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CANADIAN FORCES COLLEGE / COLLÈGE DES FORCES CANADIENNES JCSP 35 / PCEMI 35

Master's of Defence Studies Research Paper

OPERATIONAL STRESS AND THE ROLE OF THE FRONTLINE LEADER

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ABSTRACT

OPERATIONAL STRESS AND THE ROLE OF THE FRONTLINE LEADER

Warfighters, defined as those personnel who participate either directly or indirectly in military combat operations, will be exposed to inordinate amounts of physical and mental stressors as a result of their environmental exposures. Comprehensive research into the human dimension of warfighting over the last two decades has continued to support historical references that participation in combat operations is associated with increased psychological distress and decreased health-related quality of life. The Canadian Forces recognizes these combat and operational stress reactions as deployment-related mental health problems or Operational stress Injuries (OSI). The purpose of this paper is to examine the extent to which new CF policies and program for operational stress injuries are unduly focused on managerial approaches that emphasize availability of care, education and standard of treatment without acknowledging the importance of the frontline leader in preventing and mitigating operational stress injuries. By examining the epidemiology behind stress, the social and environmental factors that contribute to operational stress injuries and the role of the frontline leader in influencing these factors, this paper will culminate in recommending that the operational chain of command must be fully integrated into a comprehensive system to manage operational stress injuries. It will be recommended that the CF develop a more comprehensive program that focuses on leadership behaviours and human dimensional factors that contribute to a warfighter's moral determination, efficacy and cohesive fighting spirit thereby increasing their resilience to operational stress injuries and setting the conditions for mission success.

INTRODUCTION

The profession of arms is one wrought with extreme risks and challenges. It is a physiologically and psychologically demanding profession that can, especially in times of war, lead to injury or even death. Historical precedence has demonstrated that combat casualties related to stress injury are inevitable and are ever-prevalent in military operations.¹ This implies

¹ US Army Medical Department, "Combat Stress Control," http://www.armymedicine.army.mil/ about/tl/factscombatstresscontrol.html; Internet; accessed,12 March 2009.

that those charged with the execution of violence, the warfighters, defined as those personnel who participate either directly or indirectly in military combat operations, will experience inordinate amounts of physical and mental stressors as a result of their environmental exposures. For the warfighter, "the massive pressures of war have long been recognized to produce both immediate (acute) and long-term (chronic or delayed) psychopathology,²" that is to say that exposure to combat operations is associated with increased prevalence of mental health disorders among warfighters. There are historic inferences to this fact that date as far back as Homer's *Iliad* (6-7th Century BCE). In the final scenes of *Iliad*, Homer writes of the great warrior Achilles' overwhelming grief and guilt following a battle for a fallen comrade and his renunciation of returning home and of already feeling dead inside.³ The battlefield has always been a physiologically and psychological challenging environment for the warfighter to overcome and its evolution over the centuries has only increased its complexity and challenges.

Today's post-bipolar world is wrought with geo-political instabilities ranging from civil wars, destabilized states and non-state actors perpetuating asymmetrical warfare. As military scholar David Last aptly observes, "Peace, conflict and war have evolved and converged.⁴" The resultant conflict environment for today's warfighter is unconventional, complex, and psychologically demanding. These complexities will be further discussed within the scope of this paper as they are foundational to discourses on combat and operational stress. The lessons learned during the transition from the Cold War years to the contemporary battlefields of today

² Zahava Solomon, and Mario Mikulincer, "Trajectories of PTSD: A 20-Year Longitudinal Study," *The America Journal of Psychiatry* 163, 4 (April 2006): 659.

³ Jonathan Shay, "Learning about Combat Stress from Homer's Iliad," *Journal of Traumatic Stress* 4, no.4 (October 1991): 561.

⁴ Major David Last, quoted in *Leadership in the Canadian Forces: Conceptual Foundations*, (Ottawa: Defence academy, 2005), viii.

have led militaries to place renewed emphasis on psychological and human dimensions of operational effectiveness and its association operational stress.

Comprehensive research into the human dimension of warfighting over the last two decades has continued to support historical references that exposure to military operations is associated with increased psychological distress and decreased health-related quality of life.⁵ In a well-documented study of the Canadian military, psychiatric researcher Jitinder Sareen (*et al.*), provides strong evidence of a positive association between combat-exposure and witnessing atrocities to mental disorders and a self-perceived need for treatment by warfighters⁶. This evidence infers that warfighters on high-tempo operational deployments may be at elevated risk for stress-related disorders in relation to the mean population and will be elaborated upon in Chapter Four.

Most commonly encapsulated under the nomenclature of combat or operational stress, ⁷ the physiological and psychological demands on warfighters manifested from operational deployments are not only restricted to exposure to direct combat. As Sareen (*et al.*) indicates, combat or operational stress reactions can manifest from acute chronic exposure to high-tempo operations whether combat-related or in operations such as peacekeeping. As Chapter Two will elaborate upon, reactions to combat or operational stress can be the result of exposure to a variety of adverse environmental and social factors that are present throughout the entire spectrum of deployed military operations. The Canadian Forces (CF) recognizes combat and

⁵ Jitinder Sareen, *et al.*, "Combat and Peacekeeping Operations in Relation to prevalence of Mental Disorders and Perceived Need for Mental Health Care," *Archives of General Psychiatry*, 64, no. 7 (July 2007): 843.

⁶ *Ibid.*, 843.

⁷ Army Medicine, "Combat and Operational Stress General Information," http://www.behaviourhealth.army.mil/provider/general.html; Internet; accessed 12 March 2009.

operational stress reactions as deployment-related mental health problems which are institutionally recognized under the nomenclature of Operational Stress Injury (OSI). Thus the CF formally defines OSI to encapsulate "any persistent psychological difficulty resulting from operational duties performed while serving in the Canadian military." The use of this term and the resultant impact on non-deployment related mental health problems will formulate the theme for discussion in Chapters Three and Four.

Left untreated, operational-related stress reactions can adversely erode operational effectiveness and lead to chronic long-term mental illness. As personnel are the greatest and most critical resource to any military, addressing deployment-related mental health care issues should be a priority in order to sustain the operational effectiveness of the CF. As this paper will elaborate upon in Chapter three, the CF leadership has debatably not always been consistent in assuming and acting upon this responsibility. The CF's early experiences in dealing with operational stress during peacekeeping operations in the early-mid 1990s brought forth public criticism from returning soldiers that was critical of the CF leadership in its latent handling of deployment-related mental health problems, ostensibly related to exposure to operational stress. Further discussed in Chapter Four is how these recommendations exerted pressure on the CF towards a renewed emphasis on deployment-related mental health problems that arguably may have led to an overshadowing of other, more "ordinary" but more prevalent mental health problems in the CF. Through the implementation of a Mental Health Strategy, the CF has endeavoured to develop an integrated management systems approach to delivery of health care

⁸ Veteran Affairs Canada, "What is an Operational Stress Injury?" http://www.vac-cc.gc.ca/clients/sub.cfm? source=mhealth/definition; Internet; accessed 28 February 2009.

⁹ Department of National Defence, *Final Report Board of Inquiry – Croatia* (Ottawa: Public Works and Government Services Canada, 2000), 37.

services and build partnerships with the civilian health care system in promote the effectiveness of deployment-related mental health care requirements. However, it will be critiqued that what is conspicuously missing within this strategy is the acknowledgement that the purpose of the health care is to support the development and sustainment of an effective, cohesive fighting force and is remiss in acknowledging the importance of the frontline leadership as a critical determinant in enhancing human performance on the battlefield.

The purpose of this paper is to examine the extent to which new CF policies and program for operational stress injuries are unduly focused on a managerial approaches that emphasize availability of care, education and standard of treatment without acknowledging the importance of the frontline leader in preventing and mitigating operational stress injuries. By examining the epidemiology behind stress, the social and environmental factors that contribute to operational stress injuries and the role of the frontline leader in influencing these factors, this paper will culminate in recommending that the operational chain of command must be fully integrated into a comprehensive system to manage operational stress injuries.

The first step in understanding any problem is to first gain an appreciation as to its context. The subsequent chapter will be dedicated to providing a brief overview of the epidemiology of stress with a view to building a contextual understanding of the taxonomy of combat and operational stress reactions.

¹⁰ Evidentiary transcript of General Hillier's testimony. House of Commons, Standing Senate Committee on National Security and Defence, *Minutes of Proceedings...*, 8.

"The most negative experience for me? The usual stuff: mass graves, death and destruction, sick and injured, runins with Rwandan Patriotic Army troops. The general day-to-day of my job¹¹."

Experienced military commanders have long known that it is the human dimension that will ultimately determine victory or defeat on the battlefield. Successful commanders must intuitively master the stresses of combat as they relate to human performance through the skilled application of the operational art. Commanders must generate combat stress in their adversaries while mitigating operational stress in their own troops through leadership, training and building unit cohesion. It is therefore fundamental that frontline leaders and operational commanders have a knowledgeable understanding of the epidemiology of stress. The premise of this chapter is to establish a contextual understanding of the biological, physiological and psychological components of stress with a view to examining the basic physiological and psychological tenets of stress responses and how cognitive appraisals of stress will determine its effect on the warfighter. Given the relative narrow scope of this paper, the intent of this chapter will be somewhat constrained to the providing a foundational overview focused towards the perspective of the frontline leader. Understanding the epidemiology of stress should be considered critical for the frontline leader as the stresses of war have a fundamental effect on human performance as a critical determinant in achieving mission success.

¹¹ Peter J., Murphy, "The Stress of Deployment." in *Military Stress and Performance: The Australian Defence Force Experience*, edited by George Kearney, Mark Creamer, Ric Marshall, and Anne Goyne., 3-18. (Melbourne: Melbourne University Press, 2003), 3.

The widely accepted definition of psychological stress is "the particular relationship between the person and the environment that is appraised by an individual as taxing or exceeding his or her resources and endangering his or her well-being. 12" Essentially, psychological stress refers to a condition which occurs when psychological demands exceed the psychological resources of the moment. 13 The warfighter is exposed to a myriad of stimuli not normally present in everyday society and often results in a complex array of "stressors" that is out of the norm for most warfighters deployed on operations. These "stressors" are essentially defined as events or conditions that cause stress in individuals 14 which may be manifested by either internal or external factors normally associated with a combination of physical, cognitive, social and environmental factors. Stressors may be acute (short term) or chronic (persistent). These factors will be further discussed in detail following a brief introduction to the physiological and psychological processes associated with stress.

Stress cannot be avoided nor should it be. The human body can be highly adaptive to its environment and capable of surviving enormous challenges within our environment. In Darwinian terms it enables survival of the fittest. The physiological and psychological reactions to stress have the potential to enhance performance to an extent – as the axiom goes, too much of

¹² Widely accepted as the standard definition as developed by Lazarus and Folkman (1984). Carlene Wilson, Helen Braitwaite, and Peter J. Murphy, "Psychological Preparation for the Battlefield..., 20.

¹³ Author' interview with Director Mental Health Services (CFHS), Colonel Randy Boddam, 27 February, 2009.

¹⁴ Peter J. Murphy, and Kelly M. Farley, "Morale, Cohesion, and Confidence in Leadership:Unit Climate Dimensions for Canadian Soldiers on Operations," in *The Human in Command: Exploring the Modern Military Experience*, ed. Carol McCann and Ross Pigeau, 311-344 (New York: Kluwer Academic/Plenum Publishers, 2000), 315.

anything can be harmful. As alluded to earlier, stress can be defined as either acute (immediate) or chronic (persistent).

Acute stress is a reaction to an immediate stressor which initiates one of the human body's primary survival mechanisms, our stress response. When the human body is stressed the autonomic nervous system generates what is commonly known as the flight-or-fight response. It is an autonomic reflex where the body shifts all its available energy resources to prepare itself to respond to a perceived emergency situation or acute stress (short term stressors). Essentially, the autonomic nervous system signals the adrenal glands to release the hormones adrenalin and cortisol. These hormones increases heart and respiratory rate, dilates blood vessels thus increasing blood flow to the arms and legs. These physiological responses all contribute to instantly enhance physical performance – over the short term and can be a positive or negative influence depending on the duration of the stressor and the individual's resources. Normally, once the acute stressor has passed, the autonomic nervous system initiates a relaxation response where the levels of stress hormones begin to return to normal after a period of time ranging from hours to days depending upon the intensity of the acute stressor.

Chronic Stress is characterized by exposure to persistent and low-level stressors that keep the body in either a partial or complete state of physiological arousal as the autonomic nervous system has little opportunity to initiate the relaxation response. Unfortunately, Darwinian evolution has designed the human body to handle acute stress for survival but the autonomic

¹⁵ American Psychological Association Help Center, "Stress: How Does Stress Affect Your Body?" http://apahelpcenter.org/articles/article.php?id=141; Internet; accessed 12Febuary 2009.

¹⁶ Carlene Wilson, Helen Braitwaite, and Peter J. Murphy, "Psychological Preparation for the Battlefield," in *Military Stress and Performance: the Australian Defence Force Experience*, ed. by George Kearney, Mark Creamer, Ric Marshall, and Anne Goyne, 19-38 (Melbourne: Melbourne University Press, 2003), 21.

¹⁷ American Psychological Association Help Center, "Stress: How Does Stress..."

nervous system is ill-equipped to handle chronic or cumulative stress.¹⁸ The continued arousal of the autonomic nervous system caused by chronic stress will adversely affect physiological or psychological health over time. There is a large body of research that indicates that an individual's physical and psychological health is closely tied to the amount of stress in one's life.¹⁹ However, our appraisals and interpretations of the stressors in our environment are critical determinants of how individuals react physiologically and psychologically to stress and vary considerably between individuals.

RELATIVITY OF STRESS AND ADAPTATION

Stress is more than just a biological process of physiological adaptation. Stress in not a unitary concept but rather an interaction of many different variables and processes within the human body that involves the mind in relation to the external environment. As military psychiatrist and researcher William P. Nash aptly states, "stress may be best understood as a transaction between each individual's unique biology and his or her environment, mediated by a multitude of psychological and social processes.²⁰" In summation, adaptation to stress is highly individualized and is greatly affected by conscious coping choices, personality traits, and interpersonal relationships. Successful adaptation to the stressors of combat and operations is crucial to the mental health of warfighters and ultimately a critical determinant of mission

¹⁸ Randy J. Larsen, and David M. Buss, *Personality Psychology: Domains of Knowledge About Human Nature – third edition* (New York: McGraw-Hill, 2006), 211.

¹⁹ Based on research findings from Lampert *et al.*2002, and Adlaf *et al.*2001 as found in: Elliot Aronson, *et al.*, *Social Psychology: third Canadian edition*, (Toronto: Pearson Education Inc., 2005), 447.

²⁰ William P. Nash, "Combat/Operational Stress Adaptation and Injuries," in *Combat Stress Injury: theory, Research, andManagement,* ed. Charles R. Figley and William P. Nash, 11-29. (New York: Routledge, 2007), 39.

success. For that reason it is of fundamental importance to the frontline leader to understand the various theories surrounding the coping or adaptation of stress.

There are a multitude of theories pertaining to stress adaptation and coping but essentially they can be deconstructed into general models; those that deal with stress as a response or stimulus model (adaptation as a biological process) and those that regard stress adaptation as interactional or transactional (based on psychological processes). There is limited scope to cover each of these models in detail; however, there is a requirement to present a broad overview of each as it is of importance to the frontline leader to understand how individual warfighters adapt to stress as leadership exerts a strong influence in adaptation to stress.

