

**INCREASING COMBAT CAPABILITY  
BY  
REDUCING THE EFFECTS OF COMBAT STRESSORS**

A RESEARCH THOUGHT PAPER  
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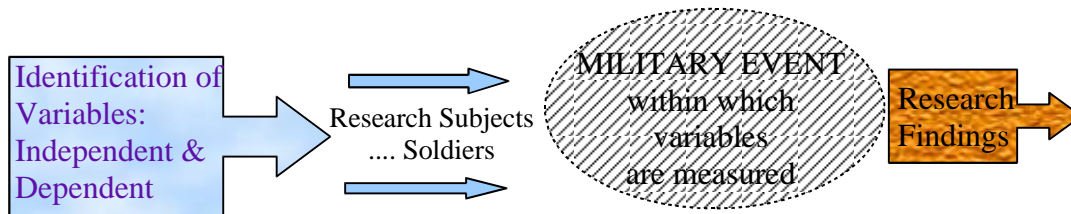
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## Project Orientation:

Often a Personnel Applied Research (PAR) program is initiated by a “thought paper”. This particular thought paper is focussed upon whether or not combat capability can be increased by reducing the impact that combat stressors have upon soldiers. Should this thought paper elicit interest, and as a result a working paper called for; in turn the working paper could lead to a series of PAR projects. This thought paper is upon unit cohesion as this phenomena may (or may not) attenuate the impact of combat stressors upon soldiers. Over the past ten years or so considerable work has been done to address leadership and education within the Canadian Forces. However, not much can be found in the Canadian research literature that is aimed at better understanding unit cohesion, and its relation to the attenuation of the impact of combat stressors upon soldiers.

In this regard, Allan English in an article “Leadership and Operational Stress”, Canadian Military Journal, Autumn, 2002 reported clearly and concisely upon the linkage between leadership and stress in operations, as follows: ***We know that strength of leadership and unit cohesion are the main factors that have had a consistent impact on reducing operational stress casualties.***<sup>1</sup> Among other sources, English uses the results of the extensive Israeli Defence Force research by Noy et.al<sup>2</sup> as his source authority, and a read of the research accomplished by Noy reveals an impressive array of findings that affirm that both leadership and unit cohesion are critical factors in dealing with combat stressors.

Fundamental to this thought paper is the Personnel Applied Research method, as used in military settings. This method is further addressed in Appendix A.



### PERSONNEL APPLIED RESEARCH PROGRAM

Parallel research flows would illuminate a comparison of responses to combat stressors by persons embraced by strongly cohesive groupings, and those persons that are not. Further, these stand alone research projects would be guided in their application by research protocols as described in “Guidelines for Writing a Social/Behavioral Research Protocol”.<sup>3</sup>

Clearly, effective personnel applied research must measure all variables in “operational conditions”, not “laboratory conditions”.<sup>4</sup> Depending on the outcomes of these research findings, modifications to the preparation and training of combat troops will be reviewed and changed by Command authority as necessary.

<sup>1</sup> Canadian Military Journal, Autumn, 2002 [http://www.journal.forces.gc.ca/engraph/Vol11/no3/pdf/33-38\\_e.pdf](http://www.journal.forces.gc.ca/engraph/Vol11/no3/pdf/33-38_e.pdf)

<sup>2</sup> Noy et all. More than 20 sources;  
<http://www.google.ca/search?hl=en&q=Noy%2C+Combat+Stress+Reaction&btnG=Google+Search&meta=>

<sup>3</sup> Guidelines for Writing a Social/Behavioural Research Protocol, Dana-Farber Cancer Institute, Jan 2006.  
[http://www.dfhcc.harvard.edu/fileadmin/DFHCC\\_Admin/Clinical\\_Trials/OPRS/uploads/investigator\\_resources/Soc-Beh\\_Protocol\\_Document\\_Guidelines\\_4-03\\_.pdf](http://www.dfhcc.harvard.edu/fileadmin/DFHCC_Admin/Clinical_Trials/OPRS/uploads/investigator_resources/Soc-Beh_Protocol_Document_Guidelines_4-03_.pdf)

<sup>4</sup> Inference drawn from Colonel Commandant Discussion Session, Presentation to PSO Conference, 2005, Ernst B. Beno, OMM, CD, MPA, BBA, CHRP, BGen (Ret), <http://www.psel.org/files05.htm> (slides 13, 14,15.)

