The Moral Consequences of Context

THE MORAL CONSEQUENCES OF CONTEXT: AN ANALYIS OF BRADSHAW
AND COLLEAGUE'S MODEL OF MORAL DISTRESS
FOR MILITARY HEALTHCARE PROFESSIONALS

By: JILL HORNING, B.A.&Sc.

A Thesis Submitted to the School of Graduate Studies in Partial Fulfilment of the
Requirements for the Degree Master of Science in Global Health

McMaster University MASTER OF SCIENCE IN GLOBAL HEALTH (2015)
Hamilton, Ontario (Health Sciences)

TITLE: The Moral Consequences of Context: An Analysis of Bradshaw and Colleague's Model of Moral Distress for Military Healthcare Professionals

AUTHOUR: Jill Horning, B.A.&Sc. (McMaster University)

SUPERVISOR: Dr. Lisa Schwartz, Ph.D.

NUMBER OF PAGES: xiv, 152

LAY ABSTRACT:

This thesis examines the experience of moral distress in military healthcare professionals (HCPs) while working abroad, where a HCP faces a moral dilemma, e.g., knows the morally correct course of action but is blocked from taking it or it requires something of moral significance be given up. This thesis analyses the most recent model of military HCP moral distress (Bradshaw, et al., 2010) by comparing it to the experiences described by participants in the Ethics in Military Medicine Research Group (EMMRG) study. The results outline support for the model as well as novel suggestions for revision, which are supported by literature from a variety of disciplines. Two adjustments to Bradshaw and colleague's model are suggested: clearer representation of the cumulative nature of moral distress as well as a reconceptualization of the resolution process to consider the influence of the immediate and extended environment on moral responsibility.

ABSTRACT:

Military healthcare professionals (HCPs) may experience moral distress during international deployment. Moral distress is experienced when a HCP faces a moral dilemma, e.g., knows the morally correct course of action but is blocked from taking it, or where all available courses of action require something of moral significance be given up. While the literature indicates that moral distress often negatively impacts the mental health of the individual and the effectiveness of the organization, limited research has examined moral distress amongst military HCP. Many similar stressors and psychological health problems are present for both civilian and military HCP; however, the unique context of deployment necessitates further examination. This thesis explores the military HCP experience with moral distress by using Bradshaw and colleague's model of progression from the encounter with a moral dilemma to the impact on individuals and organizations. Through the analysis of novel interviews collected by the Ethics in Military Medicine Research Group (EMMRG), Bradshaw and colleague's model of military moral distress is compared to participant's experiences and qualitatively analysed, with the results outlining where the model is supported and where refinement is recommended. These challenges were then supported by a literature review from the disciplines of virtue and feminist ethics, moral psychology, bioethics, and civilian HCP moral distress research. Two novel and significant revisions to the model are suggested: representing and integrating the cumulative experience of moral distress, and re-conceptualizing the resolution process based on the consideration of contextual controllability on moral responsibility.

ACKNOWLEDGEMENTS:

TABLE OF CONTENTS

LISTS OF FIGURES AND TABLES:

LIST OF ABBREVIATIONS:

HCP(s) – Healthcare Professional(s)

EMMRG – Ethics in Military Medicine Research Group

EMMRG-## – Unique identifier of EMMRG participant

MAC – Moral Action Choice

PTSD – Post-traumatic Stress Disorder

THESIS TOPIC SELECTION:

The topic for this thesis came from working with the Ethics in Military Medicine Research Group (EMMRG). EMMRG examines the ethical challenges facing military HCP and analyses the experiences of military HCPs, civilian HCPs who participate in military missions, and Canadian HCP who participate in humanitarian missions (www.emmrg.ca). EMMRG seeks to compare the experience of these different HCP groups so as to develop practical tools to sensitize and support HCP involved in international missions (www.emmrg.ca). The current EMMRG research examines the ethical challenges facing HCPs working in a military context and the project entitled 'Professional Ethics and Conflicts of Role for Healthcare Professionals Working in Military/Humanitarian Contexts' is funded by a grant from the Ethics Office of the Canadian Institutes of Health Research (www.emmrg.ca). This EMMRG project allowed for my previous research examining moral distress in humanitarian HCPs to be applied to military HCPs (Horning, 2012). This previous work indicated that the challenges related to the context in which these HCPs worked affected the types of moral dilemmas encountered and was connected to the experience of moral distress and other mental health struggles (Horning, 2012). Preliminary examination of the current project data by the EMMRG team found that moral dilemmas were experienced by military HCPs. Additionally, EMMRG participants discussed barriers that thwarted their desired ethical resolution of a dilemma and the resulting personal effects and consequences. This indicated that moral distress may be experienced by military HCP, and the EMMRG team agreed that further investigation into this topic would be feasible and beneficial. As such,

Dr. Lisa Schwartz, a Co-PI on the project, agreed to supervise me as I further investigated the phenomenon of moral distress in both the literature and EMMRG participants' experiences.