STRESS AS A RESPONSE

Stress and adaptation as a response is largely based upon biological processes. When a person is exposed to a particular stressor day in and day out such as a soldier engaged in combat operations, the physiological flight-fight-freeze response is just the first step in a chain of events that psychological researcher Hans Seyle has termed the General Adaptation Syndrome (GAS). Best represented as a three-stage model, Seyle proposed that the first stage consisted of flight-or-fight (the concept of freeze could be encapsulated in a type of flight response using this model) response and the associated autonomic nervous system reacts to prepare the body for a perceived threat. If the stressor is persistent, then the next stage begins what he deemed the resistance stage. At this point that body has been consuming a finite number of available bodily resources at an extremely rate even though the flight-or-fight responses have subsided. During this stage the body is resisting the stress but it is expending enormous effort and energy. If exposure to the

²¹ Randy J. Larsen, and David M. Buss, *Personality Psychology...*, 593.

stressor remains constant the body will eventually enter the third stage of Selye's model, exhaustion. "A stress response that is frequent, extreme and prolonged can place a large demand on, or even deplete, a person's physical, social, and psychological resources.²²"

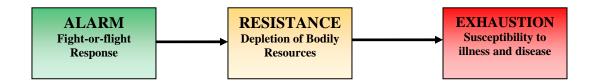


Figure 1.1 – The three stages of the General Adaptation Syndrome proposed by Selye.

Source: Larsen and Buss, Personality Psychology: Domains of Knowledge About Human Nature, 594.

To use an analogy, stress as a response is like street racing where the decisive use of nitrous oxide will immediately provide a short burst of increased horsepower to win a race but sustained use will ultimately destroy the engine. The time it takes for an individual to reach Selye's final stage is highly dependent on physiological capacities, which is known to vary significantly from one person to another person. Selye's model is useful to the study of combat stress as one can easily see how prolonged exposure to stressors can ultimately have detrimental psychological and physical effect on an individual's health. However, in Selye's model all stressors lead to similar physiological patterns of responses and there is no mention of the role of perception and appraisal related to individual differences. Therefore, it is useful in understanding acute stress reactions but when attempting to understand adaptation and coping with more chronic and cumulative stress, a transactional model of stress is debatably more useful.

STRESS AS AN INTERACTIONAL MODEL

²² *Ibid.*, 598.

²³ Randy J. Larsen, and David M. Buss, *Personality Psychology...*, 600.

Interactional or transactional models of stress tend to focus on the imbalance between individually perceived demands or stressors and the individuals cognitive appraisals of those stressors.²⁴ In comparison to stress as a response models, the transactional model focuses on adaptive responses in the cognitive, emotional and behavioural spheres which are far more diverse and variable due to individual and situational differences. ²⁵ This model is is therefore more inclusive and reflective of psychological processes than the stress response model and has rapidly become a central theme in the study of combat and operational stress. ²⁶ Psychological researchers Richard Lazarus and Susan Folkman define coping and adaptation as "constantly changing cognitive and behavioral efforts to manage specific external and/or internal demands that are appraised as taxing or exceeding the resources of that person.²⁷" Essentially, the congruence of the warfighters perception between the appraisal of environmental demands and the potential the individual feels he has for handling these demands will determine the amount of combat or operational stress experienced. Accordingly to Lazarus and Folkman's research the first step in adaptation is appraisal and consists of both a primary and secondary appraisal mechanisms (figure 1.2). The primary appraisal is event based while secondary appraisals take these events and is interpreted by an individual's knowledge, attribution style, and the preconceived beliefs in order to arrive at an appraisal of the stressor or event²⁸. As one could

²⁴ Dr. Richard Lazarus, and Dr Susan Folkman, *Stress, Appraisal, and Coping* (New York: Springer Publishing, 1984), 23.

²⁵ William P. Nash, "Combat/Operational Stress...," 41.

²⁶ William P. Nash, "Combat/Operational Stress...," 41.

²⁷ Dr. Richard Lazarus, and Dr Susan Folkman, Stress, Appraisal, and Coping ..., 141.

²⁸ Lecture notes, University of Nottingham, School of Psychology, "Models of Stress," www.psyc.nott.ac.uk/staff/ef/c82app/lecture4.pdf; Internet; accessed 17 April 2009.

surmise, individual differences in appraisal of stressful situations accounts for much of the differences in how individuals adapt to them.²⁹ The impact of this appraisal is subjected to an individual's ability to cope. Coping in this context being defined as "an individual's attempt to handle the perceived demands that he has to face.³⁰" The following figure (fig 1.2) is a pictorial representation of Lazarus and Folkman's Transactional model of stress that highlights the interactive nature of the biological, psychological, and interpersonal components of stress adaptation.

Lazarus's transactional model

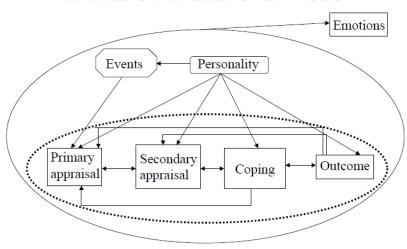


Figure 1.2 – Transactional Model of Stress Adaptation

Source: University of Nottingham, www.psyc.nott.ac.uk/staff/ef/c82app/lecture4.pdf

In summation, the importance of existing knowledge (gained through training), attribution style (personality traits) and beliefs (culture) in adaptation to stress cannot be understated as these are highly susceptible to external influence. When examined from this perspective, one may gain an intuitive appreciation as to the potential effects frontline leaders can have in shaping the stress

²⁹William P. Nash, "Combat/Operational Stress...," 44.

³⁰ Dr Ben Shalit, *The Psychology of Conflict and Combat*, (New York: Praeger Publishers, 1988), 15.

adaptation process through direct leadership and training which will be further investigated in Chapter Four.

The purpose of this chapter was to establish a contextual understanding of the biological, physiological and psychological components of stress with a view to examining the basic physiological and psychological tenets of stress responses and how cognitive appraisals of stress will determine its effect on the warfighter. A firm understanding of what is stress and the processes involved in adaptation and coping is fundamental to the warfighter, especially among those designated as frontline leaders. This understanding will be useful in contextualizing the premise of the next chapter which is to outline the psychology of the contemporary battlefield in order to further define combat and operational stress as a precursor to further discussions on the CF perspectives on operational stress in subsequent chapters.

CHAPTER II - AN INTRODUCTION TO COMBAT AND OPERATIONAL STRESS

"Combat stress is what we inflict on the enemy!"31."

Having now established a foundational overview of stress, adaptation and coping the premise of this chapter is to commence with an outline of the psychological aspects of the contemporary operating environment for today's warfighter with a view to culminating in an examination of the taxonomy of combat and operational stress nomenclature and its defining concepts. This will build on earlier foundational understandings of stress that will be applied against the context of combat and operations from a military psychology perspective. The first step in doing so is to understand the psychological dimensions of the modern battlespace.

THE PSYCHOLOGY OF THE CONTEMPORARY OPERATING ENVIRONMENT

There is a popular axiom in the Special Operations Forces (SOF) community that "humans are more important than hardware." It is a truism that is easily forgotten in an era of strained military budgets and the fixation of pursuing technological supremacy over the contemporary battlefield as a means of 'doing more with less'. Nevertheless, the global threat environment of the post-9/11 world has re-emphasized the requirement for western militaries to have standing high-readiness forces. These forces must be able to project themselves to destabilized regions of the world, often on short-notice whether it is in response to humanitarian crisis such as the Tsunami in Sri Lanka or in response to the threats and plights of populations of failed states like Afghanistan. In laymen's terms high readiness means several things to the military, but for the purposes of this paper the rawest definition of high readiness will suffice,

³¹ William P. Nash, "The Stressors of War." in *Combat Stress Injury: theory, Research, and Management*, ed. Charles R. Figley and William P. Nash, 11-29. (New York: Routledge, 2007):13.

which is essentially 'soldier's sitting on rucksacks' trained and ready to deploy on short notice — meaning today's forces are more than ever reliant upon the soldier. Much has been written describing the complexities of the contemporary battle space for today's soldier. The military operations soldiers find themselves in today are typified by Irregular Warfare (IW) where soldiers may at one moment be engaged in highly intense combat operations and or at the next moment delivering humanitarian assistance. Often the distinguishing line between the two is almost non-existent and it falls to the frontline soldier in its determination. Colonel Bernd Horn provides an excellent context of this in his recent account of Canadian soldiers in Afghanistan:

When an Afghan man approached a Canadian convoy travelling down a road and refused to stop, even though the soldiers tried, through hand signals, to warn him, the soldiers shot him. The soldiers were afraid – legitimately afraid – that he was a suicide bomber, a human explosive device. If they shot him, they risked killing an innocent person and further enraging and alienating the local population. If they allowed him to approach or approached him, they could be blown up. Ten days later, Canadian soldiers fired at a sedan that didn't stop at a road block, killing the driver instantly... The soldiers were so worried that the driver was a suicide bomber that they asked the Afghan soldiers to pull the dead driver from his car and search for explosives. Nothing was found. The same day, a suicide bomber walked right up to the main gate of Bagram Air Base, north of Kabul, and killed twenty-three people and injured scores of others. 32

As illustrated in the above example, the risk and challenges a soldier faces on combat operations is a stark reality of the profession of arms. It is a physiologically demanding and psychologically stressful profession that can, especially in times of war, lead to injury or even death. Warfighters are often placed in highly ambiguous and fluid situations as evidenced above. Today's operations are a convergence of traditional convention and unconventional methods of warfare with rapidly changing rules of engagement and ambiguous objectives which makes mission success hard to measure. The warfighter on extended deployment will typically experience a

³² Colonel Horn's observations during a visit to Afghanistan in 2007 to study counterinsurgency operations as quoted in the book by: Janice Gross Stein and Eugene Lang, *The Unexpected War: Canada In Kandahar* (Toronto: Viking Canada, 2007), 212.

variety of persistent hardships and threats³³. These "stressors" may vary depending upon a warfighters employment. A warfighter's inner strength to face adversity, fear and hardship during deployed operations with confidence and resolution is based on his or hers will to persevere and accomplish the mission at hand. Many of today's operations, especially those related to peace support or stability operations often lack clear concise tactical objectives and frequently warfighters redeploy from operations without any tangible sense of mission accomplishment. Often this generates more stress, frustration which serves to erode individual morale and unit cohesiveness which have been proven to be the best predictor of stress resiliency.³⁴ The convergence of peace, conflict and war that typifies contemporary warfare creates a complex operating environment for warfighters that is arguably more psychologically demanding than traditional black and white notions of conventional warfare.³⁵ The contemporary idea of the "Strategic Corporal" or the CNN effect is an example of this. The prevalence, speed and depth of the 24-hour mass media news cycle has arguably greatly changed the operating environment in which the seemingly innocuous tactical actions of a frontline warfighter can quickly have strategic-political consequences.³⁶ A facet that is by no means lost on today's warfighter and only serves to increase the complexity of his or her operating environment.

³³ Based on author's combat and PSO experiences in Afghanistan, Africa, and Croatia serving with both mechanized infantry units and special operations forces.

³⁴ Department of Defence, Army Behavioral Health, "Combat and Operational Stress...," 2.

³⁵ Peter J., Murphy, "The Stress of Deployment." in *Military Stress and Performance: The Australian Defence Force Experience*, edited by George Kearney, Mark Creamer, Ric Marshall, and Anne Goyne., 3-18. (Melbourne: Melbourne University Press, 2003), 9.

³⁶ Department of Defence, B-GJ-005-300/FP-000 *Canadian Forces Operations* (Ottawa: DND Canada, 2004), 22-1.

Having established a contextual understanding of the complexities of the contemporary operating environment (COE) and how they challenge traditional notions of warfare, this chapter will now shift focus to further defining the taxonomy of combat and operational stress with a view to familiarizing the frontline leader to the varies nomenclatures and their definitions used in military psychology to describe the stresses of warfare.

TAXONOMY OF COMBAT AND OPERATIONAL STRESS

The taxonomy of terms used to describe reactions to combat and operational stress is vast, historical and politically sensitive due to the stigma that often accompanies discussions on mental health problems. In addition, there seems to be a lack of comprehensive common understanding across the spectrum of the CF, especially among frontline leaders as to the terminology and taxonomy of deployment-related stress disorders. This is likely due to a deficiency in institutionalized education on combat stress and human performance³⁷ – an issue that will be addressed in Chapter Five. For example, PTSD is often used synonymously with the term combat stress when PTSD is a psychiatric disorder as defined by the Diagnostic & Statistical Manual of Mental Disorders (DSM-IV-TR)³⁸ that constitutes only one extreme in the spectrum of potential combat stress reactions.³⁹ The purpose of this section is to define the nomenclature associated with combat and operational stress.

³⁷ Major E.R. Black, "Human Performance in Combat," *Personnel Research Report (Working Paper 88-1)*. (St Hubert: Canadian Forces Mobile Command Headquarters, March 1988), 2.

³⁸ American Psychiatric Association, *Diagnostic and Statistical Manual of Mental Disorders DSM-IV-TR*. (Washington: American Psychiatric Association, 2000), 467.

³⁹ Department of Defence, Army Behavioral Health, "Combat and Operational Stress General Information," http://www.behaviouralhealth.army.mil/provider/general.html; Internet; accessed 12 April 2009.

The widely accepted definition of psychological stress is "the particular relationship between the person and the environment that is appraised by an individual as taxing or exceeding his or her resources and endangering his or her well-being. 40" Essentially, psychological stress refers to a condition which occurs when psychological demands exceed the psychological resources of the individual to cope with the experience. 41 The warfighter is exposed to a myriad of stimuli not normally present in everyday society and often results in a complex array of "stressors" that is out of the norm for most warfighters deployed on operations. These "stressors" are essentially defined as events or conditions that cause stress in individuals. 42 Stressors may be manifested by either internal or external factors normally associated with a combination of physical, cognitive, social and environmental factors. Stressors may be acute (short term) or chronic (persistent). These stressors are commonly referred to in a military context under the nomenclature of combat and operational stress.

Combat and or operational stress is defined as including all the physiological and emotional stresses experienced as a direct result of the dangers and mission demands of combat and military operations.⁴³ It should be noted that the term is conceptually not restricted to combat operations but is intended to describe the stresses encountered as a result of combat-like conditions present throughout the entire spectrum of military operations including training. The preceding definition of combat and operational stress is intended to be used to describe the

⁴⁰ Widely accepted as the standard definition as developed by Lazarus and Folkman (1984). Carlene Wilson, Helen Braitwaite, and Peter J. Murphy, "Psychological Preparation for the Battlefield..., 20.

⁴¹ Author' interview with Director Mental Health Services (CFHS), Colonel Randy Boddam, 27 February, 2009.

⁴² Peter J. Murphy, and Kelly M. Farley, "Morale, Cohesion, and Confidence in Leadership:Unit Climate Dimensions for Canadian Soldiers on Operations," in *The Human in Command: Exploring the Modern Military Experience*, ed. Carol McCann and Ross Pigeau, 311-344 (New York: Kluwer Academic/Plenum Publishers, 2000), 315.

⁴³ Department of Defence, Army Behavioral Health, "Combat and Operational Stress...," 1.

stresses of operations as experienced by all warfighters; however, reactions to these stresses vary considerably between individuals⁴⁴ for reasons that will be further outlined.

As discussed earlier, the CF categorizes deployment-related stress reactions under the nomenclature of Operational Stress Injury (OSI) which is a non-clinical term ⁴⁵ intended to encompass all deployment-related mental health problems that arise from reactions to the stresses of operations. ⁴⁶ In contrast, the US Army refers to such reactions as Combat and Operational Stress Reactions (COSR) which is defined as physiological and psychological reactions manifested by a variety of symptoms during or immediately following combat or combat-like conditions. ⁴⁷ The US military adopted the term COSR rather than using a psychiatric disorder such as Acute Stress Disorder or PTSD in order to avoid the stigma and connotation that a person suffering from COSR is actually "sick" or "injured". ⁴⁸ COSR is not considered an abnormal response to combat exposure and is meant to "normalize" the reaction, not create an impression of psychiatric disorder or injury requiring medical treatment. ⁴⁹ COSR is a normal reaction to abnormal situations and experiences and is not symptomatic of a psychiatric disorder, despite the presence of an array of psychiatric and somatic symptoms that

⁴⁴ Peter J. Murphy, and Kelly M. Farley, "Morale, Cohesion, and Confidence...," 315.

⁴⁵ Standing Senate Committee on National Security and Defence, *Fourteenth Report – Occupational Stress Injuries: The Need for Understanding*, no. 37, 1, Thursday, June 19, 2003, 8.