# "A soldier should not meet in battle, for the first time, things which set him at unease or afraid". Anonymous

## A. Combat Capability

1. Combat capability is measured in a variety of ways; one measure is the proportion of personnel unavailable for combat duty as a result of inappropriate Combat Operations Stress Reaction (COSR), a term coined by the US Marines.<sup>5</sup> If not redressed, COSR can migrate to Post Traumatic Stress Disorder, and the soldier is lost to combat operations. Apparent from several US Army sources is the loss of a considerable number of physically able personnel from combat operations as a result of COSR<sup>6</sup>. Likely, Canadian Forces soldiers will be similarly impacted. It is the aim of this work to determine, through a program of personnel applied research, the influence that training (individual and team) as related to unit cohesion has upon adding to the soldiers repertoire of coping behaviors and strategies which attenuate the adverse effects of COSR. By so doing, then suggest the introduction of ways and means to improve cohesion thereby reducing the effect of combat stressors upon combat capability.

1.1 It should be understood at the outset that reaction to combat stressors is not all bad, in fact there is much to gain by knowing how to cope with combat stressors. *"...Much research has suggested a U-shaped relationship between stress and performance—that is, individual performance is higher under moderate levels of stress than under very high and very low levels of stress (Selye, 1956). ..."*

1.2 Nor has the Canadian Forces been derelict in producing personnel applied research findings in the area of stress and stress relief. For example, then Captain P LeGras, initiated the first project in this area in 1979<sup>7</sup>, and later on, now Colonel Cheryl Lamerson, among other research activities, produced her PhD Dissertation in the arena of stress<sup>8</sup>, which formed part of the foundation for the Critical Incident Stress Debrief program.

2. Before proceeding, it important to situate this project. The Surgeon General, BGen Jaeger, who is responsible for the Management of Critical Incident Stress in the CF<sup>9</sup>, testified Feb 23<sup>rd</sup> 2005 at the "Proceedings of the Standing Senate Committee on Social Affairs, Science and Technology"<sup>5</sup>, as follows;

*"...One can hardly think of mental illness in the Canadian Forces without thinking immediately about post-traumatic stress disorder. Therefore, it may surprise you to hear that this illness is not among the three most prevalent mental illnesses in members of the Canadian Forces. Depression is our leading cause of suffering, at 7.6*

<sup>5</sup> **Combat/Operational Stress Reaction (COSR):** is the term used to describe the physiological, behavioral and psychosocial reactions experienced before, during, or after combat or due to increased operational tempo during any phase of (*combat*) operations or deployment. (*The term "combat stressor" is used to describe the combat event that causes COSR*)

**Traumatic Events:** are events outside the normal experience of people that pose actual or perceived threats of injury or exposure to death that can overwhelm both an individual's and organization's coping resources.

<sup>6</sup> Personnel Stabilization and Cohesion: A Summary of Key Literature Findings, United States Army Research Institute for the Behavioral and Social Sciences, Lincia Ruth 2004  
<http://72.14.253.104/search?q=cache:ZPU3lbqhAkkJ:www.hqda.army.mil/ari/pdf/RN%25202004-04.pdf+Measurement+of+cohesion+in+military+groups&hl=en&gl=ca&ct=clnk&cd=9>

<sup>7</sup> Presentation to Commander, Training System Command, CFB Trenton, ON. 1979.

<sup>8</sup> Col Lamerson's doctoral thesis is entitled 'Peacekeeping Stress: Testing a Model of Personal and Organizational Outcomes'. (1994)

<sup>9</sup> CFAO 34-55, Management of Critical Incident Stress , [http://www.admfincs.forces.gc.ca/admfincs/subjects/cfao/034-55\\_e.asp](http://www.admfincs.forces.gc.ca/admfincs/subjects/cfao/034-55_e.asp)

*per cent in the year preceding the survey. Alcohol abuse or dependency hit 4 per cent, and social phobia 3.6 per cent. PTSD was 2.2 per cent and panic disorder 2.2 per cent — all in the regular force, which, generally speaking, has a somewhat worse incidence of mental illness than the reserve forces....”*

2.1 However, the small percentage of PTSD casualties cited by BGen Jaeger does not, at first brush, seem to square with the considerable resources deployed by the DND across Canada in “Operational Trauma and Support Centers”, located in Halifax, Valcartier, Ottawa, Edmonton, Esquimalt.

3. Unfortunately percentages in an armed force are no respecter of rank, while losing a Private to PTSD in battle is tragic, it is worse to lose a Commander in similar fashion during battle – or afterwards. Losing a Commander to PTSD can have adverse consequences beyond measure. But of much more consequence in this respect, is the loss of mental competence suffered by all soldiers as a result of stressor impact that is not prepared for – as reported in a 2006 RAND study<sup>10</sup>

*“...Stress can have several effects on individual functioning relevant to the military, including perceptual narrowing (paying attention to fewer sensory cues or stimuli that could contribute to behaviors or decisions), reduced attention to important stimuli or cues, altered or abbreviated decision making processes, and increased task completion time (Easterbrook, 1959; Janis and Mann, 1977; Friedman, 1981; Staw, Sandelands, and Dutton, 1981; Idzikowski and Baddeley, 1983). Stress can affect group performance by reducing communication between members, contributing to a concentration of power in the leadership ranks, and leading to poor group decision making (Driskell, Carson, and Moskal, 1988; Janis and Mann, 1977; Bowers, Weaver, and Morgan, 1996). ...”*

3.1 That said, while the outcome of this project will likely have some impact on ways and means to lower the number of members developing PTSD, its primary aim is the overall improvement of combat effectiveness by improving soldiers’ responses to combat operations stressors. This is an issue of large consequence to combat effectiveness.