DECLARATION OF ACADEMIC ACHIEVEMENT:

The military moral distress model analysed in this thesis is the contribution of Bradshaw and colleagues (2010) and was generously shared by Major C.T. Trevor Bradshaw who worked with me to better understand the model and provided a valuable Canadian Forces perspective. The unpublished model was brought to my attention by Sonya de Laat, the EMMRG research coordinator at McMaster University, who connected me with Major Bradshaw and provided excellent advice as I worked through my analysis of the model. The interviews with EMMRG participants, data collection, and transcription were conducted by team members Sonya de Laat, Christiane Rochon, and Ali Okhowat. I along with EMMRG team members Leigh-Anne Gillespie, Caitlin O'Donnell, and Ali Okhowat worked on coding of the participant data, where I was under the guidance of Sonya de Laat and my supervisor Dr. Lisa Schwartz, director of the Health Policy PhD program at McMaster University and Arnold L. Johnson Chair in Health Care Ethics. The group discussions with all EMMRG team members were essential for the coding process and also supported the critical development of my ideas with other team members sharing other research, articles, and feedback with me to help support my work.

Under the invaluable supervision of Dr. Lisa Schwartz, I was responsible for the conceptualization, design, and development of this thesis. I analysed and interpreted the comparison of the EMMRG data and Bradshaw and colleagues' model, with the guidance of both my supervisor and supervisory committee, Dr. Bryn Williams-Jones from the Bioethics Program in the Department of Social and Preventative Medicine at the

Université de Montréal as well as Dr. Matthew Hunt from the Biomedical Ethics Unit at Mc Gill University. All members of my supervisory committee were also a part of the EMMRG team and provided invaluable insight and support in the development of this thesis. The assistance of Dr. Paul Kohn from York University also contributed to this thesis through the sharing of his research in the field of psychology and his specific insights into psychological adaptiveness. I was responsible for the write-up of the analysis, results, and discussion.

Introduction

0.1 The Challenge of Moral Distress

      Healthcare professionals (HCPs) are routinely placed into morally challenging situations that have the potential to cause moral distress. This is especially true for HCPs working in the military, whether they are on deployment outside their typical contexts of practice such as in disaster relief (eg Haiti), or in more typically military settings such as peace keeping or armed conflicts (e.g., Afghanistan, Syria). Moral distress refers to "painful feelings and/or psychological disequilibrium" that occurs when an individual must choose between equally treasured moral values or is aware of a morally appropriate action in a moral dilemma[1] but cannot carry out this action due to obstacles or barriers (Nilsson, Sjöberg, Kallenberg, & Larsson, 2011, p. 50). Similarly, moral distress can also occur when a military HCP is faced with a 'tragic choice' where all available courses of action require something of moral significance to be given up (Hunt, Singing, & Schwartz, 2012), such as surgical triage in a mass casualty event. In the literature on civilian healthcare practice, moral distress has been connected to negative psychological affects with HCPs reporting feelings of powerlessness, meaninglessness, insufficiency, anger, anxiety, guilt, sorrow, frustration, and helplessness (Davis, Schrader, & Belcheir, 2012, p. 740; Nilsson et al, 2011, p. 55). Civilian HCPs have also been found to encounter stress related mental health issues as a result of experiencing moral distress, including compassion fatigue, burnout, and post-traumatic stress disorder (PTSD) (Owen & Wanzer, 2014, p. 4; Gustafsson, Eriksson, Strandberg, & Norberg, 2010, p. 23).

---

[1] This thesis will use the term 'moral' and 'ethical' interchangeably

0.2 Current Understanding of Military Psychological Stress and Moral Distress

Understanding the experience of moral distress for military HCPs is not only important for improving the health of individual military HCPs, but also for the efficiency and effectiveness of organizations and the health care profession as a whole (Davis et al, 2012, p. 740). Any military force concerned about the high readiness capability and the ability of HCPs to perform their jobs effectively must be concerned about their moral well-being, including moral distress (Fry, Harvey, Hurley, & Foley, 2002, p. 373). Unresolved moral dilemmas and their resulting moral distress have been linked to reduced job satisfaction, decreased employee morale, high staff turnover, and lowered retention rates of military HCPs (Corley, 2002, p. 639; Davis et al, 2012, p. 740). Yet, moral distress can manifest itself in a variety of ways that may increase the difficulty of its identification; "moral distress may appear as a nurse distancing themselves from a patient, losing their capacity to care, failing to give good physical care, poor communications with coworkers, suffering emotional distress and experiencing symptoms of burnout" (Wilson, Goettemoeller, Bevan, & McCord, 2013, p.1456). Further, research also indicates that the presence of moral distress is associated with civilian nurse resignations from their department, organization, and even the profession (Corley, 2002, p. 639); one study found that 15% of nurses had left previous positions due to moral distress (McCarthy & Deady, 2008, p. 257). Other studies have also connected the presence of moral distress in the workplace with burnout and compassion fatigue (Corley, 2002, p. 639; Fry et al, 2002, p. 376; Davis et al, 2012, p. 740; Gustafsson et al, 2010, p. 34).