⁴⁶ Mark A. Zamorski,MD, MHSA, "Overcoming Stigma and Other Barriers to Mental Health Care in the CF," (presentation, CF Health Services, 2008), 11.

Department of Defence, Deployment Health Care Center, "Air force Combat Stress for Medical Providers," http://www.pdhealth.mil/; Internet; accessed 12 Apr 09.

⁴⁸ Dr Raymond Monsour Scurfield, *War Trauma: Lessons Unlearned from Vietnam to Iraq* (New York: Algora Publishing, 2006), 44.

⁴⁹ Ibid., 45.

may temporarily render an individual dysfunctional.⁵⁰ Although many individuals suffering from COSR will recover, recent research has suggested that if left untreated there is a positive association to the development of psychiatric disorders such as PTSD.⁵¹ In summation, the US Army has embraced the term COSR while the CF has opted for an arguably broader lexicon. The CF opted for OSI in order to avoid the stigma of deployment-related mental health problems by framing stress reactions under the auspice of an "injury.⁵²" This paper will later argue that OSI may not be as flexible a term as COSR. OSI refers to a number of deployment-related mental health problems which has a chronic or clinical connotation to it vice the frontline flexibility of CSOR which is debatably more indicative of an acute stress reaction facilitating a more positive attitude towards frontline treatment. As will subsequently discussed, the term OSI does not seek to "normalize" stress in the same manner as the COSR nomenclature.

The term Combat Stress Reaction (CSR) is an older term that existed in US Army lexicon but has since been replaced by COSR, given the prevalence of recent research that suggests stress reactions are not exclusively associated with combat operations⁵³. Therefore, COSR is generally regarded as a term which is more reflective of today's contemporary operating environment.⁵⁴ Other terms that have historically been associated with COSR or OSI but are now largely archaic include; nostalgia, soldier's heart, war neurosis, combat or battle

⁵⁰ Solomon, Zahava, Rami Shklar, and Mario Mikulincer, "Frontline Treatment of Combat Stress Reaction: A 20-Year Longitudinal Evaluation Study," *The American Journal of Psychiatry* 162, no.12 (December 2005): 2309.

⁵¹ Solomon, Zahava, Rami Shklar, and Mario Mikulincer, "Frontline Treatment of Combat...," 2309.

⁵² Standing Senate Committee on National Security and Defence, *Fourteen Report*...8.

⁵³ Army Medicine, "Combat and Operational Stress General Information," http://www.behaviourhealth. army.mil/provider/general.html; Internet; accessed 12 March 2009.

⁵⁴ Jitinder Sareen, et al., "Combat and Peacekeeping Operations..., 843.

fatigue, and shell-shock. How these terms are utilized and in what context directly reflects the approaches, policies, and actions taken by frontline leaders as will be demonstrated in Chapter Five.

THE USE OF CF NOMENCLATURE FOR COMBAT AND OPERATIONAL STRESS

While CF mental health care professionals clinically recognize the above nomenclatures, their specifiers and associated symptoms, the CF military leadership has directed the use of the non-medical term "operational stress injury" to encompass all the above stress related disorders⁵⁵. The CF defines operational stress injuries (OSI) as:

...any persistent psychological difficulty resulting from operational duties performed while serving in the Canadian military. It is used to describe a broad range of problems which include diagnosed medical conditions such as anxiety disorders, depression and post traumatic stress disorder (PTSD) as well as other conditions that may be less severe, but still interfere with daily functioning ⁵⁶.

The reason this term gained favour over others is that it was hypothesized that many personnel and veterans were reluctant to come forward and seek treatment for operationally related stress disorders because of the stigma associated with mental health problems. The term OSI was meant to be less intimidating and was thought to emphasize that stress disorders were not mental illnesses; rather they were "injuries.⁵⁷" This was an attempt by the senior military leadership to mitigate some of the stigma attached to mental health illness within the CF. However, in doing so the military leadership may have created some ambiguity and friction between mental health

⁵⁵ Standing Senate Committee on National Security and Defence, *Fourteen Report*...8.

⁵⁶ Veteran Affairs Canada, "What is an Operational Stress Injury?" http://www.vac-cc.gc.ca/clients /sub.cfm? source=mhealth/definition; Internet; accessed 28 February 2009.

⁵⁷ Standing Senate Committee on National Security and Defence, *Fourteenth Report*...8.

care professions and frontline leaders who are not intimately familiar with the clinical aspects of stress disorders. Health care professionals find the term too broad and encompassing as it includes a variety of deployment-related mental health problems (depression, anxiety disorders, PTSD, and acute stress reaction)⁵⁸. From the perspective of frontline leaders, the term is cumbersome. By framing stress reaction as an "injury," it lends itself to connotations of immediate engagement of the medical chain support chain which is outside of the purview of the frontline leader's span of control. As such, OSI has arguably a more clinical medical connotation to it vice the frontline flexibility of the term COSR which is debatably more indicative of an acute stress reaction and facilitates a more positive attitude towards frontline treatment. Suffice to say, the term is not well-regarded by either frontline leaders or mental health professionals⁵⁹. There is scope here for further analysis as to the effect of normalizing stress injuries vice implying a person is injured and the subsequent impact on return to duty rates among warfighters suffering from stress reactions. This raises an interesting paradigm regarding labeling and its impact upon those suffering from combat and operational stress reactions. While OSI nomenclature is sensitive to the stigma of mental health problems, labeling and overemphasizing the challenges and issues of deployment-related mental health problems may prove to be problematic and is worthy of further examination.

THE ETHICS OF LABELLING

Labels in psychiatric diagnosis have profound consequences for individuals that are both positive and negative. As individuals we interact with our environment based on personal constructs. These are essentially summaries of observations that convey a meaning to an

⁵⁸ Author' interview with Director Mental Health Services (CFHS), Colonel Randy Boddam, 27 February, 2009.

⁵⁹ Ibid.

individual⁶⁰. Therefore, a clinician classifying a pattern of behaviour or symptoms as a medical diagnosis can offer reassurance in individuals as it offers exculpation. The diagnosis fits easily within their personal constructs of being injured that assists in preserving one's self-identity as it places fault away from the individual. As psychologist William Nash asserts, "diagnostic labels can offer exculpation, or at least, to the extent they imply that individuals are afflicted with something outside their control.⁶¹" The labelling of medical diagnosis enables the establishment of standardized criteria for symptomatic diagnosis and treatment. In the case of combat stress, labelling has helped countless numbers to receive treatment for stress-related illnesses that would have otherwise been dismissed as "cowardice" in the past. The diagnosis legitimizes the reaction as an injury within the individual. However, diagnostic labels can also harm warfighters and the military units they serve in because of the heavy stigma that follows mental illness. Warfighters are socialized into a culture that enables them to "close with and destroy the enemy." This "warrior culture" emphasizes physical and mental fortitude in the face of extremity. Psychiatric labels imply to the warfighter and others not only weakness but a failure to live up to the ideals of his profession. As Nash aptly states, "like weapons found on close inspection to have defective components, psychiatrically labelled warriors can lose trust of their superiors and peers, and their own trust in themselves. 62. Most of this can be attributed to the stigma associated with mental illness and prevalent military attitudes which will be further addressed in Chapter Five; nevertheless there is a side of labelling that isn't directly related to stigma. To the

⁶⁰ Randy J. Larsen, and David M. Buss, *Personality Psychology...*,403.

⁶¹ William P. Nash, "Combat/Operational Stress Adaptations and Injuries," in *Combat Stress Injury: Theory, Research, and Management*, edited by Charles R. Figley and William P. Nash, 11-29 (New York: Routledge, 2007), 34.

⁶² William P. Nash, "Combat/Operational Stress Adaptations...," 34.

extent that a medical diagnosis can be a comforting assurance to an individual conflicted with combat stress reaction, "labels of any kind can also seem to give permission to individuals to give up trying to master their own stress symptoms. 63". Information shapes individual behaviours. The information source and the frequency in which an individual receives it are strong predictors of attitude and behaviour.⁶⁴ An institutionalized over-emphasis placed on combat stress injuries, such as the attention that has been placed on OSI within the CF could have the tertiary effect of having warfighters becoming overly sensitized on inward signs of stress rather than outwardardly focused on the mission. As Nash states, "the avoidance of labelling and a focus on normalization have also long been central to civilian crisis management. 65, There is extensive research on Vietnam Veterans that suggests normalization is highly effective in prevention of reactions to combat stress and in encouraging warfighters to recover from stress reactions⁶⁶. An example of this theory in practice is the US Army's Battlemind program. The Combat Stress Team (CST) members that administer and monitor the program are extremely careful not to make any entries in warfighters' medical records when seeing people with COSR unless it is absolutely necessary, as they believe, that if they start utilizing labels or delivering diagnoses, warfighters may identify with being sick or abnormal and it may make the condition worse psycho-somatically⁶⁷. CST members prefer the

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⁶³ *Ibid.*, 34.

⁶⁴ Randy J. Larsen, and David M. Buss, *Personality Psychology...*,403.

⁶⁵ William P. Nash, "Combat/Operational Stress Adaptations...," 35.

⁶⁶ H.R.Kormos, "The Nature of combat Stress," in *Stress Disorders among Vietnam Veterans: Theory, Research and Treatment*, ed, C.R.Figley, 3-22 (New York: Routledge), 14.

⁶⁷ Department of Defence, Army Behavioral Health, "Combat and Operational Stress...

philosophical approach that treats combat stress reaction as a normal reaction to abnormal situation. The concept of labelling and normalization lends itself to the understanding of the importance of nomenclature and its use in dealing with issues of combat and operational stress. This foundational understanding will assist frontline leaders in framing the context of the factors and causes of combat and operational stress as will be defined subsequently.

DEFINING COMBAT STRESS

While the nature of modern warfare often appears significantly different than the traditional experience of war, there is one commonality – the personal impact it has on the warfighter. The unlimited liability that the warfighters accept upon entering into military service brings with it an acknowledged level of risk of physical and psychological injury. "By its very nature, any military service poses potentially high risk of exposure to psychological and physical threat. ⁶⁸" Reinforcing this notion, in a study of Canadian Forces personnel it was demonstrated that 55 percent of serving personnel reported that their life had been threatened on at least one occasion, while 78 percent reported having seen or experienced an event that had a profoundly disturbing impact upon them. ⁶⁹ Yet even with the expectation of the risks involved, the statistical occurrence of combat stress reactions (see Chapter Three) seems to point to the fact that many service personnel are ill-prepared for the stressors of operations.

As previously alluded too, combat stress is the result of a complex interplay of internal and external stressors. The stressors involved may not appear to be explicit such as those that

⁶⁸ Peter J. Murphy, "the Stress of Deployment," in *Military Stress and Performance...*, 3.

⁶⁹ Peter J. Murphy, and C. Gringras, "The incidence and impact of traumatic experience in CF Personnel," Unpublished note, Ottawa: Canadian Defence Force, Personnel Reasearch Team, 1997. As quoted in Peter J. Murphy, "the Stress of Deployment," in *Military Stress and Performance...*, 3.

would normally thought to be limited to the enemy and that he may be trying to kill you. Often the warfighter perceives the biggest threats to life as a state of nature given the circumstances. To So therefore, stressors can vary from threat of imminent death to things as seemingly innocuous as loneliness and boredom. Internal stressors are individually focused and can be associated with family separation and/or personal performance anxieties about performing effectively under fire. Whereas external stressors are exhibited in the environment, meaning they could be generated from enemy actions, poor unit leadership, and / or from austere living conditions to name just a few. Research findings from the Israel Defence Force (IDF) and the US Army have sought to establish a taxonomy of common stressors reported by warfighters on deployments and in combat operations. It was discovered that among internal and external stressors they generally could be categorizing within three domains; cognitive, social, and physical stressors. Table 2.1 below serves to highlight some of the more prominent internal and external factors that have been found to contribute to combat stress:

Stressors of Deployment and	Type of Stressor	
Combat in Operations Internal Extern		External
Cognitive		
Letting comrades or dependents down	×	
Fear of losing limb, injury	X	
Fear of Death	X	
Letting unit down	×	
Being captured	×	
Showing fear	×	
Making wrong decisions	X	

⁷⁰ Drawn from the Author's own combat experiences. The author served two combat tours in Afghanistan as part of the US-led Operation: ENDURING FREEDOM (OEF) as an assaulter officer within a Canadian Special Operations Task Force.

⁷¹ These are common anxieties generated by soldiers who have never deployed on combat operations and can be a source a severe anxiety and fear. National Research Council, *The Psychology of the Fighting Man*, (New York: Penguin Books, 1943), 347.

⁷² Ben Shalit, *The Psychology of Conflict and Combat* (New York: Praeger Publishers, 1988), 11.

Being a coward	x	
Being competent	X	
Letting country down	X	
Lack or too much information		X
Ambiguous or changing mission		X
Ambiguous or changing rules of		X
engagement		
Loyalty conflicts	X	x
Boredom and monotony		x
Experiences that don't make sense		X
Losses of friends to death or injury		×
Shame and guilt	×	
Helplessness	X	
The Horror of carnage		X
Killing		X
Social		
Isolation from social supports		x
Lack of privacy or personal space		x
The media and public opinion		X
Loss in faith in god (or belief system)	×	
Inability to forgive or feel forgiven	X	
Physical		
Heat and cold		x
Dehydration and Wetness		X
Dirt and Mud		X
Sleep deprivation		X
Noise and Blasts		X
Fumes and smells		x
Bright light or darkness		X
Malnutrition		x
Injury or illness		x

Table 2.1 – A list of the commonly experienced stressors for soldiers deployed in combat operations.

Sources: Shalit, The Psychology of Conflict and Combat, 11 and Murphy, Combat Stress Injury, 19-29.

In review of the above multitude of stressors that the warfighter is exposed to it is easy to surmise why some type of stress reaction is almost inevitable as the combat environment is harsh and demanding⁷³. As discussed in Chapter One, it is the accumulative severity and duration of these stressors and the individual's adaptive resources that determine whether it becomes pathological as an acute or chronic stress disorder. Understanding the causal factors is but one

⁷³ USACHPPM Technical Guide 242 states that in combat battle fatigue and combat stress reactions are inevitable. US Army, "Pre-deployment Battlemind For Leaders," http://www.battlemind.army.mil; Internet; accessed 12 March 2009.

aspect, a basic knowledge of the psychiatric disorders associated with stress is fundamental to further examination.

THE EPIDEMIOLOGY OF STRESS DISORDERS

As alluded to above, every warfighter is exposed to combat stress but the severity and duration of exposure is based on the individual's adaptive resources which is a critical determinant as to whether stress reactions will manifest into a short-and- long term psychopathology ⁷⁴ known clinically as acute combat and operational stress reaction in US Army nomenclature and as an operational stress injury within the CF. It is important to note that "reactions to combat stress vary depending on training and circumstances. However, every soldier has a limit and can become a combat stress casualty if exposed to intense or long battle. This is not weakness: it is human nature. ⁷⁵" Extensive research into human performance conducted by the US Army has revealed that combat and operational stress reaction is a normal reaction to an abnormal event and is generally short-term. ⁷⁶ It should not be confused with other psychiatric disorders like PTSD and Acute Stress Disorder, although left untreated symptoms of COSR can lead to development of such disorders. ⁷⁷ Stress researchers Timothy Thomas and Charles O'Hara in studying combat stress reactions in Chechnya have this insight to add which serves well to illustrate the normalcy of combat stress:

⁷⁴ Zahava Solomon, Rami Shklar, and Mario Mikulincer, "Frontline Treatment of Combat Stress Reaction: A 20-Year Longitudinal Evaluation Study." *The American Journal of Psychiatry* 162, no.12 (December 2005): 2309.

⁷⁵ US Army Medical Department, "Combat Stress Control," http://www.armymedicine.army.mil/ about/tl/factscombatstresscontrol.html; Internet; accessed,12 March 2009.

⁷⁶ Army Medicine, "Combat and Operational Stress General Information," http://www.behaviourhealth.army.mil/provider/general.html; Internet; accessed 12 March 2009.