4. As affirmed earlier, the orientation of this thought paper is in the main a forerunner “... to determine, through a program of personnel applied research, the influence that unit cohesion has upon soldiers repertoire of coping behaviors and strategies which attenuate the adverse effects of COSR...” But, also subject to these stressors in their combat arenas are Naval and Air Force personnel. No doubt a great variety of lessons learned through this program of research will apply elsewhere, but in an effort to grapple with coping fundamentals, this proposal is limited to the Army. It may well be that interest in this sort of project by Navy and Air Force Commanders will cause the development of programs specific to their concerns.

## **IDENTIFICATION OF RESEARCH VARIABLES**

### **B. Stressors, Stress and PTSD**

1. A question has been raised that does not seem to have a ready answer. While considerable research is available upon individual soldiers' responses to combat stressors; little evidence other than anecdotal can be found to answer the question as to whether or not a high level of unit cohesion enables soldiers to resist succumbing to a combat operations stressor. Stressors, which if not coped with may lead to acute stress reaction and subsequent development into Post Traumatic Stress Disorder (PTSD). However, there is considerable anecdotal evidence that PTSD is not common among units in combat

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<sup>10</sup> How Deployments Affect Service Members, Rand Corp, 2006. [http://www.rand.org/pubs/monographs/2005/RAND\\_MG432.pdf](http://www.rand.org/pubs/monographs/2005/RAND_MG432.pdf)

which do have high levels of cohesion; one of these reports is from MGen (Ret.) Lewis Mackenzie<sup>11</sup> But whether or not unit cohesion has a prophylactic effect that can help soldiers resist the effect of combat stressors has yet to be thoroughly addressed in a program of research.

2. Also needed, is resolution as to the types of training regimes that might be useful in developing a robust level of cohesion that would attenuate the impact of stressors. The research program would include a section devoted to this issue.

### C. Ethos, Cohesion and Combat Capability.

1. Fundamental to this program of research is the determination of ways and means of measuring cohesiveness in military units. One appealing method is to start with an identification of a unit's ethos<sup>12</sup>, which is a term that embraces the concept of unit cohesion, considered by strong and recognized professional authority to be fundamental to success in combat.

2. Following on, the following definition of ethos, from the *Dictionary of the Social Sciences*, Craig Calhoun, Ed. Oxford University Press, 2002 Oxford References On Line, is extremely useful: "...From the ancient Greek, signifying the character, way of life, or moral purpose of an individual or group. The broad sense of the original term, "ethos" which encompassed **habits, pre-dispositions**, (which lead to) **values and sentiments** – persisted well into the eighteenth century, when it suggested to Charles-Louis Montesquieu the irreconcilable plurality of morals and ways of life. The term's modern derivation – ethics - is usually restricted to general theories of right or moral conduct. *The older term is retained to demonstrate how these are rooted on social practices and values.*".

3. The first use of the term ethos in Canadian Army matters was in the Citadelle Document, 1981 as reported in "Understanding the Canadian Army Ethos"<sup>13</sup>. Part of the concept of ethos, with respect to values and beliefs, was impressively published by the Canadian Forces in *Duty With Honour*,<sup>6</sup>. But it was not until the summer of 2004 that a more complete understanding of the term ethos was made<sup>12</sup>. Presented was the notion that this more complete understanding called for the linked connection of training routines and predispositions as related operational practices to the generation of values and sentiments. Thence gaining the understanding of the corollary that, once embraced, embedded values and sentiments will in turn elicit predictable patterns of habits and predispositions. However, fundamental to unit cohesion is leadership. Leaders so do by assuring that an individual soldier's tasking leads to appropriate habits and predispositions, and that the interdependent taskings enacted by its members result in trust with each other's competence.

4. It is the behavior of the group, as permitted and or encouraged by the group's leader, that determines whether or not unit cohesion supports the established aim of the unit. For example, a group of boy (or girl) scouts will have a different aim than does a motorcycle gang. These two groups will have different ethos, but could have similar levels of cohesion. Both could have "good" leadership, but serve differing aims. Prevention of the development of an ethos inconsistent with the aim is paramount. It is leadership that enables the appropriate aim to be articulated.