While the phenomenon of moral distress has not been a specific research focus in the context of military HCP, nor for other service members in the military population, research examining military service members finds that high levels of stress in military personnel is related to mental health issues, I propose that moral distress is a relevant factor in this equation. Morally ambiguous situations were found to be prevalent for American service members on deployment with 27% of soldiers describing encountering an ethical situation in which "they did not know how to respond" (Litz, et al., 2009, p. 696). Other data from the United States military finds that approximately 20-30% of personnel experience some sort of psychological ramification after being deployed (Owen & Wanzer, 2014, p. 2). Furthermore, psychological distress has been positively associated with being a member of the medical corps in the armed forces (Jones, et al., 2008, p. 423). Military HCPs have been found to develop stress related psychological illnesses due to their exposure to death, trauma casualties, and trauma survivors which has been linked to increased levels of compassion fatigue, burn out, depression, anxiety, and overall decline in psychological wellbeing (Owen & Wanzer, 2014, p. 2). In a UK study, military HCPs were found to be overrepresented in referrals to mental health services, with medical technicians, for example, composing 3% of the armed forces but accounting for 7% of psychiatric evacuees (Jones, et al., 2008, p. 423). Jones and colleagues also found that medically traumatic experiences – such as seeing personnel wounded or killed and giving aid to wounded – but not combat traumatic experiences, were associated with psychological distress and mental health issues for the medical technicians (2008, p. 425). These mental health issues lead to decreased job performance that negatively affects the

quality of patient care, and increases professionals' sick time and decisions to leave the profession (Owen & Wanzer, 2014, p. 2). As such, understanding the experience of military HCPs' moral distress is important not only for protecting service member's mental health, but also for improving healthcare practice in the military as well as the effectiveness of the military as an organization.

These findings show a prevalence of stress related mental health issues in military HCPs, yet little research has taken into consideration the role of moral distress in the development of these important problems. Studies have examined the often adverse psychological effects on HCPs of military deployment, but little research has examined how military HCPs cope with their morally complex role(s) (Gibbons, Schafer, Hickling, & Ramsey, 2013, p. 115). HCPs provide care to patients, but often their own quality of life and the effect of their morally complex roles are overlooked (Gibbons, et al., 2013, p. 115). Gibbons and colleagues found that HCPs serving in deployed military operations were in a position of constant stress from several sources including "life threat, loss, morally injurious events, as well as the accumulation of stressors from life experiences and circumstances affecting service members and their families, wherever they live and work, that deplete coping reserve over time" (2013, p. 115). These factors, in combination with the unique practice context of military HCP which is often dangerous to their own person and creates challenges to providing patient care, creates "ample opportunities for moral distress to occur" in military HCPs (Fry, et al., 2002, p. 378).

0.3 Thesis Structure

This thesis will bring further understanding of military HCPs' experience with moral distress by examining Bradshaw and colleagues' model of moral distress for military HCPs in relation to novel data from EMMRG participants discussing moral experiences in the field, and supported by research from a diverse literature review (Bradshaw, Brajtman, Cragg, & Higuchi, 2010).

The literature review in Chapter 1 summarizes findings from fields and disciplines relevant to understanding military HCP experience of moral distress. First, the concept of moral injury and moral distress in the military literature will be reviewed and Bradshaw and colleagues' model will be outlined. These will be used as the foundation for the empirical work presented in Chapters 2-4. Then the moral distress experience for civilian HCPs will be outlined and the differences and similarities between civilian and military HCPs discussed. Particular attention will be given to the literature in nursing as it is well developed with many studies focusing on moral distress, compared to other fields of practice, and it is generalizable to other health professions. Next, the psychological literature on stress and coping will be conceptually applied to the experience of encountering and resolving moral distress. Finally, moral theory from the field of virtue ethics will be considered as a framework for understanding moral responsibility given the controllability of context. Chapter 2 outlines the methods and approach used in this thesis to analyse the EMMRG participants' narratives and then apply the results to Bradshaw and colleagues' model. In Chapter 3, I examine each step of the model and indicate where analysis of EMMRG participants' narratives supported Bradshaw and colleagues' model

and where it was challenged; in Chapter 4 the supports and challenges are synthesized and potential refinements to Bradshaw and colleagues' model are suggested by applying support from the literature review. Finally, Chapter 5 concludes by summarizing the research and indicating possible areas for future research.

Chapter 1 – Literature Review

This literature review draws on research pertaining to moral distress from the perspectives of several disciplines including moral psychology, philosophy, nursing ethics, and military health ethics. This approach integrates research findings from a variety of related fields to better understand the complex experience of moral distress in the specific population of military HCP. Through the incorporation of both theoretical and practical approaches, the aim is to provide a more well-rounded understanding of the phenomenon of moral distress.