Combat produces two types of behavior, one positive or adaptive, the other dysfunctional. Both may cause a soldier to become a combat stress casualty either in the short-term (during or immediately after a battle) or long-term, after the fighting has stopped and the soldier is either out of the combat zone or even out of the armed forces. Some elements that help form adaptive behavior are unit cohesion, a sense of mission, vigilance, loyalty, and acts of heroism. However, overexposure to conditions can stress even a good soldier, and the individual may end up committing criminal or other acts of misconduct.⁷⁸

As indicated above, combat stress reactions can become acute and will "encompass an array of reversible psychiatric and somatic symptoms and impaired functioning.⁷⁹" Although individuals may recover, combat stress reaction often crystallizes into chronic post-traumatic stress disorder (PTSD). Recounting the preceding examination of nomenclatures used by the frontline warfighter, one now appreciates how confusing it can be using terms such as COSR and OSI when confronting medical clinicians and the psychiatric disorders associated with stress disorders. Perhaps the most common and erroneous labelling of combat stress reaction has been the use of PTSD. Normally, clinical definitions are of little consequence for the frontline leader, however when situation arises and the paths of the frontline leader and the mental health care chain converge, Clausewitz's "friction' can develop due to misunderstanding the epidemiology of combat stress. Human reactions to war vary considerably and reactions to combat stress are polymorphous and liable to rapid change. Combat and operational stress is usually manifested while on deployed operations. However, the symptoms may not manifest until a delayed period of time has lapsed. The difficulties of immediate diagnosis on the battlefield have led most

⁷⁷ Zahava Solomon, Rami Shklar, and Mario Mikulincer, "Frontline Treatment of Combat Stress...," 2309.

⁷⁸ Timothy L. Thomas and Major Charles P. O'Hara, "Combat Stress in Chechnya: The Equal Opportunity Disorder," http://leav-www.army.mil/fmso/documents/stress.htm; Internet; accessed 9 March 2009.

⁷⁹ Zahava Solomon, Rami Shklar, and Mario Mikulincer, "Frontline Treatment of Combat Stress...2309.

armies to use functional definitions to better enable their warfighters. ⁸⁰ If leaders are to fulfill their roles in assisting in the mitigation and treatment of the stress disorders amongst their warfighters, ignorance of stress reactions is an inhibitor to the maintenance of operational effectiveness.

There is an established nomenclature for stress related psychiatric disorders used in clinical applications, research or statistical settings. The Diagnostic and Statistical Manual of Mental Disorders version IV – text revised (DSM-IV-TR)⁸¹ produced by the American Psychiatric Association (APA) is the standard diagnostic psychiatric text for mental health care professionals. DSM-IV-TR delineates the psychiatric disorders and related symptoms. In addressing the epidemiology of stress disorders, table 2.2 outlines and summarizes the variety of stress related disorders normally associated with combat stress.

Specifier	Definition - Symptoms
Combat or	The natural result of the heavy mental and emotional work required
Operational Stress	when facing danger in tough conditions – no pathological physical or psychological reactions beyond fatigue.
Carabat and	, , ,
Combat and	A normal reaction to an abnormal event and is generally short-term.
Operational Stress	Also known as "combat fatigue" or "shell-shock" - an array of reversible
Reaction (COSR)	psychiatric and somatic symptoms and impaired cognitive functioning.
Acute Stress	Development of characteristic anxiety, dissociative (must incl
Disorder	numbing, detachment, and absence of emotional responsiveness), and
	other symptoms that occurs within 1 month after exposure to an
	extreme traumatic stressor. Also prevalent is derealization,
	depersonalization, or dissociative amnesia. Must cause clinically
	significant distress.
Adjustment Disorder	The response to any stressor that does not meet criteria for PTSD, yet
	symptoms patterns of PTSD occur.
Post-Traumatic	The development of characteristic symptoms following exposure to
Stress Disorder	an extreme traumatic stressor involving direct personal
(PTSD)	experience of an event that involves actual or threatened death or
	serious injury, or other threat to one's physical integrity; or witnessing

⁸⁰ Rachael Dekel *et al*, "World Assumptions and Combat-Related Posttraumatic Stress Disorder," *The Journal of Social Psychology* 144, no.4 (2004): 407.

⁸¹ Produced by the APA Committee on Nomenclature and Statistics. American Psychiatric Association, *Diagnostic and Statistical Manual of Mental Disorders: Fourth Edition – Text Revision*, (Washington: American Psychiatric Association, 2000), 465

	or learning of an event that involves violent death, serious harm or threat of death. Must involve intense fear, helplessness, or horror and disorganized or agitated behaviour. The duration of symptoms is more than 1 month and the severity of symptoms must be sufficient to cause "clinically significant distress" or impaired functioning.
Acute PTSD	When duration of symptoms last 3 months or less.
Chronic PTSD	When duration of symptoms exceeds 6 months.
PTSD with Delayed	Manifestation of symptoms is when at least 6 months have passed
Onset	between the traumatic event.
Comorbidities of	Major Depressive Disorder, Substance-Related Disorders, Panic
PTSD	Disorder, Generalized Anxiety Disorder, Obsessive-Compulsive
	Disorder, Agrophobia, Social Phobia, and Bipolar disorder.

Table 2.2 – A taxonomy of combat-related stress disorders

Source: US Army Medical Department: Combat Stress Control and DSM-IV-TR, 465-467

In review of the taxonomy of combat-related stress disorders (table 2.2) it is important to note that "not all psychopathology that occurs in individuals exposed to an extreme stressor should necessarily be attributed to Post-traumatic Stress Disorder. Disorder. Most warfighters exposed to a traumatic stress event do not develop a psychiatric illness. Often the most common mistake made by frontline leaders is relating reactions to combat stress immediately to PTSD. While acute reactions to combat stress left unmanaged can leave an individual at high risk for developing PTSD, it is not the same as PTSD. As figure 2.2 articulates there are a plethora of mental illnesses that can be attributable to reactions from combat stress and each of them requires a specific set of treatment protocols. For example, some are best treated as far forward as possible while others require more comprehensive treatment that cannot be found in the frontlines (see Chapter Four).

⁸² American Psychiatric Association, *Diagnostic and Statistical Manual of Mental Disorders...*,467.

⁸³ Canadian Psychological Association, "Clinical Practice Guidelines: Management of Anxiety Disorders – Posttraumatic Stress Disorder," *Canadian Journal of Psychiatry* 51, no.2 (July 2006):57.

⁸⁴ Zahava Solomon, Rami Shklar, and Mario Mikulincer, "Frontline Treatment of Combat Stress...2309.

In summation, COSR and OSI consist of physiological and psychological stress responses that result from a specific set of cognitive, physical, social and environmental stressors. As mentioned in the previous chapter, stress reactions are the result of personal interpretation of a stressor based on experience, methods of coping. As the research will demonstrate in Chapter Five, interpretations of stress are amenable to change through leadership and training. However, in doing so one must recognize the stressors involved and be knowledgeable in the epidemiology of combat-related stress. The purpose of this chapter was to provide an overview of the taxonomy of combat and operational stress nomenclature while examining the specific stressors present in today's contemporary operating environment. The intent was to reinforce and build upon the frontline leaders' knowledge as to the casual factors relating to combat and operational stress injuries. From this foundation of examination, this paper will now orient towards an examination of the Canadian perspective on combat and operational stress injuries commencing with an institutional perspective. This will be a precursor to subsequent chapters which will further address leadership and its influence on combat and operational stress.

CHAPTER III - THE CANADIAN PERSPECTIVE ON OPERATIONAL STRESS

...the mission in Afghanistan may potentially have a significant long-term mental health impact, but the Canadian forces strives to improve, and has improved, a robust program to deploy forces that are mentally ready, to support them well in-theatre, with mental health resources, and to maximize the early identification and treatment of conditions that manifest after deployment.⁸⁵

-Lieutenant-General Michel Gauthier

The premise of this chapter is to orient further examination of combat and operational stress injuries into a Canadian context. Commencing with an overview of public perceptions of operational stress injuries, this chapter will present a summation of the background, political events and influences that have led to the current CF systems approach to operational stress injuries. The chapter will also include an examination of the prevalence of deployment and non-deployment related mental health problems within the CF. Finally, the chapter will conclude with a critique on the current institutional approaches which will be argued that overemphasizes deployment-related mental health problems which will be demonstrated to be in the statistical minority when compared to non-deployment related problems.

OPERATIONAL STRESS AND THE CANADIAN PUBLIC DOMAIN

The public domain has become increasingly aware of the issues surrounding combat stress and Post-Traumatic Stress Disorders (PTSD) ever since the post-Vietnam era. Since this time, combat stress and PTSD have become almost synonymous with soldiers who have experienced combat. Given the predominate role of mass media in our society, one does not have to wear a military uniform to have an idea of the stressors associated with modern warfare.

⁸⁵ Lieutenant-General Michel Gauthier, Commander Canadian Expeditionary Command, Standing Committee on National Defence, 3 April, 2008.

Popular movies, novels and television serve to reflect the public domains morbid fascination with the experience of war⁸⁶. An example of this is the 1978 highly acclaimed motion picture, The Deer Hunter which focused on the issue of PTSD. Winning five academy awards including best picture, the movie depicted a group of returned Vietnam veterans who were psychologically haunted by their war experiences as they tried to re-integrate into everyday society with tragic consequences. A more recent example of how combat stress has permeated its way into the public domain can be illustrated by prominent Canadian, General (ret'd) Romeo Dallaire. Now an appointed Senator, Dallaire has become a strong and aggressive advocate for military mental health care reform as he himself suffers from chronic PTSD from his experiences in Rwanda. Senator Dallaire's advocacy has placed significant pressure on the CF to examine and address issues pertaining to operational stress injuries. This has only been reinforced by several highly publicized allegations raised against the CF leadership in its handling of deployment-related mental health problems. Of course, the high profile on-going operations in Afghanistan also serve to highlight this issue. The care of soldiers and their families has great interest in today's public domain armed due to a resurgence of support for the Canadian Forces and its challenges in Afghanistan perpetuated by the prevalence of mass media. This generation has had an unprecedented exposure to the grotesque images and most intimate accounts of war due to the unfettered access of mass media to the battlefield⁸⁷.

Much as allegations of abuse at the Abu Grah-Eeb military prison focused accountability upon the US military leadership for its detainee policies, the public release of the 1999 Board of Inquiry-Croatia provided a similar effect in the CF context. The Final Report made public in

⁸⁶Nash, William P., "The Stressors of War." in *Combat Stress Injury...*, 11.

⁸⁷ Ibid., 11.

2000 was highly critical of frontline leaders in their handling of deployment-related health concerns during CF's operations in Croatia. The combination of the above events and circumstances would converge to raise an atmosphere of concern regarding the issue of combat stress and bring it to the forefront of public consciousness thereby forcing attention from the most senior levels of CF leadership.

BACKGROUND ON THE OPERATIONAL STRESS ISSUE IN THE CF

Indications of warfighters suffering symptoms of either acute or chronic reactions to combat stress have been observed for centuries and are well known to the CF. However, a brief historical overview of the CF experience will reveal that there has been a great deal of denial within the military regarding the psychological impact of war on military personnel. 88 Understanding the underpinnings of the CF's background in dealing with combat stress reactions will enable better context to further discussions in subsequent chapters that addresses the challenges frontlines leaders are faced with in dealing with operational stress injuries.

It wasn't until World War I that adverse reactions to combat stress would be labelled and recognized as a legitimate illness. This formal recognition came in the form of a published article by Charles Myers, of the Royal Army Medical Corps who published research indicating that "shell-shock" was not a cover-up for malingering but a legitimate mental-illness that required treatment since then, the taxonomy of terms relating to combat stress has evolved and grown to include a variety of terms in attempts to legitimize combat and operational stress reactions. As psychiatric researcher Zahava Solomon states, reactions to combat stress have been previously

⁸⁸ Peter J. Murphy, "the Stress of Deployment," in *Military Stress and Performance...*, 6.

⁸⁹ David Sharp, "Shocked, shot, and pardoned," *The Lancet* 368, (September 2006): 975.

referred to by a variety of labels such as shell-shock, battle shock or battle or combat fatigue and more commonly by the US military as combat stress reaction (CSR). Yet even while shell-shocked was recognized by health professionals and the military hierarchy as a legitimate psychopathology, the stigma associated with "shell-shock" still shadowed the diagnosis. An eminent medical doctor of the age, Charles Wilson was to write in his much praised book *Anatomy of Courage*, that soldiers who were afflicted with shell-shock were men who "...were unable to stand the test of men...and had about them the marks known to our calling of the incomplete man, the stamp of degeneracy. 91"

The Canadian military's sensitivity to the stigma is well known and is demonstrated in the recent direction the CF leadership has taken in utilizing OSI as a label for all stress disorders attributable to military service. As one can readily observe that it is difficult to have a discourse on the historical background relating to combat stress without acknowledging the stigma that typically accompanies mental illnesses. Even with the progressiveness of 20th Century mental health care and the dawning awareness and acceptance in our society, stigma still looms as a prominent factor in how the CF approaches mental health care in the 21st Century. However, it would be the very public events surrounding the CF's deployment to the Balkans in the late 1990s that would prove to be a catalytic event in how the CF would approach operational stress.

The public disclosure of the 1999 Board of Inquiry – Croatia marks a significant event regarding the topic of operational stress and deployment-related mental health issues within the

⁹⁰ Zahava Solomon, and Rami Shklar, "Frontline Treatment of Combat Stress Reaction..., 2309.

⁹¹ May C. "Lord Moran's Memoir: Shell-shock and the Pathology of Fear," *The Journal of the Royal Society of Medicine* 99, (1998): 97.

⁹²For this reason a portion of Chapter IV will be devoted to further discussion on this topical issue.

CF. 93 Convened to investigate various allegations of health concerns among returning soldiers from operations in Croatia, the final report released in 2000, was highly critical of the CF frontline leadership. The report accused the CF frontline leadership of neglecting its obligations to provide adequate mental health care for soldiers exposed to the stresses of operations 94. The report was scathing in its remarks on how complacent frontline leaders were in addressing operational stress injuries, indicating "an appalling lack of knowledge about mental health by CF members at all rank levels." 95 It went on further to criticize that most commanding officers "knew little about unusual stress-related illnesses such as post-traumatic stress disorder and functional somatic syndromes...this lack of understanding led some Commanding Officers to override medical limitations advised by the Medical Officer. "96 In investigating these allegations, a subsequent report by the Minister of National Defence in 2001 supported the initial findings of the Board of Inquiry-Croatia by concluding that the CF "lacked a comprehensive and integrated medical policy approach to PTSD. 97"

Testifying before the House of Commons Standing Committee on National Defence in June 2008, then Chief of Defence Staff (CDS) General Rick Hillier, provided a concise recent historical perspective on the CF military health care system which serves as an admission that the CF leadership had perhaps been remiss on their responsibilities:

⁹³ Evidentiary transcript of General Hillier's testimony. House of Commons, Standing Senate Committee on National Security and Defence, *Minutes of Proceedings and Evidence*, no. 33, Tuesday, June 17, 2008, 1:30.

⁹⁴ Department of National Defence, *Final Report Board of Inquiry – Croatia* (Ottawa: Public Works and Government Services Canada, 2000), 37.

⁹⁵ Department of National Defence, *Final Report Board of Inquiry – Croatia...*,37.

⁹⁶ *Ibid.*, 37.

⁹⁷ Maggie L.Maier, The Effects of Environmental Illness and Post Traumatic Stress..., 6.

With the end of the cold war, the anticipated peace dividend led to our downsizing, including the CF Health systems and health services, exactly as our commitments operationally worldwide in intense operations skyrocketed, with operations in Croatia, Bosnia, Macedonia, Somalia, Rwanda, Cyprus, and others. We now continue to see, perhaps in increasing numbers, casualties from those operations who for the first time have felt confident enough to come forward...By the late 1990s we knew, and it was confirmed by a chief review of services report, that our military health care system was in trouble. We had almost destroyed it. As a result, we launched a health care project entitled "Rx2000".