5. The outcomes of successful individual and unit training schedules/routines are many, but in relation

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<sup>11</sup> Discussion John C Eggenberger & MGen (Ret.) Lewis Mackenzie -- 2006.

<sup>12</sup> *Duty With Honour*, Queens Printer 2003. [http://www.forces.gc.ca/site/Reports/somalia/vol2/V2C19\\_e.asp](http://www.forces.gc.ca/site/Reports/somalia/vol2/V2C19_e.asp)

<sup>13</sup> The Citadelle Document, in "Understanding The Canadian Army Ethos, <http://www.rusivicda.org/opinion/opin-10.html>

to unit cohesion the most important outcome is the trust developed between all members of the team. Trust between all members of the team such that each member is confident that the others will do their job regardless of the consequences. In sum, high levels of unit cohesion (other things equal) will result in success in combat – low levels of cohesion will lead (other things equal) to failure in combat.

#### **D. The Impact of Casualties Upon Cohesion.**

1. To see a comrade wounded, or a comrade killed close by during combat is a stressor of high impact. Not only is the unit's combat capability reduced with the loss of a vital member, the feeling of grief aroused by the loss of a trusted comrade is a stressor that, if not prepared for, or immediately coped with in some way, will cause stress in other members of the unit that may develop into PTSD. Most casualties in ground battle are from the combat arms; infantry, armour, artillery, ... . It is the casualty's regimental family that traditionally has provided the warm envelope for the effective dissipation of grief by survivors. And, perhaps collaterally, the regimental family may be the vehicle for successfully coping with such high impact stressors. This observation will be developed into part of the research paradigm for this work, i.e., is it that new combat formations now provide for this important event, if so how has this phenomena been addressed.
2. Of major concern is the mutability of cohesion throughout a deployment. A unit going in with good cohesion can, weeks later, be a wreck with no cohesion. Circumstances could produce this result. It could also be that changes in team membership adversely impact the glue that holds units and sub-units together, and each change will also impact on the end result, reducing resistance to stress.
3. Further, it may well be that extrapolation the belief that unit cohesiveness prevents combat stress reaction is not warranted beyond the immediate team composition. An important outcome of this research project would be to focus upon the rapidity that cohesive structures can be retained or resumed when unit membership changes as a result of combat casualties, or routine postings in and out, promotions, and so on.

#### **E. Stressors and Stress**

1. After more than half a century, still the most important authority on the subject of stress is Hans Selye<sup>14</sup>. According to Selye, stressors abound and affect us as all, sometimes more and sometimes less. The reaction to stressors, referred to as stress, is the cause of much bodily discomfort as well as mental. Should the stressors be intense and/or the person's resistance to them low, then the outcome can be extremely debilitating. No one is immune. In 1956 Selye argued that the stressors can be better resisted (or coped with) by preparing for them. For Selye, programs of anticipation that familiarize persons

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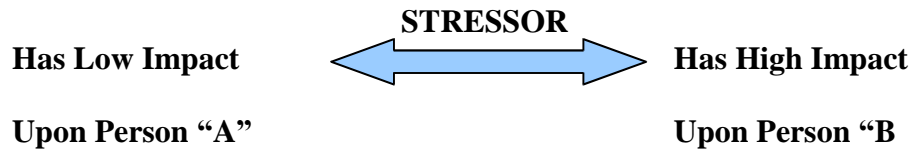
<sup>14</sup> Hans Selye was born in Vienna in 1907. As early as his second year of medical school (1926), he began developing his now-famous theory of the influence of stress on people's ability to cope with and adapt to the pressures of injury and disease. He discovered that patients with a variety of ailments manifested many similar symptoms, which he ultimately attributed to their bodies' efforts to respond to the stresses of being ill. He called this collection of symptoms--this separate stress disease--stress syndrome, or the general adaptation syndrome (GAS).

He spent a lifetime in continuing research on GAS and wrote some 30 books and more than 1,500 articles on stress and related problems, including *Stress without Distress* (1974) and *The Stress of Life* (1956). His first published article on the topic of stress was published in 1950. So impressive have his findings and theories been that some authorities refer to him as "the Einstein of medicine."

More than anyone else, Selye has demonstrated the role of emotional responses in causing or combating much of the wear and tear experienced by human beings throughout their lives.