The review is divided into four sections. Section 1 reviews the concept of moral injury in the *military literature* and will be divided into three parts that examine the moral complexity of acting well as a military HCP, the moral injury experience, and a model of the moral distress experience described by Bradshaw and colleagues. Section 2 reviews the *bioethics literature* discussing moral distress of civilian HCPs and will be approached in four parts: (1) a comparison of moral injury, moral stress, and moral distress; (2) the experience of moral distress in civilian HCPs; (3) the inherent moral challenges of providing healthcare; (4) and a summary of civilian models of the moral distress experience. Section 3 discusses the *stress literature* in the psychology. While psychology does not focus on moral distress or moral injury, the findings regarding stress and distress can provide conceptual understandings of the individual experience in relation to context as well as specific processes known to resolve distress. This section will be arranged in four parts that overview the interrelated concepts of stress and distress, the mechanism of ego depletion which progresses from stress to distress, strategies to resolve distress, and the influence of external and internal factors on stress resolution. Finally, Section 4

outlines *moral philosophical literature* on virtue ethics and feminist ethics in philosophy which can be used as a framework for understanding moral distress; this literature discusses moral responsibility as an extension of one's character, not as a prescribed action in a specific situation, while also considering autonomy and controllability of the immediate and extended context. This section will also be divided into four parts: (1) a brief summary of Aristotelian virtue ethics, (2) a discussion of the impact of moral luck on moral responsibility in controllable and uncontrollable contexts, (3) the impact of bad moral luck on the individual as moral suffering and moral damage, and (4) resolution strategies to address moral suffering of the individual. At the end of each section a connection and application to the population of military HCPs will be made.

1.1 Military HCP – Moral Distress and Moral Injury

This section will outline the experience of moral injury for military HCP. First, the moral challenges of acting as a military HCP in the deployed environment will be outlined. The complexity of the soldier/healer role duality and the increased stressors when compared to the civilian context will also be explored. Next the concepts of moral injury and moral distress will be compared. This discussion will be followed by a summary of the moral distress experience, its impact on individual service members, and potential resolution strategies to mitigate negative effects. Finally, Bradshaw and colleagues' model of moral distress in military HCPs will be covered in moderate detail to provide a basis for the analysis in Chapter 3.

1.1.1 Moral Complexity of Military HCPs Acting in the Deployed Context

The challenging context of all military work has been described as intrinsically moral and morally compromising since in the context of war, service members are confronted with many moral dilemmas (Gibbons, et al., 2013, p. 247; Litz, et al., 2009, p. 696). However, even with strong training in ethics and the rules of engagement, it can be difficult for military HCPs to decide how to act when faced with a moral dilemma (Litz, et al., 2009, p. 696).

The military is founded on strong moral codes, including honour and duties of professionalism, but in times of war it is normal for soldiers to witness and partake in violence or even killing (Simmons & Yoder, 2013, p. 18). However, only rarely will military HCP partake in violence, with medics having to defend their unit when under enemy fire, but focusing primarily on the health of their unit. Yet, Simmons and Yoder describe how military values such as honour and duty place immense pressure on service members to do what is right according to both moral and legal codes while simultaneously succeeding to accomplish as much as possible the mission objective (2013, p. 18). This involves partaking in otherwise 'immoral' actions such as killing, which are expected and acceptable among the military in a context of war (Litz, et al., 2009, p. 696). Litz et al argue that all individuals in the military encounter heightened potential to "act in ways that transgress deeply held moral beliefs, ... experience conflict about the unethical behaviors of others, ... [or] bear witness to intense human suffering and cruelty that shakes their core beliefs about humanity" (2009, p. 696). This innately contradictive nature of the deployed context indicates the complex and challenging

demand of balancing both military and personal moral values for military service members.

While military HCPs are usually non-combatants and do not have the same moral dilemmas as combat soldiers, they must also conduct healthcare work that involves more morally challenging aspects than their civilian counterparts do due to the nature of deployment. Recent research indicates that challenges can arise for military HCPs due to the nature of their complex role as both caregivers and soldiers (Gibbons, et al., 2013, p. 247). Regarding the challenging position in which military health care professionals are placed, Gibbons et al note that:

> *The dual role of healer and service member adds another dimension to distress experienced by deployed health care providers. Even though military health care personnel have an obligation to both their patients and to the mission, the mission is primary, and at times interests of society or the mission are placed ahead of patient needs. The nature of war and long-term occupation of regions put health care providers in ethically compromising situations that leave lasting impressions.* (Gibbons et al, 2013, p. 247).

This duality creates morally challenging situations for military HCPs who struggle to fulfill their obligations to both the mission and their patient. As such, the requirement of following military policies and practices such as triage can be challenging as it "reverses the natural inclination of nurses [for example] to provide nursing care to those who are the sickest or most in need of care" (Fry, et al., 2002, p. 379).