In synthesizing General Hillier's comments, it is considered that the erosion of the CF mental health care system was indicative of a failure in the operational leadership in dealing with deployment-related mental health problems. This perceived failure in the CF resonated externally to the department which led to public questioning of the senior CF military leadership by the Office of the Ombudsman in the CF's ability to provide adequate mental health care for its soldiers in this area⁹⁹.

Their was a perception that the CF military chain of command was complacent towards its handling of deployment-related mental health problems. This is evidenced by the interest directed towards the subject by various special interest groups and lobbyists (such as Senator Dallaire) external to the department such as the Standing Committee on National Defence and Veterans Affairs (SCONDVA)¹⁰⁰. These organizations have exerted significant pressures on the senior military leadership to focus heavily on reforming the standard of care for deployment-related mental health problems, in particular PTSD. Direct evidence of this can be found in the

⁹⁸ House of Commons, Standing Senate Committee on National Security and Defence, *Minutes of Proceedings and Evidence*, no. 33...1:30.

⁹⁹ National Defence and Canadian Forces Ombudsman, "Message from the Ombudsman," http://www.ombudsman.forces.gc.ca/index-eng.asp; Internet; accessed 13 March 2009.

SCONDVA – The Standing Committee on National Defence and Veteran Affairs, "About SCONDVA," http://www.dnd.ca/hr/scondva/engraph/about_e.asp; Internet; accessed 12 March 2009.

opening remarks of the Honourable Michael A. Meighen, chairmen of the Standing Senate Committee on National Security and Defence, who in June 2003 stated the following:

Whether it is in peacekeeping, peace-building, peacemaking or in a theatre of war, such as Afghanistan, death and dismemberment stalk the daily lives of our forces personnel. Living and working in such conditions for long stretches with little or no relief and often having no alternative but to stand helplessly by as genocide takes place, may result in what is now termed "occupational stress injuries", the best known of them being "post-traumatic stress disorder". The hearings of our Committee on this subject have been revealing in that they have demonstrated the need for Parliament to be ever vigilant in its monitoring of the activities of our armed forces ¹⁰¹.

The above comments are reflective of the loss of confidence in the senior military leadership demonstrated by the government following the Somali inquiry. In 2002 the National Defence and CF Ombudsman, still perceiving inaction on behalf of the leadership of the Canadian Forces to remedy issues of operational stress, issued a scathing report on CF complacency regarding the military leadership's treatment of its warfighter's with deployment-related PTSD. The report was generated as a result of an investigation instigated by the Ombudsman's Office in April 2001 following a receipt of a complaint by a service member that alleged that, after being diagnosed with PTSD, he was stigmatized and unjustly treated by the military 103. The Ombudsman's office summarized the report as follows in a news release issued in 2002:

In addition to recommending system-wide solutions such as centralized databases, training and educating personnel about PTSD, changing leadership attitudes and

¹⁰¹Standing Senate Committee on National Security and Defence, *Fourtheen Report - Occupational Stress Injuries: The Need for Understanding*, no. 37, 1, Thursday, June 19, 2003, 6.

¹⁰² National Defence and the Canadian Forces Ombudsman, "Special Report to the Minister of National Defence: Systemic Treatment of CF Members with PTSD," (Ottawa: Public Works and Government Services Canada, September 2001).

¹⁰³The report grew out of an investigation launched by the Ombudsman's Office in April 2001 into a complaint by Corporal Christian McEachern . National Defence and Canadian Forces Ombudsman, "Ombudsman says Military Fails its Sick Soldiers," http://www.ombudsman.forces.gc.ca/mr-sm/nr-cp/2002/0502-eng.asp; Internet; accessed 09 February 2009.

evaluating deployment –related training and procedures, the report found that systemic administrative issues must be addressed. The report expresses concerns about confidentiality of medical information, and inflexible use of occupational transfers for soldiers with PTSD. In addition, families of those suffering with PTSD are offered little by way of treatment or support ¹⁰⁴.

The stated report contained 31 recommendations for change to the CF health care system. Since the early millennium, the CF has since been extremely proactive in addressing the issues surrounding operational stress injuries, such as a undertaking a major restructuring of the CF Health care system under the auspice of the Rx2000 Project and the more recent Strengthening of the Forces initiative. Both of which will be further discussed subsequently. However, despite this, in 2008 the Ombudsman's office issued a follow-on report that indicated only 13 out of the 31 original recommendations have been addressed. ¹⁰⁵

In summation, the publicity and public profile of the CF's perceived complacency towards the treatment of operational stress injuries created a large amount of institutional attention and inertia dedicated towards addressing deployment-related mental health problems. ¹⁰⁶ It will be subsequently argued that this institutional focus may have caused an overemphasis on deployment-related mental health problems; however, before doing so a review of the current initiatives needs to be undertaken. One of the most prominent initiatives undertaken to improve the standard of CF Health care was the RX 2000 Project.

 $^{^{104}}$ Comments made by the Office of the National Defence Ombudsman reference the 2002 Ombudsman's Report on Operational Stress injuries. *Ibid.*, 1.

¹⁰⁵ National Defence and Canadian Forces Ombudsman, *A long Road to Recovery: Battling Operational Stress Injuries*, "Special Report to the Minister of National Defence," (Ottawa: Public Works and Government Services Canada, 2008), 7.

¹⁰⁶ Dr Mark Zamorski, "Overcoming Stigma and Other Barriers to Mental Health Care in the CF." Presentation, CF Health Services, 2008.

THE RX 2000 PROJECT

The Rx2000 project was designed to reform the CF health care system through a unified command and administrative structure that would bring together military health care resources. While its timing is conspicuously associated with the Report of Findings published by the Board of Inquiry – Croatia, the Rx2000 project was initiated by former CDS General Maurice Baril prior to the report. The Rx2000 was envisioned to develop an integrated interdisciplinary approach to the delivery of health care services and build partnerships with the civilian health care system to fulfill service requirements. It was based upon four areas that were identified to be improved upon; continuity of care, an acceptable accountability framework, the provision of health protection, and the sustainability of CF health services human resources (figure 3.1). The restructuring of the CF health care system resulted in the creation of a unified command structure known as CF Health Services (CFHS).

Four Pillars of Rx2000				
Continuity of Care	Accountability Framework	Health Protection	Sustainability of CFHS HR	
Case Manager Primary Care Renewal Initiative	Accreditation - Continuous quality Improvement	Force Health Protection	Health Services Reserves	
Standing Commitee on Operational	Command & Control Health Policy		Human Resources Capability Enhancement	
Medicine Review Pre Hospital Care	Performance Management Modern Management Review		Civilian - Military Cooperation	
Third Party Contract Material Management				

¹⁰⁷ Author's conversation with Dr Alan C. Okros who was intimately involved in the Rx2000 project, dated 6 April 2009.

¹⁰⁸ CF Health Services, "Four Pillars Support Rx2000," http://www.forces.gc.ca/health-sante/proj/RX2000/pillars-piliers-eng.asp; Internet; accessed 15 March 2009.

Mental Health		
Physiotherapy		

Table 3.1 – The Four Pillars of the Rx2000 Project and the targeted areas for improvement

Source: Canadian Forces Health Services, Four Pillars of Support Rx2000

Part of the Rx2000 project was a comprehensive review of mental health best practices using an evidence-based approach. But, as General Hillier stated in reference to mental health care delivery, "redeveloping lost capabilities is difficult and it takes a long time. Onsidered leading edge in terms of mental health in Canada, this new approach produced several social welfare initiatives geared towards boosting mental health care support for CF members and their families. This new approach led to the creation and support of several mental health related initiatives (in a combination with several other factors that are outside of the scope of this paper, such as an abandonment of support for institutionalized critical stress debriefings). Examples of such programs are the Operational Stress Injury Social Support (OSISS) program established in 2001 by Veteran Affairs Canada and the Strengthening of the Forces initiative. OSISS was "established to develop and improve social support programs for CF members, veterans and their families. This program is geared completely towards treatment and care vice prevention or mitigation, whereas Strengthening the Forces "is a health promotion program designed to assist Canadian Forces (CF) members, Regular and Primary Reserve, to take control of their health and

¹⁰⁹ House of Commons, Standing Senate Committee on National Security and Defence, *Minutes of Proceedings and Evidence*, no. 33..., 8.

OSISS is a program to support members who suffer from operational stress injuries that are not caused by physical injury as a result of combat actions but rather those injuries that affect the mind and spirit. CF Health Service. Operational Stress Injury Social Support, "Invisible Wounds," http://www.osiss.ca/engraph/hist-e.asp?sidecat=3&txt=2; Internet; accessed 14 March 2009.

¹¹¹ *Ibid*.

well-being. 112, Strengthening of the Forces focuses on injury prevention and active living, nutritional wellness, addictions awareness and prevention, and social wellness. While not directly related to deployment-related mental health issues, it is an adjunct to mental health and well-being and demonstrates a concerted concern for the welfare of CF personnel and families. Strengthening the Forces also strives to increase the availability of health care services with service level agreements with civilian partners to ensure accessibility to said resources and services. 113 It should also be noted that in 2002 the Department of National Defence requested the assistance of Statistics Canada to undertake a comprehensive mental health survey of CF personnel. Known as the 2002 CF Mental Health Survey, it was a supplement to Statistics Canada Canadian Community Health Survey (CCHS) and marked the first instance in CF history that a survey contained a significant mental health component. Along with these sweeping changes and program initiatives (including creation of CF Health Services as a separate command), there were also several committees created. These committees were created to monitor and assess the standard of deployment-related mental health care for the CF. Most notable of these is the CF operational stress injury steering committee (a senior leadership forum) and the establishment of a senior advisor to the Chief of Military Personnel.

As evidenced in the above initiatives, CF has adopted a proactive approach since 2001 in addressing the mental health care needs of CF personnel. Arguably many of these initiatives were in reaction to external criticisms, political pressures and, of course, the recent increase in tempo of combat-related operations in Afghanistan. Despite this, there is still significant

¹¹² National Defence and the Canadian Forces, "What is Strengthening the Forces?" http://www.forces.gc.ca/health-sante/ps/hpp-pps/wstf-qelf-eng.asp; Internet; accessed 17 April 2009.

¹¹³ National Defence and the Canadian Forces, "What is Strengthening the Forces..."

institutional pressure being applied to the CF from the Office of the Ombudsman to further improve the standard of health care for the CF. This was demonstrated most explicitly in the latest 2008 Ombudsman's Special Report (*A Long Road to Recovery: Battling Operational Stress Injuries*). ¹¹⁴ This special report again critiques the CF for not fully implementing all the original 31 recommendations contained within the 2002 report on PTSD.

A REFLECTION ON MILITARY MENTAL HEALTH CARE REFORM

The Department of National Defence and the CF are two distinct parts to a whole that share a congruent aim in executing the defence of Canada but each have distinct and unique roles in that mission. Without getting into a detailed analysis of each, the Department of Defence is essentially the bureaucratic governmental body for the armed forces (CF). Therefore, the recommendations made by the Ombudsman reflect a civilian managerial approach to mental health issues and may not reflect a full appreciation of the unique culture and needs of the CF. Indeed it will be argued in Chapter Four that many of the approaches adopted by the CF as a result of external institutional pressures reflect a civilian managerial model of mental health care that debatably may not be congruent with the role and mandate of military mental health care - which in simplistic terms must put a priority on preserving unit cohesion and the fighting strength of combat units. ¹¹⁵

In summation, what does all this mean in the Canadian context of examining combat and operational stress issues? First, there has also been a resurgence of concern in the military over

¹¹⁴National Defence and Canadian Forces Ombudsman, A long Road to Recover..., 3.

¹¹⁵ Dr Raymond Monsour Scurfield, War Trauma: Lessons Unlearned..., 52.

the provision and quality of treatment for combat-related stress disorders that is indicative of an atmosphere of public perception that there is prevalence of deployment-related mental health problems such as PTSD. Second, in a review of the various aforementioned reports, there appears to be an inconsistent understanding about the mental health issues surrounding combatrelated stress disorders and the diagnosis of PTSD. Tertiary to this is that among the recommendations presented in the various reports there is a conspicuous lack of emphasis on prevention and mitigation of combat and operational stress. There is also a complete lack of emphasis on the role that frontline leadership must play in fulfilling that responsibility. 116 Lastly, in consequence to the very real political institutional pressures exerted on the CF to improve deployment-related mental health problems, there is a perceived singular attention being focused on this one area of mental health. As the CF's deployment mental health specialist Dr Mark Zamorski observes, "deployment-related mental health problems are important, but they appear to have overshadowed other, more "ordinary" mental health problems over the past years. 117, In appreciation of the above, one can surmise that the challenges surrounding operational and combat stress within the CF are sensitive, complex and highly politicized issues. These issues need to be understood by frontline leadership and oriented into the context of promoting operational effectiveness.

The premise of this chapter was to put a Canadian context to the issues of combat and operational stress in order to begin an examination of the Canadian approach to the problem of deployment-related mental health. Continuing within this framework, the next chapter will

¹¹⁶ Author' conversation with Director Mental Health Services (CFHS), Colonel Randy Boddam, who emphasized the importance of operational leadership at the unit level in being the first line of defence against OSI within the CF, 27 February, 2009.

¹¹⁷ Mark A. Zamorski, MD, MHSA, "Overcoming Stigma and Other Barriers...," 11.

examine the prevalence of deployment-related mental health problems in the CF. A review of the statistical data will demonstrate that in reality they represent only a small portion of mental health problems in the CF, lending credence to Zamorski's above observations. However, more importantly, it will provide frontline leaders with an appreciation as to the scope of deployment-related mental health problems as a final precursor to discussing the leader's role in mitigating operational stress.

CHAPTER IV - OPERATIONAL STRESS INJURIES IN THE CF

You dance with the devil, you don't change him – the devil changes you. 118

This chapter will examine the statistical scope of deployment-related mental health problems in the CF. The intent is to gain an appreciation of the actual scope of operational stress injuries and their inherent impact on CF operational effectiveness. From a review of the data, this chapter will highlight that, while important, deployment-related mental health problems are comparable to that of the Canadian civilian population, some non-deployment related mental health problems significantly exceed the Canadian mean-population. This begets the question that perhaps there is an over-emphasis placed on deployment-related mental health problems which arguably may detract attention from more prevalent but non-deployment-related mental illnesses in the CF. Some of these issues are beyond the scope of this paper but require some discourse in order to better inform the frontline leader's risk assessments in dealing with operational stress injuries. In concluding, the chapter will briefly examine the ethics and some of the negative connotations that can be associated with labeling combat and operational stress as a precursor to discussing leadership and operational stress. The first step in achieving this is of course defining the scope of the problem.

THE PREVALENCE OF OPERATIONAL STRESS INJURIES IN THE CF

As a disclaimer to any statistical analysis into the prevalence of deployment-related mental health problems, it should be noted that such data is difficult to obtain and susceptible to

¹¹⁸ Quoted by Max California in the film 8 mm, director Joel Schaumer, 8 mm, Paramount Studios, 1999.

variations in presentation and interpretation. This is due to the wide variance of combat and operational stress disorders, some of which are treated forward successfully and never reported, others are reported months later following deployments, and others are not reported at all 119. In evidence of this, US Army researchers examining the prevalence of COSR in Afghanistan and Iraq reported significant difficulties in quantifying overall percentages and numbers of warfighters that succumb to COSR. 120 This only reinforces the importance and dedicated effort that must be made to gather such data. Statistical data and research into operational stress injuries is critical in achieving an economy of effort in the allocation of appropriate health care resources towards deployment-related mental health problems. In recent years there has been a significant effort put forth by the CF to establish a baseline of statistical data on mental health issues as evidence earlier with 2002 CF Mental Health Survey initiative and the establishment of the Deployment Health Section under CFHS which conducts the Enhanced Post-deployment Health Screening Program for CF personnel deployed on operations ¹²¹. Results from these initiatives have begun to provide a significant appreciation as to the prevalence of operational stress injuries within the CF.