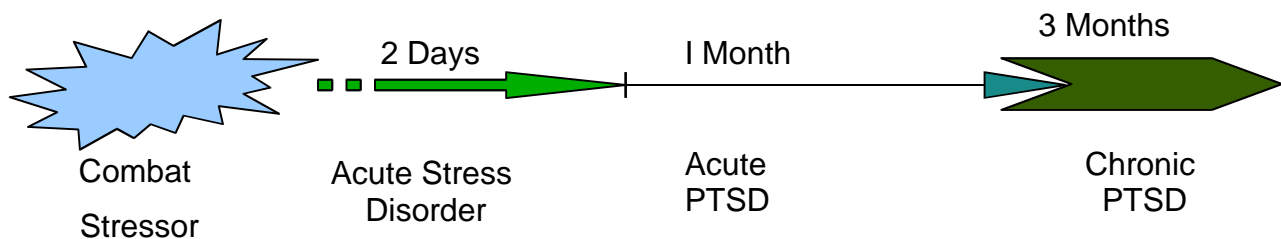
with stressors in a gradual manner often enable stressors to be coped with before being transformed to unmanageable stress. Selye's arguments have not been challenged in the general literature.

2. Further, as shown below, a stressor, or a combination of stressors may have low impact on one person and high impact on another. This differentiation will have an important bearing upon examining combat stressors in the context of unit cohesion.



3. The next diagram is designed to show that there are preparative stages of training that result in cohesion which may ameliorate the effect of a combat stressor. Depending upon the training regimes, levels of unit cohesion may be developed which may be effective in coping with stressors.

4. The diagram below is linked to the diagram above. The below diagram from Ref G, Page 7: VA/DOD Clinical Practice Guidelines for the Management of Post Traumatic Stress, shows the trend line that obtains when combat stressors, presumably not prepared for in some way, induce the psychological trauma which becomes acute then chronic.



5. Writ large, it would seem from the foregoing diagram that the closer (and even prior) to the combat stressor event(s) the “prevention” mechanisms are deployed, the less likely the effect of the stressor(s) will develop (the “reaction”) into Acute Stress Disorder and subsequent PTSD. In support of this contention, the CF Surgeon General, BGen Jaeger affirmed her view in a recent CDAI Newsletter On Track<sup>15</sup> that: “... Operational readiness demands fit and healthy personnel, which in turn demands psychological fitness. The twin pillars of maximizing psychological fitness are quickly and effectively treating mental health problems and enhancing psychological resiliency. Leadership has a key role in both approaches; without the right leadership climate the stigma and taboo will remain and care will be delayed. Further, leaders are the ones who promote resiliency training, who create a supportive esprit within the unit, and who oversee the reintegration into the unit of those who have sought care. Together we are strengthening the forces....” Also a “bullet” taken from the DND CF Medical Health Services website suggests;

- Good mission training, high unit cohesion, social support, and knowing about the effects of stress are the best methods of prevention. (of PTSD).

6. Further, a recent review of research literature, Stress in the Military Context, by the Rand Corporation<sup>16</sup>, reveals the following: “... The most important moderator in the military context, for individuals and

<sup>15</sup> CDAI Newsletter “On Track”, Spring 2006, Vol 11, No. 1. Page 32

<sup>16</sup> The Rand Corporation – A 2005 report which reviews the literature and empirical studies conducted on the relationships among stressors, stress, and performance in a variety of contexts, with a specific focus on stress in a military context. An



groups, is training. Stress exposure training, in which individuals are exposed to simulated stressors and forced to perform target skills under them, can build familiarity with potential stressors, teach individuals strategies to maintain performance under stress, and contribute to over-learning, task mastery, and increased self-confidence (Driskell and Johnston, 1998; Saunders et al., 1996; Deikis, 1982). Stress exposure training can also be effective in improving group performance under stress by teaching groups how to adapt their performance strategies to external stressors and alerting them to how other team members will be affected by stress. Groups that undergo training tend to have better communication, teamwork, and feedback strategies that help them to work together under stress (Serfaty, Entin, and Johnston, 1998). ...”

7. Combat Operations Stressors, among a great many other terms are defined at reference<sup>17</sup>.

- **Combat stressors** are any stressors occurring during the course of combat-related duties, whether due to enemy action or from the soldier’s own unit, leaders, and mission demands, or the soldier’s home life. The reaction to stressors is referred to as Stress.
- **Stress** is the mobilization of the body and mind to counteract stressors. It involves the physiological reflexes that ready the body for fight or flight. It also involves mental reactions. Effects include decreased blood flow to skin, muscles, and heart; increased sweating; adrenaline release for energy and alertness; muscle tension; and interference with sleep.

8 Further, a combat stressor experience often includes;

- unexpected events with sharp surprisal components,
- events that are extraordinarily different from past experience, often these events include loss of life of comrades, as well as others (enemy and collateral casualties),
- other components of a combat stressor experience include bodies and body parts in the soldiers field of view, often these must be picked up for disposal by soldiers.
- strong feelings of helplessness, coupled with rage at having to deal with these feelings.

9. However it is done, the primary aim of training for combat and the development of cohesion is to win the battle. A secondary aim can be proposed as; to prevent the experience of a combat stressor from resulting in acute combat stress reaction or its follow-on, PTSD.

