvement, and validate the requirement for institutionalization of such training.

2.7 Objectives

The objectives of the training programs include: increase awareness of and be able to identify symptoms of stress in self and others; learn and apply skills to cope with stress; optimize mental fitness and resilience; decrease stigma toward and increase acceptance of mental health problems; increase mental health help-seeking behaviour; and, maintain operational effectiveness and performance. The mental health training for student pilots and air traffic controllers in Belgium, ‘Techniques to Optimize Potential’ (TOP: ‘Techniques pour l’Optimisation du Potentiel’), has as objectives: increased recovery after operations; improved sleep quality; improved vigilance and attention; improved decision making, self-confidence, group communication and cohesion; and enhanced learning.

While the stated objectives of the programs vary in the level of detail in which they are stated, they are relatively consistent across nations.

2.8 Knowledge

In order to achieve the stated objectives of each of the programs, the knowledge factors include: definitions of stress, strain, pressure, combat stress, and resilience; description of the human stress response; delineation between good stress and bad stress; helpful and unhelpful coping, including specifically the role of humour in coping; cognitive behaviour theory highlighting how perception of events affects reactions; importance of teamwork and buddy support; and fatigue management.

While each of the programs has some unique aspects, the key knowledge elements are very consistent across nations.

2.9 Targeted Skills

The targeted skills, while referred to by different names in the various training programs, can be grouped into seven broad categories.

Targeted Skills	
Category	Skills as they are referred to in the training packages
Acceptance (2)	Acceptance of new reality in basic training
Self Talk (6)	Positive appraisal of events, challenging negative self-talk, thinking traps, neuro linguistic programming, internal dialogue, “adjusting your thoughts”, cognitive distortions
Breathing (5)	Tactical breathing, diaphragmatic breathing, energy management, arousal control, controlled breathing
Relaxation (4)	Regulation of tension, progressive muscle relaxation
Goal setting (4)	
Visualization (5)	Mental imagery, mental rehearsal
Grounding (2)	Situational awareness, focusing

Table 3: Targeted Skills

In accordance with the categories in Table 3, six countries include various approaches to self-talk and cognitive behaviour theory; five countries target the skills of breathing and visualization; four countries teach skills related to relaxation and goal setting; two countries aim to increase acceptance; and two countries include skills to facilitate grounding and increase situational awareness. There is a significant level of consistency among the nations with respect to which targeted skills can be trained in order to achieve the stated objectives of mental health and resilience training. The selection of these skills is also based on strong scientific evidence, as indicated in paragraph 2.5.

The targeted skills come primarily from cognitive behaviour theory and performance sports psychology. There is a significant body of evidence that demonstrates that skills such as controlled breathing, visualization, goal setting and self-talk contribute to enhanced sports performance (Driskell et al., 1994, Barwood et al., 2006, Barwood et al., 2008). Additionally, the randomized control trial conducted by Cohn and Pakenham (2008) with the Australian Defence Force found better cognitive coping and lower psychological distress compared to the control group. Further research on the application of these skills to coping with stress in military populations is currently being done in a few member nations, and will also be used to inform the development of the final RTG products.

2.10 Practical Application

Three of the participating nations use vignettes or scenarios to apply the targeted skills in the classroom, either through small group discussion or by walking through the scenario as a large group. And two of the training programs (Belgium and The Netherlands) use graduated exposure through either adventure activities or a series of training scenarios after which there is a debriefing to review performance and learning. As well, the mental health training program in the Belgian military includes specific instruction to practice and apply each of the skills on an individual basis, in addition to the classroom and scenario work. This is particularly important to consider in the development of mental health training modules, as we know that these skills must be practiced and mastered ahead of time if they are to be effective when used in real-life situations of extreme stress.

2.11 Resources and Follow-up

Not surprisingly, all of the mental health training programs reviewed include information on mental health resources available to military personnel, depending on their level of need. This includes self help and buddy support, as well as some information aimed at demystifying what happens in mental health treatment. Some programs include a discussion about common barriers to care in military populations, and facts with which to challenge some of those attitudinal barriers and beliefs about treatment. Many of the programs aim to normalize help seeking as a way to manage distress and solve problems, and in doing so try to de-stigmatize counselling and mental health treatment. As stigma toward mental health treatment tends to be common in many military populations, there are some interesting techniques to be considered in the development of the training modules.

3.0 CONCLUSIONS

The findings of this review of mental health training delivered during basic training in several NATO nations provides a starting point for the development of a NATO mental health resilience training module for initial basic training. It will also provide valuable information for the development of Resilience Training Guidelines, Implementation Principles, as well as a standardized train the trainer program for mental health training. Consistency was found in terms of training objectives, and targeted knowledge and skills. There was less consistency around the implementation principles, such as the duration and timing of the training, evaluation, and instructors or trainers. Further research in these areas will provide additional detail to guide the development of the RTG products.

4.0 REFERENCES

- [1] Barwood, M.J., Dalzell, J., Datta, A.K., Thelwell, R.C., & Tipton, M. (2006, November). Breath-Hold Performance During Cold Water Immersion: Effects of Psychological Skills Training. *Aviation, Space, and Environmental Medicine*, 77, 1136-1142.
- [2] Barwood, M.J., Thelwell, C. & Tipton, M.J. (2008). Psychological Skills Training Improves Exercise Performance in the Heat. *Medicine & Science in Sports & Exercise*, 387-396.
- [3] Driskell, J.E., Copper, C., & Moran, A. (1994). Does Mental Practice Enhance Performance? *Journal of Applied Psychology*, 79, 481-492.

Comparative Analysis of NATO Resilience Training Programs

- [4] Driskell, J.E., Johnston, J.H., & Salas, E. (2001). Does Stress Training Generalize to Novel Settings? *Human Factors*, 43, 99-110.
- [5] Cohn, A., & Pakenham, K. (2008). Military The Efficacy of a Cognitive-Behavioral Program in Improving Psychological Adjustment Amongst Soldiers in Recruit Training. *Military Medicine*, 173, 1151-1157.
- [6] Delahajj, R. & van Tussenbroek B. (2010). Benefits of Mental Health Training for Military Organizations. NATO HFM-RTG-203 (Mental Health Training) White Paper 001.
- [7] Saunders, T., Driskell, J.E., Johnston, J.H., & Salas, E. (1996). The Effects of Stress Inoculation Training on Anxiety and Performance. *Journal of Occupational Health Psychology*, 1, 170-186.