Furthermore, research indicates that the nature of the care that military HCPs provide in the deployed environment creates additional challenges beyond what is experienced by their civilian counterparts. Stewart (2009) finds that military healthcare

teams in the deployed environment regularly encounter horrific trauma, whether

traumatic injury or death; and military HCPs experience a higher prevalence of

encounters with combat injuries that involve severe trauma, 69% of which involves

polytrauma. One UK study examining military medical personnel found that experiencing

'medically traumatic experiences' such as witnessing personnel being wounded or killed,

providing care and treatment to trauma cases, and handling bodies was associated with

psychological distress in medical personnel (Jones, et al., 2008, p. 425). While different

medical professions may encounter different specific challenges, Fry and colleagues

argue that military nurses, for example, work in a diagnosis and treatment setting that is

atypical and stressful as it often involves mass deaths, battle trauma, and endemic

diseases (2002, p. 379). The constant exposure to trauma has been linked to an overall

increased experience of stress and stress related psychological issues (Owen & Wanzer,

2014, p. 3). However, different HCP are likely to experience varying degrees of trauma

and other factors contributing to stress, depending on the environment in which they

work.

1.1.2 Experience of Moral Distress and Moral Injury in the Military

Some research has been conducted regarding the impact of the moral dimension

on stress related mental health issues in the population of military HCPs (Litz, et al.,

2009; Gibbons, et al., 2013; Vargas, Hanson, Kraus, Drescher, & Foy, 2013; Dombo,

Gray, & Early, 2013). Recently, researchers have begun to explore the moral impact of

working in the deployed environment on service members; the inherently moral nature of

military healthcare combined with the significant moral and non-moral stressors in the

deployed environment suggest that moral stressors may be responsible for the high levels of stress related mental health problems of military service members. While there is limited research available, the concepts of both moral distress and more recently 'moral injury' have been examined in military HCPs.

1.1.2.1 Military Moral Injury and Moral Distress

The experiences of moral injury and moral distress are conceptually comparable as they both describe a similar moral experience of responsibility to act, but being blocked from enacting this desired choice. In the civilian literature, moral distress is described by Corley as "the painful psychological disequilibrium that results from recognizing the ethically appropriate action, yet not taking it, because of obstacles" (2001, p. 250) and by Lutzen and Kvist in a comparative analysis of the term in the civilian literature as "a person's experiences of external factors preventing him/her from doing what he or she thinks is the right thing to do, at the same time as being aware of his or her inability to take action according to internalized moral guidelines" (2012, p. 16-17).

Moral injury is defined by Gibbons and colleagues (2013) as a separate phenomenon from moral distress in military HCPs, among other service members. While moral distress occurs when one's choice of action in a moral dilemma is blocked, they argue that moral injury involves a "deeper emotional wound and is unique to those who bear witness to intense human suffering and cruelty" which creates internal dissonance when the military HCP is required to act in a way that contradicts their moral beliefs and

so leads to psychic and spiritual pain (Gibbons, et al., 2013, p. 248). Both definitions outline conceptually similar experiences for both moral injury and moral distress.

First, both moral injury and moral distress are depicted as resulting from a challenging moral experience. Like moral distress, moral injury involves a responsibility to act, but due to the experience of being blocked from an external source, albeit more implicit. While the definition of moral injury does not overtly include a description of 'obstacles' or 'external factors preventing', it describes a 'disruption' of one's 'capacity to behave in a just manner' which implies that the influence of the external context in limiting behavioural choices is intrinsic to both the experience of moral distress and moral injury (Drescher, et al., 2011). Witnessing intense human suffering and cruelty implies an unidentified barrier thwarting one from preventing or stopping a situation in which any human being may arguably perceive a responsibility to act, even if it may be impossible to do so due to obstacles. While moral distress describes a more direct responsibility to act, the implicit responsibility of moral injury is comparable. In addition, moral distress includes an overt description of the 'painful psychological disequilibrium' that occurs when an individual is "aware of his or her inability to take action according to internalized moral guidelines" (Lutzen & Kvist, 2012, p. 16-17). This challenge to one's moral beliefs and worldviews can deeply affect an individual as demonstrated by the literature, and can be considered comparable to the 'psychic and spiritual pain' described by moral injury research (Gibbons, et al., 2013, p. 248). Both moral distress and moral injury describe a moral and psychological disequilibrium that may disrupt behaviour and one's sense of self. As such, the terms are conceptually comparable, justifying the

inclusion and consideration of the moral distress literature when considering moral injury in military HCPs.