10. Anecdotal evidence from the reaction of those afflicted often impacts research such as proposed here. Such a reaction has been provided from a retired soldier<sup>18</sup> under treatment for PTSD by Dr. George Nichol, Clinical Psychologist, practicing in a team with James Main MD (in and around Sudbury, Ontario). While much of the program proposed at Appendix B might well be already in train, there still could be merit in a re-examination of the effect of combat stressors that develop negative emotions and feelings within a cohesive group as against soldiers in less cohesive envelopes.

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<sup>17</sup>US Marine Combat/Operations Stress Reaction

<http://www.usmc-mccs.org/deploy/ml/warrior.cfm>

<sup>18</sup>Described at Appendix B are his two proposals, one dealing with specific preparation for soldiers, and the other for group support for soldiers returning to civilian life after a combat tour. Confirmed by Dr. Tim Black, Canadian Certified Counselor, Assistant Professor Dept. of EPLS, Faculty of Education, University of Victoria, the sentiments and ideas cited below are consistent with his observations arising from his work over that past few years in a group counselling program at the University of Victoria (supported by the Canadian Legion) for soldiers and others who have contracted PTSD.

## F. Measuring Research Variables

1. The most effective measures of military cohesion to be examined are likely to be:
  - Trust – lateral and vertical,
  - Loyalty – lateral and vertical,
  - Leadership – at all levels.
  
2. Measuring cohesion in this work will call for knowing the ethos of a group. A first step in describing the ethos of a group would be to identify the habits and predispositions developed by persons in the group to achieve its task (mission); the resultant beliefs and sentiments would need also to be measured in some reliable and valid way. Next would be the necessity to describe the training regime and the interactions and dependencies developed between the members of the group. Needed (and to be developed if not available) are scales that reveal levels of trust – loyalty – leadership within a combat group. Likely this need will call for an effort to design suitable scales so to do.
  
3. The variables to be measured are:
  - a) The construct of ethos, as measured by;
    - i) each member of the group's habits, predispositions as linked to their values, beliefs and sentiments.
    - ii) the group's predominant habits, predispositions as linked to values, beliefs and sentiments.
  - b) The construct of group cohesion, as measured by;
    - i) Trust among members,
    - ii) Loyalty to superior and subordinate
    - iii) Leadership provided to the group.
  - c) The elements of individual and team training regimes.
  - d) Combat Stressors.
  - e) Reaction to Combat stressors
  - f. Most often the dependent variable will be the reaction to combat stressors. But some precursor research might examine other variables from other optics and research questions

## G. Leadership.

1. Of all the variables to be measured, leadership is the most difficult to come to grips with. There are literally thousands of leadership models, each claiming to be the “silver bullet”. The only counsel that this thought paper offers in this regard is that it would **not** be a “good thing” to tie measures of leadership to one theory or another. The research teams will have a dandy time sorting out this aspect of the research program.

2. While the ingredients of successful leadership have been much investigated, sooner or later three fundamental leadership nuggets arise, these are cited below: (from Peter Green)

Military leadership in relation to combat cohesion.

*A press visit to a Guards Battalion in the UK. After being shown around by the RSM one of the reporters noted he hadn't seen any officers and where were they. The RSM's answer "Sir, when the time comes to die, they will be here".*

*And, the Rifle Brigade, who had had fought so well at Dunkirk, when told by their Commander that they would be rear guard and would likely have to surrender at some moment, accepted their fate with equanimity. Their Commanding Officer saying they would be amongst friends!*

*From the Peninsula war, where one company was delegated to be the vanguard during one of Wellington's forays into Spain. The company commander's address to his troops was very simple: " Men, the Army will follow our Battalion, the Battalion will follow our Company, and you will follow me".*

3. Now, as in millenniums past, combat personnel will not enter action unless substantial levels of cohesion, which calls for leadership, trust and loyalty, have been established before combat. The fundamental measure of leadership in this instance is whether or not soldiers willingly enter combat with their leaders. We here additionally wish to know to what extent such unit cohesion can or will enable soldiers to develop better coping strategies to reduce the impact of combat stressors.

## **H. Research Teams.**

1. Since the outcomes of this project will impact upon unit cohesion, a cornerstone of the Army's effectiveness, the whole of the research team should be led by combat experienced commanders. Subset teams should include persons from the combat arms, medical, psychological (clinical, educational, industrial), and sociological professions. Research questions selected for investigation should be addressed by contributors from more than one profession. Of considerable importance and consequence are the research designs generated by the research teams. A great deal of ingenuity will be required so as to enable the inclusion (and exclusion) of variables that may be of interest to one profession but not to another into a single sub-set research design.