Canadian researcher into human performance in combat discovered in a meta-analysis of casualty statistics in World War II (WWII) that combat stress casualties accounted for a large number of wounded-in-action (WIA). It was reported that in excess of 10,000 personnel were

¹¹⁹ American Psychiatric Association, *Diagnostic and Statistical Manual of Mental Disorders...*,467.

¹²⁰ Coady B. Lapierre, et al, "Posttraumatic Stress and Depression Symptoms in Soldiers Returning from Combat Operations in Iraq and Afghanistan," *Journal of Traumatic Stress* 20, no. 6 (December 2007):933.

¹²¹National Defence and the Canadian Forces, "Evaluation of an Enhanced Post-deployment Health Screening Program for Canadian Forces Members Deployed on Operation APOLLO," http://www.forces.gc.ca/health-sante/pub/rpt/apollo/toc-tdm-eng.asp; Internet; accessed 19 April 2009.

identified and treated for combat stress reactions throughout WWII. 122 Contemporary statistics on CF missions remain difficult to obtain up until just recently which presents a gap in historical inter-war data on operational stress injuries that occurred during these periods during operations in places such as Cyprus, Rwanda, Croatia and Bosnia-Herzegovina. As first identified in the 2002 Ombudsman's Report and reiterated again in the 2008 report, there is "no centralized Canadian-Forces-wide process to collect up-to-date statistics on the number of current and former Canadian Forces members who have been diagnosed with post-traumatic stress disorder or other stress-related injuries ¹²³." Compounding that is the varied nature of missions that the CF have undertaken since the 1990s which have ranged from traditional peacekeeping to peace support operations to active combat operations. In addition, the generating force for this mission relied heavily upon augmentation from the primary reserves which further exacerbates the problem of statistical tracking. Many reservists quickly transition back to civilian life following operational deployments and thus revert back to the civilian health care system making it most difficult to gather medical statistical data. The diversity of personnel (regular force and reservists) and the nature of the missions make the maintenance of statistical databases a difficult challenge. For example, the current mission in Afghanistan prior to 2006 was largely a peace support operation (PSO). Following the CF assuming responsibility for Southern Afghanistan the mission quickly transitioned into aggressive warfighting marked by active combat with insurgent forces. Nevertheless, as mentioned previously, recent initiatives have begun to produce data that assists in formulating an assessment as to the scope of deployment-related

¹²² Major E.R. Black, "Human Performance in Combat...," 2.

¹²³ National Defence and Canadian Forces Ombudsman, A long Road to Recovery...,12.

mental health problems that lend us a much better informed position on the prevalence of deployment-related mental health problems.

Currently, there are approximately 8,000 Canadian Forces members - one third of the CF's deployable force - preparing for, engaged in or returning from an overseas mission ¹²⁴. From the period of 2005 to November 2008 alone there has been a total of 14, 392 CF members deployed on operations in support of the mission in Afghanistan ¹²⁵. Considering the total combined strength of the Land Force (Regular and Reserve) is 34,400 ¹²⁶ this figure represents a significant proportion of the deployable force in the CF. Of those warfighters, statistical data obtained from the Enhanced Post-Deployment Screening Process, 13% reported symptoms of one or more of six common mental health problems that would classify as an operational stress injury. However, only 5.9% of those individuals were clinically symptomatic of suffering from PTSD. ¹²⁷

As alluded to previously, these statistics are a reflection of recent initiatives and thereby reflect a narrow cohort of operations. In searching for statistical data to perhaps gain additional perspective as to the accuracy of the CF figures, it is advantageous to examine the data gathered from the US Army which is much broader due to an obvious advantage in dedicated resources. For example, in 2007 the US congress allocated an unprecedented \$150 million to the US

¹²⁴ Canadian Forces Expeditionary Command, "Current Operations," http://www.forces.gc.ca/site/operations/current-ops-courante-eng.asp; Internet; accessed 12 April 2009.

Statistics gathered from the Canadian Forces Tasking Personnel Order (CFTPO) from 1 Oct 2005 to 10 November 2008. Mark Zamorski, MD, MHSA, "Report on the Findings of the Enhanced Post-Deployment Screening of those returning from OP Archer/Task Force Afghanistan as of 10 November 2008," (briefing note, CF Health Services, 23 December 2008).

¹²⁶ Canadian Forces, "Army Fact Sheet," http://www.army.dnd.ca/lf/English/1_6_3_2.asp; Internet; accessed, 01 April 2009.

¹²⁷ Mark Zamorski, MD, MHSA, "Report on the Findings of the Enhanced Post-Deployment...," 2.

Department of Defense to launch a comprehensive PTSD research program to be administered by the US Army Medical Research and Material Command as part of the ongoing efforts to ensure mental health care and readiness of US soldiers. Therefore, cross-referencing data obtained by the US Army may provide a more accurate portrayal as to the relative accuracy of the CF data.

In 2007 Coady Lapierre *et al*, conducted a research study in the United States on stress disorders and PTSD amongst US soldiers returning from operations in Afghanistan (OEF) and Iraq. The researchers surveyed a total of 5,796 US military personnel serving 15-month tours of duty in combat arms, combat support and service support units. All surveyed had experienced some form of combat and it should be noted there was no statistical significance attributable to gender differences in the study. Their findings are summarized in the table below (table 4.1):

Specifier	OEF Veterans	OIF Veterans
Clinically significant PTSD	6%	7%
Clinically significant Depressive symptoms	15%	13%
PTSD and Depressive symptoms	24%	24%
Some form of clinically significant symptom of Combat Stress Reaction (CSR)		
(Accum Totals)	44%	44%

Table 4.1 – Incidents of reported combat stress reactions among OEF and OIF veterans.

Source: Lapierre, Schwegler and LaBauve (2007), Post Traumatic and Depressive Symptoms in Soldiers Returning from Combat Operations in Iraq and Afghanistan.

It would appear that given the above data (table 4.1) that the purported incident rate of 15% for CF personnel suffering from OSI does not seem to be out of the realm of possibility although perhaps high (15% versus the US 6% for OEF) if the Canadian OSI figure does not contain the

¹²⁸ US Department of Veteran Affairs, "DoD Announces 2 of 6 new PTSD & TBI Research Funding Opportunities," http://www1.va.gov/houston_va_rd/page.cfm?pg=66; Internet; accessed 28 Febuary 2009.

comorbity diagnosis of depression with PTSD. Again, an example of how use of the non-medical term OSI inhibits a proper understanding of the scope of combat stress reactions within the CF. However, it should be noted that the US figures represent a 15-month tour of duty of somewhat sustained combat operations, while the CF have only been engaged in combat operation in Afghanistan since 2006 and for sustained 6-month deployments. In addition, the broad nature of OSI as a nomenclature does not allow for an accurate comparison with the US data.

Stress reactions resulting from traumatic events are not just the purview of the warfighter but are also prevalent within Canadian society, be it firefighters, police officers, emergency services personnel or the general population. People who have experienced severe stressors or traumatic events during the course of their everyday lives are also at risk of developing stress related mental illnesses. A reference to these figures may be useful in providing a more in-depth perspective on the CF figures. The following table (table 4.2) outlines the prevalence of stress-related mental health illnesses within the Canadian mean population gathered from the 2002 Canadian Community Heath Survey (CCHS) developed by Statistics Canada and compares them to the CF Mental Health Survey component which was conducted the same year as a supplement to the CCHS. ¹²⁹ It should be noted that these figures represent the pan-CF population and as such differ from those collected in post-deployment screenings.

Specifier	Prevalence in	Prevalence in
	Civilian Population (mean)	CF (RegF)
Incidence of Mental Illness	20%	
Major Depression (lifetime prevalence)	7.6% *5.5%	16.2%

¹²⁹ This was the first official comprehensive mental health survey ever undertaken by the CF. National Defence and the Canadian Forces, "Statistics Canada CF Mental Health Survey: A Milestone," http://www.forces.gc.ca/health-sante/pub/rpt/mh-sm/survey-enquete-eng.asp#3; Internet; accessed 15 March 2009.

Generalized Anxiety Disorders (GAD)	1.8%	4.6%
Suicide as cause of death	24% (age:15-24) 16% (age: 25-44)	(less than .001%)
Personality Disorder	7%	
PTSD (lifetime prevalence)	9.2% ¹³⁰	7.2%

^{*}this figure represents deployment-related incidence of PTSD (Op APOLLO)

Table 4.2 – Prevalence of mental health disorders in the Canadian mean population, 2002.

Source: Canadian Mental Health Association, http://www.cmha.ca CF Mental Health Survey, and DSM-IV-TR, 466.

ANALYSIS

The 2008 Ombudsman's Special Report states that "a significant number of soldiers are returning from overseas deployments suffering with mental health issues...[and] it has become evident that the Canadian Forces and Canadian Forces members are strained almost to the breaking point¹³¹." In a statistical review of the data gathered above, one is arguably led to question the accuracy of that statement.

An analysis of the above data reveals that while OSI is statistically proven to be of concern for the CF, many of the associated mental health problems encapsulated within the nomenclature (remembering that OSI covers a broad range of mental health illnesses) are comparable to the mean population of Canada. For example, the occurrence of non-deployment-related PTSD in the pan-CF is statistically lower than that of the mean Canadian civilian population (9.2% PTSD prevalence rate in Canadian population versus 7.6% in the CF). In fact, the prevalence of PTSD in CF veterans from Afghanistan is even lower at 5.9% ¹³². That isn't to

¹³⁰ The lifetime prevalence of 9.2% is current statistical data (2006) representative of the Canadian population and supercedes the 2002 statistics quoted in the 2002 CF Health Survey. Sourced from: Canadian Psychological Association, "Clinical Practice Guidelines: Management of Anxiety Disorders – Posttraumatic Stress Disorder," *Canadian Journal of Psychiatry* 51, no.2 (July 2006):57.

¹³¹ National Defence and Canadian Forces Ombudsman, A long Road to Recovery..., 4.

¹³² Mark Zamorski, MD, MHSA, "Report on the Findings of the Enhanced Post-Deployment...," 2.

say that PTSD is not or should not be a concern to the CF. One must bear in mind that the CF statistic for PTSD is representative of the whole CF, while clearly the whole CF does not deploy forward on operations; therefore a smaller demographic is at higher risk of PTSD than the statistic may represent. In addition, PTSD only represents the extreme right of the spectrum of deployment-related mental health problems encapsulated within the term OSI. As mentioned in preceding chapters use of the term OSI can be problematic when attempting comparable analysis as it is a non-clinical term and very broad in scope.

By consolidating, comparing and analysing the above CF statistical data, we are able to garner a more complete perspective on the prevalence of combat and operational stress. In doing so, one is led to question why there is such an emphasis on deployment-related mental health problems when statistically they in fact appear to be lower in prevalence than non-deployment-related ones. Non-deployment mental illnesses are not only more prevalent but in some cases far exceed the Canadian population mean. For instance, the lifetime prevalence of major depression in the CF is 16.2% compared to 7.6% in the general population. There seems to be an over-emphasis placed on OSI (inclusive of PTSD) which has overshadowed concern for other non-deployment-related mental illnesses within the CF. ¹³³ One may speculate that this over-emphasis is in part due to external institutional pressures placed on the CF. This is supported anecdotally by comments made by the Director of the CF Deployed Health Section, Dr Mark Zamorski who states that, "We [CFHS] have been working hard to try to make it clear over the past few years in particular that deployment-related mental health problems are important, but

¹³³ Mark A. Zamorski, MD, MHSA, "Overcoming Stigma and Other Barriers...," 11.

they aren't everything.¹³⁴" Why isn't there a Special Advisor or Standing Committee examining Depression in the CF vice PTSD?

THE DARKER-SIDE OF EMPHASIZING OPERATIONAL STRESS INURIES

The recommendations of the 2008 Ombudsman's Special Report to the Minister of National Defence that calls for the CF to create a full-time National Operational Stress Injury Coordinator reporting directly to the CDS is demonstrative of how the issue of OSI has been 'politicized out of proportion.' The recommendations contained within the Ombudsman's report are based on precepts and incomplete data on OSI within CF which has inherently placed extraordinary pressure on CF Mental Health Services (CFHS) to essentially establish OSI as their first priority over other more prevalence and just as harmful mental illnesses in the CF, such as Major Depression (see figure 2.2). Major Depression in the CF is over double that of the national average, whereas the prevalence of PTSD in the CF is actually lower than the national average 135. This is not to say that OSI is not an important issue or that the CF does not need to improve the way it provides care for its members suffering from OSI; however, OSI has become political in that it is singled-out from other mental health illnesses because of the high profile attention OSI has received in recent years. The public sensitivities to combat casualties and perceptions of veterans suffering PTSD are well known 136. They are formulated and reinforced

¹³⁴ Presentation speaker notes from Mark A. Zamorski,MD, MHSA, "Overcoming Stigma and Other Barriers...," 11.

¹³⁵ Canadian Psychological Association, "Clinical Practice Guidelines...,57.

¹³⁶ As discussed in Chapter 1, mass media sensationalism of combat veterans tortured by PTSD are common themes in Hollywood films of war. While this aids in drawing attention to combat stress disorders it also skews public perceptions on prevalence rates and masks other more prevalent mental illness within the military.

by the various parliamentary reports fuelled by perceptions rather than facts and often supported by incomplete data. In addition, prominent Canadians like Senator Dallaire have brought far-reaching attentions to the issue of PTSD, having published material on the subject and offered testimony at many of the Standing Committees examining OSI. Not to take anything from Senator Dallaire's efforts to reduce stigma and improve care for veterans suffering from OSI, but again it has drawn attention away from other mental illnesses that are impacting the CF's operational effectiveness. Lastly, there is the issue of creating a National Operational Stress Coordinator which runs counter-intuitive to the unified command model that was implemented with the Rx2000 project.

The position of a National Operational Stress Coordinator answering directly to the CDS directly undermines a unified command and administrative structure of CFHS and the Chief of Military Personnel (CMP) it is subordinate to. The idea of the National Coordinator is that it is an independent entity separate from the established chain of command in order to provide oversight in "all issues related to operational stress, including: the quality and consistency of care, diagnosis and treatment; and training and education across the Canadian Forces¹³⁷." If this recommendation is implemented by the CF¹³⁸ it would clearly create a quasi two-tiered system of mental health care within the CF. Through recognizing OSI as distinct mental illness requiring a specialized "stove-pipe" to ensure adequacy of care, training and treatment, one inherently creates a perception that an OSI is distinctly different from other mental illnesses. Proponents of this would argue that by doing so it will improve cultural attitudes towards OSI.

¹³⁷ The 2008 Special Report to the MND. National Defence and Canadian Forces Ombudsman, *A long Road to Recovery...*,12.

¹³⁸ The recommendation of appointing a central National Coordinator was first put forth in the Ombudsman's Special Report to the Minister of National Defence on the Systemic Treatment of CF Members with PTSD (made public in 2002) and was again reiterated in the 2008 Ombudsman's follow-up report on OSI in the CF.

That may be so but it would certainly not assist in doing so for other mental illnesses. To the contrary, it would likely result in an increase of stigma against other mental illnesses that cannot be directly linked to combat operations. To summarize, the fact that this recommendation was repeatedly brought forth only serves to reinforce how politicized the issue of OSI has become and that it detracts from the overall attention devoted to other just as important mental health issues with the CF.

There must be a balance struck between how much emphasis is placed on OSI within an institutional framework. The ideal balance is somewhere between emphasis and fixation. It is suggested that balance can be found and is best managed by the leadership within the CF chain of command. It must be the frontline leaders, who are responsible for mission success and the welfare of their subordinates, that take the lead on the education, training, and treatment of operational stress – not a third party hierarchy such as the National Operational Stress Injury Coordinator as proposed by the National Defence and Canadian Forces Ombudsman. A recommended alternative for the CF would be to pursue a similar model that emphasizes an integrated comprehensive approach such as the Battlemind programs utilized in the US Army and the Australian Defence Force. This brings further examination of OSI into the realm of the frontline leader which frames the supposition of the subsequent chapter which will focus on the frontline leader and his role and responsibility in combating operational stress.