1.1.2.2 Experience of Moral Distress

The experience of moral distress requires that a military HCP "have a responsibility for some action and to feel responsible for the outcomes of their action" (Fry, et al., 2002, p. 376). Both contextual aspects of the deployed environment as well as atypical patient care factors related to role responsibility were found to contribute to the experience of moral distress in military HCPs (Fry, et al., 2002, 378). In a study of military nurses, Fry and colleagues describe the process of moral distress as first involving an awareness of a situation as conflicting with their personal moral values, followed by an appraisal of the situation, and a moral judgement deciding on the best course of action given the context (2002, p. 380). If military nurses encounter a barrier to this desired moral action they will experience initial moral distress, and if they attempt to overcome it and are unsuccessful, they will experience reactive moral distress which has both short and long term consequences. Initial moral distress in this population is described as involving psychological disequilibrium along with negative feelings such as "frustration, anger, anxiety, powerlessness, discomfort and hurt" (Fry, et al., 2002, p. 383). Reactive moral distress involves "continuing moral distress" from the initial distress as well as emotional consequences experienced over time in the form of "crying, loss of sleep, loss of appetite, nightmares, feelings of worthlessness, loss of confidence, heart palpitations, changes in body functions and headaches" (Fry, et al., 2002, p. 383). This reactive moral distress over time can have further negative effects for the individual HCP

and organization as it increases the likelihood of withdrawing from the professional practice, not agreeing to deploy in future deployments, and even burn-out.

1.1.2.3 Experience of Moral Injury

Gibbons and colleagues describe moral injury as a "deeper emotional wound" than moral distress which results from witnessing intense human suffering and cruelty, creating a combination of psychic distress and spiritual pain (2013, p. 248; Litz, et al., 2009, p. 696). They find that moral injury occurs when an individual perpetrates, fails to prevent, bears witness to, or learns about acts that "transgress deeply held moral beliefs and expectations", producing inner conflict and moral emotions such as anger, guilt, and shame (Litz, et al., 2009, p. 700; Vargas, et al., 2013, p. 248). This is corroborated by Vargas and colleagues who describe moral injury as occurring when an individual experiences "internal conflict stemming from involvement in acts that violate deeply held moral and ethical standards" (2013, p. 243).

In essence, moral injury occurs when a "traumatic and overwhelming act is evaluated as a threat to the integrity of one's moral schema", which leads to a realization that there is a discrepancy between one's fundamental moral beliefs and assumptions about how the world operates and the challenging experience, which then leads to experiencing inner conflict and dissonance (Dombo, et al., 2013, p. 200; Litz, et al., 2009, p. 700). Or as Dombo and colleagues explain "this act of transgression, voluntarily engaged in by an individual, represents a trauma that affects the soul and presents in symptoms including the affective symptoms of guilt and shame" (Dombo, et al., 2013, p. 201).

Moral injury in military HCPs leads to the experience of internal dissonance where an individual feels a lack of integration of their thoughts, emotions, and understanding of the world (Gibbons, et al., 2013, p. 249). Moral emotions such as remorse, guilt, and potentially shame result from moral injury "if they blame themselves because of perceived personal inadequacy and flaw" (Litz, et al., 2009, p. 700). In addition, morally injured military service members are likely to experience withdrawal and anxiety as well as other 'averse' emotional and psychological outcomes, including feeling helpless, hopeless, and isolated (Litz, et al., 2009, p. 700). Other 'collateral manifestations' that present with moral injury in service members include self-harming and self-handicapping behaviours as well as demoralization (Litz, et al., 2009, p. 701). In addition, individuals experiencing long term effects of moral injury may eventually begin to see themselves and their character as morally compromised; "the more time passes, the more service members will be convinced and confident that not only their actions, but *they* are unforgivable" (Litz, et al., 2009, p. 700). If this state of moral injury is reached, then service members are highly unlikely to 'see a path' towards reconciliation and renewal if they fail to experience self-forgiveness (Litz, et al., 2009, p. 700). Dombo and colleagues agree and find that an individual may shift away from believing that a behaviour is bad and begin to internalize the belief that they themselves are 'bad', which can lead to a lack of self-control and mental health issues such as depression, eating disorders, and addiction (2013, p. 201).

1.1.2.4 Resolution of Moral Distress and Moral Injury

While little research discusses the resolution of moral distress in military HCP, some research on the military in general examines the resolution of moral injury (Fry, et al., 2002). Litz and colleagues argue that morally injured military service members exhibit a "psychological imperative to reconcile morally incongruent or discrepant experiences" which requires psychological and emotional processing (2009, p. 701). This processing requires the following in order to be successful:

> *If the person accommodates the experience and attributes the event in a specific (i.e., highly context war dependent), not stable (i.e., time-locked), and external (e.g., a result of exigencies and extraordinary demands) way, this reduces conflicts and fosters moral repair; successful integration of the moral violation into an intact, although more flexible, functional belief system* (Litz, et al., 2009, p. 701).