## **I. Research Sequence, Selection of Independent & Dependant Variables**

1. A historical paper should be contracted to follow on and add to the historical perspective of Terry Copp & Bill McAndrew, in their seminal work; *Battle Exhaustion, Soldiers and Psychiatrists in the Canadian Army 1939-1945*.
2. Provided below are several "research questions" that were developed during the formation of this thought paper. These research questions are not offered in any particular order, nor is it suggested that all of these questions should survive a priority listing.
3. Following research custom, selected research questions would be subject to thorough literature review. Available research findings may satisfactorily respond to a question, making further inquiry redundant. Research questions that do not meet this requirement could be the focus of comprehensive research design meeting fundamental professional and applied research standards.

## J. Research Questions

1. As urged in “Developing a Research Question”<sup>19</sup> a primary research question is required. In this instance suggested is the following:

- Is it possible to prevent/reduce psychological combat stressor reaction effects through unit cohesion as influenced by leadership and training.

1.1 A suggested list (not exhaustive, and in no particular order) of subset research questions is presented below. While each of these research questions could be of considerable interest, it is not suggested that the entire list be formed into a PAR program. Necessarily choices would be made among these which would depend upon findings in the recent literature or elsewhere.

- how best to measure a group's ethos.
- how best to measure the development and maintenance of cohesion.
- how does leadership affect the formation and maintenance of unit cohesion.
- how does loyalty affect the formation and maintenance of unit cohesion.
- how does trust affect the formation and maintenance of unit cohesion.
- in what ways does the group legitimize the assimilation of group beliefs/values/sentiments.
- could soldiers repatriated/released from the CF after combat to locations where regular force presence is minimal or non existent find support from local groups of retired veterans.
- how best to relate measures of cohesion to combat stressors.
- how does, and how quickly does, a cohesive group continue to be cohesive after suffering casualties and these casualties replaced (or not).
- how best to relate/incorporate combat stressor coping training into unit/individual combat training.
- From a historical prospective by what means has the army dealt with the phenomena of combat stressors since WWII.
- determine best methods/instruments for identifying applicants who may be more than ordinarily susceptible to the adverse effect of battle stress.
- determine the best methods/instruments for measuring battle stress reaction.
- the effect(s) of combat stressors upon individuals - while embraced by a "cohesive" group.
- the effect(s) of combat stressors upon individuals - but NOT embraced by a cohesive group,
- the effect(s) of prematurely leaving a cohesive group after experiencing a combat stressor.
- the effect(s) of remaining in a cohesive group after experiencing a combat stressor..
- is it possible to reduce battle stress by immediate intervention(s) after the combat stressor experience.
- is there any response difference between males and females who experience the same/similar combat stressor events
- for persons already traumatized is it possible for training and group cohesion to reduce levels of battle stress effects.
- can techniques/training can be acquired from morticians to deal with stressors that include bodies and body parts.
- are there any differences between Army Navy and Air Force experiences WRT combat stressors.
- are there any differences between Army Navy and Air Force WRT taskings and organizational configurations that bear upon resistance to combat stressors.
- is there a “delayed” reaction to a combat stressor such that Acute Stress Reaction and/or PTSD can appear

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<sup>19</sup> Developing a Research Question, Research Room; *Contributors*: Elaine Handley | Susan Oaks, Empire State College, State University of New York.

[http://www.esc.edu/esconline/across\\_esc/writerscomplex.nsf/0/f87fd7182f0ff21c852569c2005a47b7](http://www.esc.edu/esconline/across_esc/writerscomplex.nsf/0/f87fd7182f0ff21c852569c2005a47b7)

years after the combat stressor experience.

- is it that a combat stressor can be suppressed till long after the experience, then develop Acute Stress Reaction and/or PTSD.
- in what manner does religion impact upon a soldiers capability to cope with COSR.
- it is that other religions have a belief/value structure that reduces the impact of battlefield stressors.
- is it that “too much” cohesion can have a deleterious effect upon combat performance.
- is it that “too much” cohesion can have a deleterious effect upon coping with stressors.
- is it that negative emotional reactions to combat stressors can be better coped with by soldiers in cohesive groups than soldiers in solitude.

#### **K. Development of the Working Paper**

1. As is customary, should this thought paper serve, the follow-on working paper will call for a comprehensive review of current research literature in relation to the research questions that are deemed to be most useful from those that are posed.
2. There might well be developed a pilot PAR project to test the waters (so to speak).

## APPENDIX A:

The research findings of the IDF, along with other material cited by English, are substantial. Indeed the sources cited by English point the way towards understanding the relationship between cohesion and coping with combat stressors. However, always there is some reluctance to take findings with reference to a particular set of issues from one force/culture/ethos to another. Thus one of the motivations for producing this thought paper is to call more attention to the need to include the phenomena of group cohesion in relation to coping with combat stressors in the current CF behavioral science and medical research programs.