CHAPTER V – THE ROLE OF THE FRONTLINE LEADERSHIP IN COMBATTING OPERATIONAL STRESS

A brave Captain is as a root, out of which, as branches, the courage of his soldiers doth spring. 139

As summarized in the previous chapter it is the operational chain of command in the military that is responsible for mission success. Key to that success are the warfighters who execute the mission. Therefore, the welfare of their warfighters is of utmost concern for the frontline operational commander as this equates directly to building unit cohesion and effectiveness on the battlefield which has been proven to increase resiliency to stress ¹⁴⁰. It is the role and responsibility of the frontline leader to build a cohesive and effective fighting force. The frontline leader is being defined as a member of the operational chain of command who bears a direct responsibility over the management of violence and is responsible to both the military institution and the warfighters under his command to execute military operations. As discussed earlier, the CF's experience in warfighting has demonstrated that operational stress injuries are a reality of the battlefield. In fact one of the fundamental tenets of the US Army's Battlemind program is that the combat environment is harsh and demanding and combat stress reactions are expected ¹⁴¹. While combat and operational stress reactions should be expected, casualties resulting from acute combat and operational stress injuries should not be. Warfighters

¹³⁹ Quote by Sir Philip Sidney (1554-1586), Robert Debs Heinl, *Dictionary of Military and Naval Quotations* (Maryland: Naval Institute Press, 1978), 41.

¹⁴⁰ Department of National Defence. A-PA-005-000/AP-004 *Leadership in the Canadian Forces: Conceptual Foundations* (Ottawa: Canadian Defence Academy, 2005), 80.

¹⁴¹ The US Army Battlemind Program is an operationally focused program that that develops those factors (focusing on Leader behaviours) that contribute to the Soldier's will and spirit to fight and win in combat, thereby reducing combat stress reactions and will be discussed further later on in this paper, however, it reinforces the responsibility of managing combat stress with the frontline leader. US Army, "Pre-deployment Battlemind For Leaders," http://www.battlemind.army.mil; Internet; accessed 12 March 2009.

suffering from acute combat and operational stress injuries can be quickly restored to duty if they are given immediate frontline treatment ¹⁴². Leadership plays the key role in ensuring adequate and immediate frontline care is provided for thereby preventing warfighters from becoming casualties requiring evacuation from the battlefield. This puts the responsibility of dealing with operational stress injuries clearly in the hands of the frontline leader; therefore, the responsibility for developing a comprehensive and integrated system to effectively decrease preventable operational stress injuries must fall within the operational chain of command. As Dr Allan English, who was an advisor on combat stress reaction on the Board of Inquiry-Croatia concedes, "leadership at all levels is the key to reducing the effects of operational stress. 143" With these premises in mind, this chapter will focus on arguing that the operational chain of command enacting through the frontline leader, must take the lead in dealing with operational stress injuries - correction, must be allowed to take the lead on the development of a comprehensive and integrated system to mitigate the effects of operational stress on the CF. That is not to say that this system will be exclusive of CF Health Services, rather this system must re-affirm the leading role of frontline leadership in the relationship between the two. This is a position that is incongruent with the current recommendations of the National Defence and CF Ombudsman's Office proposing the creation of a third party hierarchy to undertake the responsible for operational stress issues within the CF. 144 Just as the SOF axiom "those that execute the mission plan the mission" affirms, the professional of arms should become the lead in mitigating the

¹⁴² US Army Center for Health Promotion and Preventive Medicine, "USACHPPM Technical Guide 242," http://chppm-www.apgea.army.mil/dhpw/; Internet; accessed 12 January 2009.

¹⁴³ Dr Allan English, "Leadership and Operational Stress in the Canadian Forces," *Canadian Military Journal* 1, no. 3 (Autumn 2000): 36.

¹⁴⁴ The 2008 Special Report to the MND. National Defence and Canadian Forces Ombudsman, *A long Road to Recovery...*,12.

impacts of operational stress. After all, it is the frontline leaders that will ultimately bear the final responsibility for that system¹⁴⁵, they are the ones charged with the psychological well-being of their warfighters, not mental health professions.

FRONTLINE LEADERS AND OPERATIONAL STRESS

When reviewing the academic literature on PTSD and combat stress from the perspective of a frontline leader, one would be quick to observe a marked cohort of perspectives. The majority of research pre-Vietnam war era focuses heavily on the role of the frontline leader in mitigating combat stress casualties, while post-Vietnam research is far more clinical and theoretical that predicates concepts such as maladaptive appraisals, cognitive models of PTSD and so forth. It's not surprising considering the advances in the psychiatric sciences since that period but from the perspective of the modern warfighter reviewing the literature one begins to question: where is the perspective of the frontline leader in all this? A book published by the Army Medical Corps in 1946 strikes to the heart of preventive psychiatry on the battlefield in its first opening sentences that is a review of dozens of psychological journals on combat stress reactions failed to recognize:

The platoon leader is the most important man in the army because of his intimate relationship to the men in his command. The soldiers in his unit can be the best fighting men in the world - or the poorest – depending on how well he understands their minds, and on how much effort he is willing to apply in molding these minds ¹⁴⁶.

¹⁴⁵Dr English reiterates the need for officers in the operational chain of command to take the lead in the development of an integrated approach: Dr Allan English, "Leadership and Operational Stress…," 37.

¹⁴⁶ Samuel Henry Kraines, M.D., *Managing Men: Preventive Psychiatry*. New York: Hirschfeld Press, 1946.

Disregarding the fact you could not get away with publishing a book entitled *Managing Men* nor with statements like "molding minds" in today's political environment, one cannot help but admire the raw conciseness of the above quote as from the perspective of an experienced warfighter – it makes perfect sense. The point being, a focus on leadership should be core to any research or statistical study of operational stress. It would seem that in the inter-war periods research into operational stress often underestimates the role of frontline leadership, perhaps because it is difficult to study in post-war periods where the true impact of operational stress injuries are reflected. Nevertheless, in close examination of some of the stressors responsible for operational stress injuries one is immediately drawn to the fact that many are within the realm of leadership influence.

As indicated in previous chapters, combat stress is the result of a complex interplay of internal and external stressors. The stressors involved do not derive themselves directly in relation to the enemy and on the fact he may be trying to kill you. Often for the warfighter this is perceived as a state of nature given the circumstances. ¹⁴⁷ The stressors can vary from threat of imminent death to loneliness and boredom. Internal stressors are individually focused and can be associated with family separation, personal performance anxieties about performing effectively under fire. ¹⁴⁸ External stressors are environmental meaning they could be generated from the warfighter's fear of death, poor unit leadership, and / or from austere living conditions to name just a few.

¹⁴⁷ Drawn from the Author's own combat experiences. The author served two combat tours in Afghanistan as part of the US-led Operation: ENDURING FREEDOM (OEF) as an assaulter officer within a Canadian Special Operations Task Force.

¹⁴⁸ These are common anxieties generated by soldiers who have never deployed on combat operations and can be a source a severe anxiety and fear. National Research Council, *The Psychology of the Fighting Man*, (New York: Penguin Books, 1943), 347.

Stress on the battlefield cannot be avoided, nor arguably should it be, as stress can often enhance performance and generate productive behaviours. Having said that, it is the frontline leader's responsibility to manage the stress of operations and keep them within acceptable tolerances where at all possible. It is essentially risk management. That is, accepting degrees of risk in order to achieve mission success. The stressors of chaos, uncertainty, surprise, hopelessness, physical hardship, isolation, and sleep deprivation are of primary concern for the frontline leader. They are primary contributors to combat stress. These must therefore be continually taken into account and weighed accordingly in every military decision in combat. 149," Effective frontline leaders intuitively influence the battlefield environment in order to enhance the positive effects of stress that contribute to esprit de corps, trust and heroism that lead to mission success while mitigating the negative effects that disciplinary problems, combat fatigue and ineffectiveness. ¹⁵⁰ The frontline leader and the operational chain of command through either direct or indirect actions have a profound influence on both internal and external stressors. If one examines the common stressors reported by warfighters on deployments and operations and superimpose upon those frontline leadership responsibilities it becomes clear that they are indeed in a unique position to influence these factors lending support to the notion that in dealing with operational stress the frontline leader figures prominently.

¹⁴⁹ William P. Nash, "The Stressors of War," in *Combat Stress Injury: theory, Research, and Management*, ed. Charles R. Figley and William P. Nash, 11-29 (New York: Routledge, 2007), 13.

¹⁵⁰ Major Michael E. Doyle, "Combat Stress Control Detachment: A Commander's Tool," *Military Review* (May-June, 2000): 65.

Leadership Influence Morale, esprit de corps. team-Command, leader efficacy, lead by Training Individ-ills and abilities, building, reinforcing warrior ethos, example, planning, welfare of stress inoculation, shaping soldiers, risk management trust expectations and self-identity Deployment and Operational Stressors SOCIAL COGNITIVE PHYSICAL Isolation from social supports Fear of Death, injury/Showing Fear Heat and cold Lack of privacy or personal Fear of Death/Being captured Dehydration and Wetness space Making wrong decisions Dirt and Mud Letting comrades or others Being a coward/competent Sleep deprivation down Lack or too much information Noise and Blasts The media and public opinion Ambiguous/changing mission Fumes and smells Loss in faith in god (or belief Ambiguous/changing ROE Bright light or darl ness system) Loyalty conflicts/Boredom and Malnutrition Inability to forgive or feel monotony Injury or illness forgiven Experiences that don't make sense Losses of friends to death or injury Shame and guilt/Helplessness The Horror of carnage Killing

Figure 5.1 – **Proposed Model of Leadership Influences over Combat Stressors** Source: Author.

The above (figure 5.1) illustrates how specific leader behaviours influence the complete spectrum of physical, social and cognitive combat stressors. The factors delineated along the top of the model denote leadership behaviours that either directly or indirect impact to some extent the physical, social and cognitive deployment and operational stressors denoted below. The left extreme of the spectrum is where leadership influence is direct and immediate. For instance, the leader can provide clear and concise mission direction, intelligently manage mission risks and provide for physical comforts of his subordinates allowing them opportunity to recover physically and mentally from combat as required. As the spectrum of leadership influence moves to the right, the leader's influences are more subtle, such as striving to consistently demonstrate a high standard of professional knowledge and skill as an example for his subordinates. His efficacy will promote and inspire unit confidence. The frontline leader is also critical to promoting unit cohesion and esprit de corps. He can admit and joke about his own

fears and anxieties as way of reassuring others and relieve tensions thereby influencing his subordinates the warfighters social and cognitive appraisals of stress as leader's influence interacts with individual predispositions of self-identity, predisposition, and personality traits. ¹⁵¹ The role of the leader is also critical in developing individual and group efficacy through the conduct of rigorous and realistic training in combat skills which will that empower warfighters with self-efficacy and confidence. This has been demonstrated to greatly improve resiliency to operational stress. ¹⁵² The above model (figure 5.1) serves to demonstrate that the influence and operational role of the frontline leader is a critical determinant in the causal relationship between the warfighter and the amount of operational stress experienced. Therefore, frontline leadership is the key to mitigating the effects of operational stress. ¹⁵³ Having set the arcs regarding the causal relationship between frontline leaders and operational stress, it is appropriate to spend a moment discussing in more detail the active role frontline leaders have in combat that shapes incidences of combat stress.

A LEADER'S ROLE

Whether it is the first thunderous blow of clashing shields or the gut-wrenching impact of artillery, a timeless feature of battle is the tendency toward confusion and paralysis during the moment a unit comes under fire from the enemy. It can be difficult to get soldiers to begin to fight actively from positions of cover. "In such circumstances, leadership, or simply action of

¹⁵¹ Peter J., Murphy, "The Stress of Deployment." in *Military Stress and Performance...*," 15.

¹⁵² Capt W.R. Wild, "Proposal for studying the Human Dimension of Combat Readiness: Technical Note 5/88" (Canadian Forces Personnel Applied Research Unit, April 1988), 6.

¹⁵³ Dr Allan English, "Leadership and Operational Stress...," 36.

any sort, can exert a powerful influence, particularly since in threatening situations people tend to copy the behaviour of others. ¹⁵⁴" It is the human factor that is a critical determinant of victory or defeat on the battlefield. As psychiatric researcher William Nash aptly states:

War is a clash of opposing wills, fueled by emotion, and influenced as much by mental and moral forces as by technology and material factors. It is seldom the physical destruction of people or equipment that brings victory, but destruction of adversaries' will to go on fighting because of bombs, bullets, and other hardships they endure. Combat stressors are weapons whose targets are the hearts and minds of individual opposing warriors. ¹⁵⁵

The presence of a skilled and able officer has historically been a defining factor in achieving mission success on the battlefield. The perceived efficacy of a leader in enhancing operational effectiveness cannot be overstated. It is a basic tenet of social psychology that "people's thoughts, feelings and behaviours are influenced by the real or imagined presence of others. Social influence is an extremely powerful modifier of behaviours and attitudes and usually outweighs and overcomes individual differences in personal dispositions. By virtue of the hierarchical nature of the military, it is the frontline leader by definition who is vested with the authorities and responsibilities to be exert significant social influence. How this influence equates to shaping behaviours and attitudes can be simplistically summarized in relation to cognitive appraisal. It is important to realize that stress is not in the event but rather in how an individual appraises the event (see Chapter One). Appraisals concerns an evaluation of how threatening the event is with respect to a person's goals and desires and an evaluation of the

¹⁵⁴ Anthony Kellet, "The Soldier in Battle: Motivational and Behavioural Aspects of the Combat Experience," in Betty Glad, *Psychological Dimensions of War*, (Newbury:Sage Publications, Inc., 1990), 224.

¹⁵⁵ William P. Nash, "The Stressors of War," in *Combat Stress Injury...*, 13.

¹⁵⁶ Elliot, Aronson et al., Social Psychology...24.

¹⁵⁷ *Ibid.*, 24.

person's own resources (self-efficacy) for meeting the challenge of the threatening event. ¹⁵⁸ A leader has an enormous influence in how a warfighter interprets an event.

The Israeli Defence Force (IDF) is renowned for their comprehensive research on combat related stress and human performance and have long emphasized the importance of the frontline leader in shaping and influencing combat behaviour. 159 As E.R. Black observes, "leaders must have knowledge that the most important element in operational effectiveness is human performance and that molding of individuals into a cohesive unit as well as the maintenance of this state, is the responsibility of the leader. 160, Israeli psychiatric researchers Reuven Gal and Franklin Jones have developed an interactive model based on experienced IDF field commanders that depicts a soldier's behaviour in combat demonstrating the enormous influence a leader has in shaping a soldier's appraisal and subsequent performance under combat stress conditions ¹⁶¹. The model (figure 5.2) portrays the frontline leader reflects the prominent role of the leader as a "lens" that magnifies or minimizes the impact of the objective variables on a soldier's subjective cognitive appraisals. 162 Essentially the leader has an important intervention role in the appraisal process that determines the impact of combat stressors. Where the antecedent variables filter through the leader is a window of opportunity where the leader can effectively intervene and shape a warfighter's reactions to combat based on leadership behaviours. For example, a leader

¹⁵⁸ Randy Larsen, et al., *Personality Psychology...*, 619.

¹⁵⁹ Dr Ben Shalit, *The Psychology of Conflict...*, 19.

¹⁶⁰ Major E.R. Black, "Human Performance in Combat...," 9.

¹⁶¹ Reuven Gal, and Franklin D. Jones, "Psychological Model of Combat Stress," in *Textbook of Military Medicine: War Psychiatry*, ed. by Franklin D. Jones, et al., 133-148 (Washington: Walter Reed Institute, 1995), 136.

¹⁶² Ibid., 136.

who exudes confident and calmness will likely inspire the same behaviour in his subordinates. "If the platoon leader isn't worried about it then why should I be?"

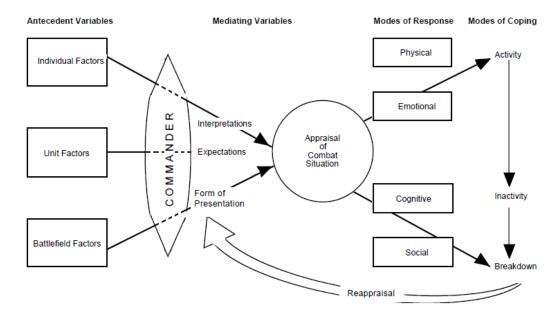


Figure 5.2 - A Model of a Soldier's Behaviour in Combat Stress Conditions

Source: Reuven Gal, and Franklin D. Jones, "Psychological Model of Combat Stress...," 136.