Litz and colleagues describe this resolution process as reflecting on the deployed context and considering the external and unstable elements that are caused by the unique environment (2009, p. 701). By doing so, it is possible for the service member to reconstruct a more flexible moral understanding and worldview that accommodates these factors and allows for healing of the moral injury (Litz, et al., 2009, p. 701). They find that it is possible to alleviate moral injury by practicing self-forgiveness "a set of motivational changes whereby one becomes decreasingly motivated to avoid stimuli associated with the offense, decreasingly motivated to retaliate against the self (e.g., punish the self, engage in self-destructive behaviours, etc.), and increasingly motivated to act benevolently toward the self" (Litz, et al., 2009, p. 699; Hall & Fincham, 2005, p. 622). Self-forgiveness diminishes the moral emotions, such as guilt and shame, associated with a morally injurious incident (Gibbons, et al., 2013, p. 257). Conversely, if self-

condemnation (the opposite of self-forgiveness) is practiced instead, research finds increased PTSD symptom severity, depression, general anxiety, dispositional shame, poor psychological well-being, and self-punishment (Litz, et al., 2009, p. 700). For veteran military HCPs, research indicates that the 'essential element' for treatment is forgiveness and compassion "and [to] make peace with the traumatic exposure that haunts them" and then searching for meaning related to their moral injury experience (Gibbons, et al., 2013, p. 257-8).

1.1.3 Bradshaw and Colleagues' Model of Moral Distress in Military Nurses

Bradshaw and colleagues' model, created in 2010, is the latest depiction of a model that describes the distinct experience of moral distress for health care professionals specifically working in a military environment abroad. Bradshaw and colleagues drew inspiration from Fry and colleagues' 2002 model to develop a new model based on the qualitative analysis of the described experiences of a sample of Canadian military nurses. Several important developments are present in Bradshaw and colleagues' model that are not incorporated into civilian models or Fry and colleagues' version. The first change in Bradshaw and colleagues' model is the shift from four stages to two phases that incorporate many intermediary steps. The first 'Moral Deliberation Phase' outlines the process that occurs when HCPs encounter a moral dilemma and attempt to resolve it. The second 'Moral Impact Phase' occurs when ethical resolution of the dilemma is blocked by a barrier and thus creates a moral impact on the individual (as well as additional external factors). A second major development in Bradshaw and colleagues' model is the direct incorporation of the impact of the unique environment on both phases of the model.
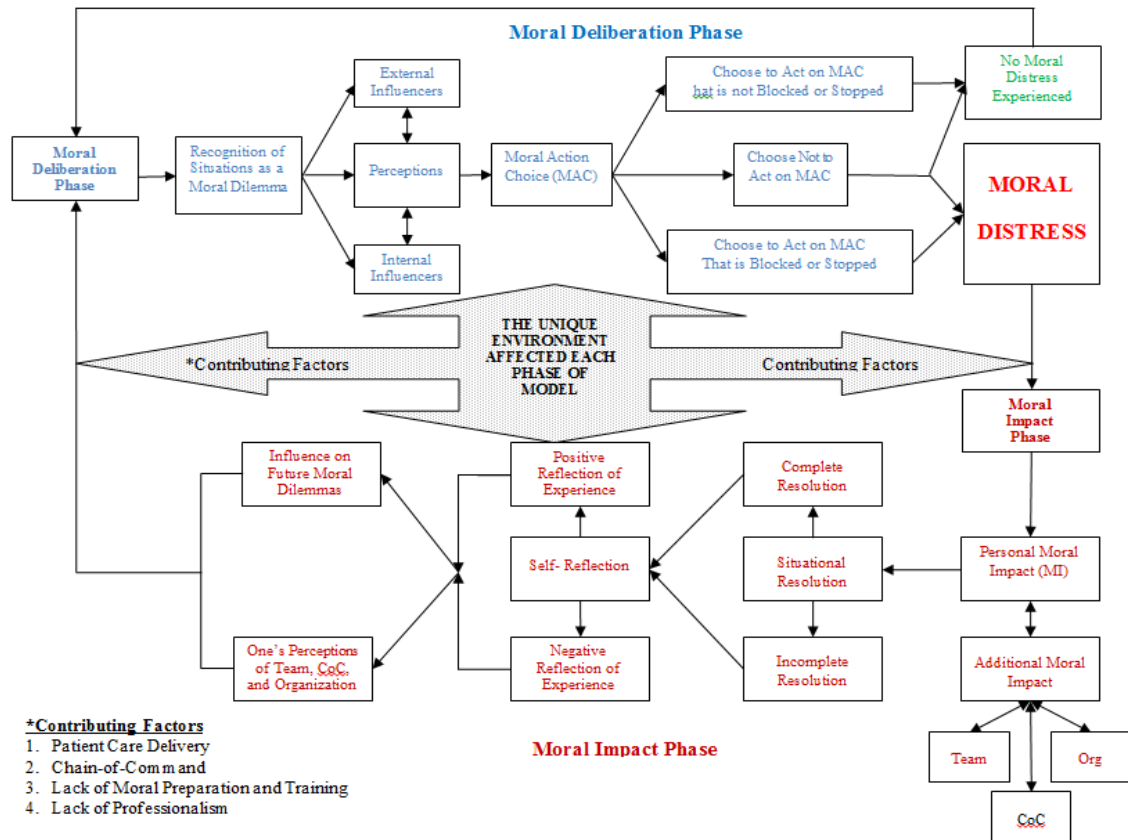
Fig. 1 – Bradshaw and Colleagues' model of Military Nurse Moral Distress