It will also be noted that this thought paper does not include an exhaustive archival search for relevant findings in relation to the issues raised. Thought papers call for presenting representative research findings, in this instance these are minimally cited. But noted in support of this thought paper is a short list of retained references derived from the great many which have been examined

What follows is not a service paper, it is a personnel applied research thought paper. Typically, personnel applied research thought papers do not have a recognized formal structure, as does a service paper. The reason for this approach is to provide for inclusion of a wide range of concepts, some perhaps only loosely related. At this stage of developing a full personnel applied research program it is important to include as many concepts or constructs as thought necessary by the author(s) to make their case. In this instance, to demonstrate that it would be useful for the Canadian Forces to do the further work from the thought paper to develop a personnel applied research working paper which would focus upon unit cohesion and COSR. This research working paper would more likely follow the service paper template. By doing so, there would first be the development of the aim, and subset aims, as these may emerge, to which all following materials would relate. Then, from this research working paper are developed stand alone personnel applied research projects that more or less follow the protocols set out in formal research proposals.

At the same time the research program is constrained by operational requirements. These two conditions are at first brush, contradictory, and from an academic standpoint the outcomes of research done under these conditions will likely be considered flawed. For this reason, personnel applied research teams are generally comprised of academically prepared persons who have also successfully completed a military operational tour. It is the operational experience of the personnel applied researcher that bridges the protocols of research to operational conditions.

Finally, personnel research teams must be unfettered for personnel applied research findings to be thought valid. Ordinarily these teams are employed in a unit under the authority of a Commanding Officer. This CO is chosen as an honest broker, is not associated with a "cause" and will protect the researchers when irate generals come pounding on the door.

## APPENDIX B

As provided by Dr. George Nichols patient, below is copied this retired soldier's description of a regimen that he views would better serve than that which he experienced. It may well be that many of his proposals are already in play, still, his rendition is worthy of a good read.

### Proposal for Decreasing the Degree of PTSD suffered by Soldiers

1. Education. Start by Educating the Leaders at all levels. Take away the mystique. We are not afraid of things we know and the more we know the less prejudice we have toward acknowledging an issue. The best way to do that is by getting soldiers that have been on the front lines of tours to talk about their experience of living with the emotional impact. Not the details of their traumatic events but what it is like living with PTSD; how they got help and what they are doing to overcome it. Teach them the signs and symptoms of PTSD. But in layman's terms!
2. Peer Counseling. We have to train the troops how to talk to each other when they have problems. You can always trust the guy next to you on the line. If they see their buddy having problems, it would help everyone to know what to do and who to talk to about it. For example, the Mental Health Team could provide direct emotional support.
3. Mental Health Teams. For a Mental Health Team to work and for the troops to have any kind of trust in them, they should be on ground for the training as well as in Country of deployment. To fly a team in for a few days does not work. The men don't trust them and just try to mess with their heads. There should be one Psychiatrist/Psychologist on ground and one or two mental health nurses.
4. I would also like to propose an idea that might help with the shortage of mental health professionals in the Military. Start another branch of the Medical Assistance's: e.g., Mental Health Medical Assistance. You could take TQ 5 Med A's and teach them how to be peer counselors and how to facilitate referrals. These would give you a few more Med A's on ground as well as extra mental health people to screen patients for the Doctor and Nurse. Two, it might help with getting the guys to open up more to a peer than a superior officer. Also you will have trained support staff that the men respect on the line with the men. They would be able to see firsthand what the men are dealing with and experiencing.
5. To help with separation anxiety, maybe you should look into getting a computer room with web cams so the guys can chat with their wives/husbands, kids, girlfriends/boyfriends, mothers/fathers. Now I know for a fact that this will keep them more emotionally stable and grounded, so why not give it a trial run. This would counteract the risk of developing PTSD.
6. Educate the troops and families on what to expect while over seas, such as emotional distancing. The Soldier that is leaving is likely to pull away emotionally from his family. The kids may act out. The wives/husbands may have a feeling of being pushed aside. It is important to be prepared for what to expect when Soldiers return home. The Family structure likely will have changed and it may be difficult to find a new way of fitting in to these changes. Reconnecting to family support can minimize the impact of PTSD.

#### **Support groups for PTSD**

1. It is my belief that a support group or support line should not be to deal with the traumas that cause the injury, but to deal with the day-to-day problems of dealing with emotions and personal relationships, such as family involvements; your wife's feelings of being left out, relationships with your kids, etc.
2. Help the Soldier deal with re-entering civilian life, relating to friends, your bosses and fellow employees.
3. **To deal with the feelings of feeling inadequate because you are no longer part of the military ... .. and honestly my person feeling is that you are treated that way when you get out.**
4. To counteract the fear of starting life over again.

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