The above model is of significant importance in the study of operational stress as it establishes a casual relationship between leadership (defined as the art of influencing others) and the incidences of combat stress reactions among warfighters. In reinforcing this relationship, Canadian human performance researcher E.R. Black observes that:

The literature on combat stress unanimously agrees that in order to minimize the negative effects of combat stress, units at the lowest level must be both well led and strongly cohesive. Further, that these conditions are created through strong leadership, arduous and realistic training, reliable equipment, and efficient unit and family support ¹⁶³.

As the research indicates, a frontline leader's actions in operations are a key component in reducing incidence of operational stress injury and must therefore, be integrated within any

¹⁶³ Major E.R. Black, "Human Performance in Combat...," 8.

system with this endstate in mind. Following a noticeable gap in focused human performance research within the CF, in 1995 the Canadian Army undertook an initiative to further explore the human dimension in operations.

Known as the Human Dimension of Operations (HDO) project, HDO was undertaken to develop a comprehensive research model for the measurement of the human dimensions of combat readiness for use by frontline leaders. 164 The goal of the project was to enable frontline leaders with a tool to measure and monitor human performance dimensions and thus be more effective in promoting unit cohesion and effectiveness. It recognizes the importance of frontline leaders but more importantly it recognizes that leaders must be equipped with knowledge and training in how to promote unit cohesion and effectiveness in order to execute their command responsibilities. The HDO project is based on an operational effectiveness model that comprises four components (stressors, moderators, coping, and outcomes) that interact at the individual, group and organizational levels. 165 The model is indicative of the interactive approach in considering the human dimensions behind operational effectiveness and indicates to leaders the "appropriate training and interventions that will enhance individual and organizational wellbeing and performance. 166, The results of HDO project produced a multidimensional operational metric known as the Unit Climate Profile (UCP) that measures organization wellbeing and operational effectiveness utilizing individual and group level psychological characteristics that are presumed to be strong indicators of morale, unit cohesiveness and

¹⁶⁴ Peter J. Murphy, and Kelly M. Farley, "Morale, Cohesion, and Confidence in Leadership...," 313.

¹⁶⁵ Peter J. Murphy, and Kelly M. Farley, "Morale, Cohesion, and Confidence in Leadership...," 314.

¹⁶⁶ Ibid., 315.

leadership competence.¹⁶⁷ The UCP is an example of a tool that was produced in recognition that frontline leaders are primarily responsible and affective of unit cohesiveness and effectiveness and therefore psychological initiatives should designed to support the operational chain of command. While still used today, the HDO requires continued support as the importance of the human dimension to operational effectiveness cannot be understated as this paper has served to highlight continuously. The HDO was a positive step forward; however, a closer examination of the wider CF management system for operational stress will reveal that it is still debatably remiss in acknowledging the importance of the frontline leader.

THE CF MANAGEMENT SYSTEM FOR OPERATIONAL STRESS

The scope of this paper is such that there is little opportunity to comprehensively discuss the clinical treatment protocols or the historical background that lead to their development.

Suffice to say, there is a requirement to have at least a broad developmental understanding of the systems approach to operational stress injuries in order to contextualize recommended models of treatment presented in this paper.

Dr Allan English effectively encapsulates the background of the treatment of operational stress in the CF as a repetitive cycle of three stages of focus. The first stage is characterized by a lack of any organized model or acknowledgement of operational stress as anything but a lack of moral fiber or hysteria. This stage is typical of the Canadian Army in the First World War¹⁶⁹ and led to significant instances of stress-casualties that was highly stigmatized as

¹⁶⁷ Peter J. Murphy, and Kelly M. Farley, "Morale, Cohesion, and Confidence in Leadership...," 314.

¹⁶⁸ *Ibid.*, 34.

¹⁶⁹ *Ibid.*, 34.

cowardice or associated directly with mental illness (not acknowledging acute combat stress as highly treatable). The second stage legitimates operational stress as treatable and preventable but comprises a variety of efforts by health care professionals and the chain of command but lacks unity of effort and integration. This stage typically focuses on treatment and broad education but lacks significant emphasis on preventable stress casualties. These two stages are markedly different from stage three which is distinguished from the others as being an integrated systems approach that emphasizes prevention and frontline treatment which is encapsulated within a unified comprehensive system to address operational stress. It should be noted that many systems emphasize a 'comprehensive system for the treatment' of operational stress vice a system for addressing operational stress – the key difference is it is not treatment focused rather it broader in scope and the development and implementation of policies was under direct supervision of military operational commanders who were armed with the appropriate mental health professionals. According to Dr English, stage three was achieved sparingly at the end of each World War but regressed to stage one within the Canadian military in the post-war years. Canadian research into human performance in combat supports Dr English's observation as put forth in a Mobile Command Personnel Research Report (1988) that succinctly identified and critiqued that the Canadian Army "does not have a programme specifically dedicated to minimizing the breakdown of human performance in combat. 170, This begets the question of where does the CF stand today regarding the current CF management system for operational stress injuries in prevention and mitigation?

As previously discussed in some depth in Chapter Three, the Rx2000 project was designed to reform the CF health care system through a unified command and administrative

¹⁷⁰ Major E.R. Black, "Human Performance in Combat, "Personnel Research Report...," 2.

structure that would bring together military health care resources based on criticisms brought forth by the Board of Inquiry – Croatia. Rx2000 was envisioned to develop an integrated interdisciplinary approach to delivery of health care services and build partnerships with the civilian health care system which is necessary in order to fulfill its health care service requirements ¹⁷¹. It was based upon four areas that were identified to be improved upon; continuity of care, an acceptable accountability framework, the provision of health protection, and the sustainability of CF health services human resources (see Chapter Three, figure 3.1). The restructuring of the CF health care system resulted in the creation of a unified command structure known as CF Health Services (CFHS). It is clear from this synopsis of the Rx2000 program and its evolution since its inception, that this system emphasizes two areas, education and programs and services which is reflective of a managerial model. ¹⁷² The education aspect focuses on developing a better understanding of and sensitivity to the nature and treatment of operational stress illnesses. The programs and services are geared towards creating, expanding and enhancing advisory body mandates with a view to developing a range of substantive programs and support services to assist those suffering from operational stress injuries and their immediate families. 173 It is evident in the Rx2000 initiatives that the CF are serious in reforming the delivery of mental health care in keeping with many of the original recommendations of the Board on Inquiry – Croatia; however, it is also apparent that quality of life issues are of foremost concern within this program and health services professionals appear to have the prominent role

¹⁷¹ Evidentiary transcript of General Hillier's testimony. House of Commons, Standing Senate Committee on National Security and Defence, *Minutes of Proceedings...*, 8.

¹⁷² Library of Parliament. "Afghanistan: Military Personnel and Operational Stress Injuries," *Parliamentary Information and Research Service...*, 3.

¹⁷³ *Ibid.*, 3.

in these initiatives.¹⁷⁴ From the perspective of Dr English's stages model the CF's Rx2000 program is reflective of a stage two approach. While there is no doubt that the issues of medical care and support coupled with quality of life issues are of great importance, they are only parts of an integrated and unified system of what should be a system that is focused on frontline leadership. It would appear that despite the positive steps forward with the advances of the Rx2000 program the CF appears to be in the second stage.¹⁷⁵

The current model is debatably a managerial approach to the problem of combat and operational stress and is not wholly inclusive of the realities of the CF's operating environment which requires a military-focused mental health care that enables frontline leaders in prevention and mitigation rather than a civilian managerial approach focused on education, care and treatment. A military approach to mental health care must deal with the sobering reality that priority of care should address the realities of a "mission-first" approach. This approach is cognizant of the understanding that warfighters accept the contract of unlimited liability in service of their country. The role of military mental health care in dealing with combat and operational stress should be geared towards providing frontline assistance and service in managing the fear, fatigue and traumatic experiences that a warfighter experiences in operations in order to preserve unit cohesion and the fighting strength of combat units. As PTSD researcher and Vietnam veteran Dr Raymond Monsour Scurfield states there is a distinctly different approach to military mental health care:

¹⁷⁴ Dr Allan English, "Leadership and Operational Stress...," 37.

¹⁷⁵ *Ibid.*, 36.

¹⁷⁶ Dr Raymond Monsour Scurfield, *War Trauma: Lessons Unlearned from Vietnam to Iraq* (New York: Algora Publishing, 2006), 57.

Military mental health differs distinctly from civilian practices in that it is not the personal problems of the soldiers, or their mental health per se, that are the primary focus of clinical attention. Rather, the military medical mission is to conserve the fighting strength of the unit, and thus to return the combat stress reactive soldier back to his unit in the field ASAP.¹⁷⁷

As a way forward an effort must be made in co-ordinating the efforts of CFHS with the operational level of command in order to develop capabilities to deal with the fundamental causes of operational stress and merge the best practices of civilian mental health care with the priorities of sustaining a cohesive and effective fighting force that is resilient and prepared for the rigours of warfare. There is a clear overlap in this merge that requires frontline leaders and health care practitioners to work in unison.

A COMPREHENSIVE SYSTEM FOR OPERATIONAL STRESS MANAGEMENT

The preceding research in this chapter all supports the critical role the frontline leader plays in the prevention, mitigation and management of combat and operational stress. As previously observed the current CF management system has done extremely well in drawing attention and mitigating some of the cultural stigma associated with operational stress injuries, which is outside the narrow scope of this paper. Nevertheless, the CF requires an adjunct to the existing program that is specifically dedicated to the enhancement and mitigation of human performance in combat.

The current system has functioned despite this misbalance because the CF was not at war and incidents of operational stress injuries were relatively low.¹⁷⁸ With increasing op tempo in

¹⁷⁷ Dr Raymond Monsour Scurfield, War Trauma: Lessons Unlearned...52.

¹⁷⁸ Jitender, et al., "Combat and Peacekeeping Operations in relation to Prevalence of Mental Disorders and Perceived Need for Mental Health Care," Archives of General Psychiatry 64, no. 7 (July 2007): 843.

the CF, this problem of misaligned authority and responsibility has the potential to affect the commander's ability to achieve mission success. There needs to be a re-alignment of authority in dealing with operational stress injuries. An institutional shift initiated at the operational level needs to happen to empower commanders with the authority to influence treatment plans (that includes ensuring continuity of health care). This is slowly being recognized at the strategic level. ¹⁷⁹ However, there needs to a reorienting of CF Health Services at the organizational level in order to grant additional authorities to operational commanders in dictating training regimes and treatment plans that includes responsibilities over career limitations for individuals with operational stress injuries. This will ensure that a balance of authority and responsibility is maintained at the command level that will empower commanders towards mission success. The key is to institutionalize this balance in an integrated and comprehensive system for operational stress management that begets operational ownership.

This comprehensive approach must acknowledge the fact that research has firmly established that frontline treatment is the most preferred intervention for operational stress reactions. A 20- year longitudinal that evaluated the treatment of combat stress reactions revealed that frontline treatment is the preferred intervention second only to prevention. The study also indicated that there is a time-limiting window of effectiveness lasting between 48-72 hrs for frontline treatment. To miss this window greatly increased the risk that the combat stress reaction would crystallize into chronic PTSD. Statistics gathered by the Walter Reed Army Institute of Research (US Army Medical Research and Material Command) state that over 95%

¹⁷⁹ The CDS, Gen Hillier released a CF CANFORGEN 093/08 that underlined the importance of communications between operational commanders and health care providers as well as some guidelines to ensure that commanders had access to pertinent medical info on personnel they were responsible for.

¹⁸⁰ Zahava, Solomon, et al., "Frontline Treatment of Combat Stress Reaction...," 2309

of warfighters who received forward mental health support for combat stress reaction were returned to duty. ¹⁸¹ The conclusion to be drawn from this data supports the supposition that frontline leaders are likely to be in the best position to influence and even provide first line treatment for operational stress injuries. It is the responsibility of the frontline leader to decide how and when to expend and allocate resources to the accomplishment of the mission. As Nash affirms, "The best leaders likely have the clearest idea which combat stress reactions should be considered leadership problems rather than unavoidable stress injuries. But there exists nowhere a taxonomy for discriminating leadership-responsive stress adaptations from the stress wounds that cannot be healed or prevented by leadership alone. ¹⁸²"

This inherently speaks to the requirement for the operational chain of command assuming ownership of systems for managing operational stress within the CF. The vested authorities that compliment this ownership will empower operational commanders to achieve mission success by enabling effective management of personnel. This includes comprehensive training and education that extends beyond the current program which is focused on awareness. Therefore any comprehensive system of management for operational stress injuries needs to include a component of training and education for frontline leaders. Frontline leaders must be equipped with "psychiatric first aid skills¹⁸³" that includes an enlightened awareness of the physiological and psychological aspects of command and its influence on human performance.

¹⁸¹ Department of Defence, US Army Medical research and Material Command, "10 Unpleasant Facts About Combat and what leaders can do to change them," presentation, https://www.battlemind.army.mil; Internet; accessed 19 April 2009.

¹⁸² Nash, William P., "The Stressors of War." in *Combat Stress Injury...*," 17.

¹⁸³ Bret A. Moore, and Greg M. Reger, "Clinician to Frontline Soldier: A Look at the Roles and Challenges of Army Clinical Psychologists in Iraq," *Journal of Clinical Psychology* 62, no. 3, (2006): 398.

In summation, the intent of this chapter was to highlight the importance of the frontline leader in addressing combat and operational stress reactions in order to enhance human performance thus increasing operational effectiveness. It also argued that further attention is required in the continued evolution of the CF management system for deployment-related mental health problems that necessitates the inclusion of the frontline leader and the operational chain of command.

CONCLUSION

Left untreated operational-related stress reactions can adversely erode human performance and diminish operational effectiveness. As personnel are the greatest and most critical resource to any military, addressing mental health care should be a priority in order to sustain operational effectiveness within the CF. As this paper highlights, the CF leadership has debatably not always been consistent in assuming and acting upon this responsibility. The CF's early experiences in managing operational stress in the early-mid 1990s are demonstrative of this. However, since then a proactive approach has been made by the CF in addressing deployment-related mental health problems.

The purpose of this paper is to examine the extent to which new CF policies and program for operational stress injuries are unduly focused on a managerial approaches that emphasize availability of care, education and standard of treatment without acknowledging the importance of the frontline leader in preventing and mitigating operational stress injuries. In an examination of the epidemiology behind stress, the social and environmental factors that contribute to operational stress injuries and the role of the frontline leader in influencing these factors, this paper puts forth a recommendation that the operational chain of command must be fully integrated into a comprehensive management system for operational stress injuries. That system must emphasize prevention and mitigation in order to build a cohesive, effective and resilient fighting force. This paper also identifies that further attention is required in the continued evolution of the CF management system for deployment-related mental health problems that necessitates the inclusion of the frontline leader into a comprehensive training program focused towards empowering leaders with "psychiatric first aid skills" that includes an enlightened

awareness of the physiological and psychological aspects of command and its influence on human performance. More research is required in determining to what extent frontline leaders should be empowered with psychiatric skills but suffice to say a certain level of training should be considered as core skill. There is also additional scope for further study into examining the balance of emphasis that has been placed on deployment-related mental health problems and if this has indeed over-shadowed non-deployment related "ordinary" mental health problems in the CF as research in the course of the above examination discovered that there was some anecdotal evidence that this may well be the case.

In conclusion, the CF requires continued effort in its development of a comprehensive frontline-focused management program for operational stress injuries that is operationally focused such as the US Army Battlemind program. This paper highly recommends that the CF strive toward developing a comprehensive program that focuses on leader behaviours and factors that contribute to a warfighter's moral determination and cohesive fighting spirit to effectively perform and succeed in combat, thereby increasing their resilience to combat and operational stress.

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