Bradshaw and colleagues agree with Fry and colleagues, that the context in which military HCPs work is distinct from the environments in which other HCPs practice. They outline four major 'contributing factors' to moral distress in the military environment: (1) Issues around Patient Care and Delivery, (2) Chain of Command, (3) Lack of Moral Preparation and Training in Moral Dilemmas, and (4) a Lack of Professionalism. Bradshaw and colleagues argue that each of these contributing factors affect individuals during both the moral deliberation and moral impact phases of the model. Issues surrounding (1) Patient Care and Delivery refers to aspects of health care delivery and includes both patient type and resources (human, supply, space, etc.). This contributing

factor was found to most commonly affect moral distress in military HCPs. Patient type refers to the treatment of either a civilian or a combatant (whether allied or enemy forces) and often created frustration and confusion for HCPs due to the complex and often futile process of "medical rules of eligibility or entitlement to care, the use of finite resources, and the country's poor if non-existent health care infrastructure" (Bradshaw, et al., p. 39). Resource issues refer to problems related to "aspects necessary for the ongoing operation and maintenance of the military health care facility to deliver health care" (Bradshaw, et al., p. 40). Resources can be external (such as staffing, team cohesion, time, amount of supplies, and space) or internal (including personality traits, experience, and energy level) and often affected the development of moral distress when HCPs perceived resources as being absent or mismanaged.

The second contributing factor, (2) Chain of Command, is useful in mitigating moral distress when individuals in a supervisory role lead by example, are supportive, and ensure the well-being of their subordinates but may aggravate moral distress by failing to perform these roles. Thirdly, Bradshaw and colleagues' study found a (3) Lack of Moral Preparation and Training in Moral Dilemmas. While Canadian Forces nurses in Bradshaw and colleagues' study felt trained and ready to act as nurses in the field, they felt unprepared to handle moral dilemmas during missions due to the absence of effective pre-deployment training outlining potential ethical challenges. Finally, a (4) Lack of Professionalism was cited as a contributing factor to moral distress and is defined as a lack of respect, equality, and maintenance of rules during health care delivery. Many of the nurses in Bradshaw and colleagues' study found that the deployed environment

created unique professional challenges due to the complexity of nurse-physician role challenges, in tandem with the challenging dynamics associated with HCPs holding military rank.

Together, Bradshaw and colleagues found that these four contributing factors create a unique environment that affects the development of moral distress through both the Moral Deliberation and Moral Impact phases.

1.1.3.1 The Moral Deliberation Phase

The first phase of Bradshaw and colleagues' model, or the Moral Deliberation phase, involves the recognition of a situation as a moral dilemma and the subsequent moral decision making process involved in deciding upon a single moral action to take after carefully considering reasons for two or more moral options. The action that is decided upon is called the Moral Action Choice (MAC). The process of determining and then implementing one's MAC requires a significant amount of personal energy and cost to the HCP. Furthermore, the deliberation on a MAC is strongly influenced by external influencers (e.g., environment, team cohesion, decisional power), perceptions (e.g., degree of support, career impact, "what choice can I live with?"), and internal influencers (e.g., core values and beliefs, congruency with organizational values and beliefs). Once a MAC was decided and then implemented, one of four results is possible: (1) the MAC was blocked by an external barrier (e.g., lack of resources), (2) the MAC was blocked internally by the HCP his or herself, (3) the MAC was blocked either internally or externally, but the HCP was satisfied with the result, (4) the MAC was not blocked and was implemented. Bradshaw and colleagues describes how these four possible results

affected the development of moral distress differently. In result (4), no moral distress was experienced.

When a MAC was blocked externally (1) it most often resulted in moral distress; however, when a MAC was blocked internally (2) it lead to the most severe negative impact from moral distress. Nurses who employed 'self-imposed blocking' of their MAC typically did so to "protect others (e.g., a colleague's failure to follow orders), when they believed their actions were not worth the cost (e.g., energy, deployment length, potential fracturing of relationships), or if they felt they could live with this less than optimal particular choice." (Bradshaw, et al., 2010, p. 62). Self-imposed blocking often leads to the most drastic experience of moral distress including self-loathing, emotional withdrawal, compromising personal core values, and leaving either the nursing profession or the military. However, it was also found that if the internal or external barrier was perceived to be beyond the control of the HCP, then some nurses could become satisfied with their MAC despite it being blocked (3) as they felt they could not have influenced the outcome. Yet, even with this understanding, it was common for military HCPs to still experience moral distress, especially if their proximity and level of involvement with the situation was high. Bradshaw and colleagues found that both of these factors were significantly correlated with the likelihood of developing moral distress in any of these three MAC outcomes. If proximity and involvement were high, the experience of moral distress was more likely to be severe; but if these factors were minimal, so to was the negative impact of moral distress.

1.1.3.2 The Moral Impact Phase

If the attempt to implement the MAC resulted in either an external or internal (self-imposed) barrier, the military HCPs moved to the second phase of this model – the Moral Impact Phase. The experience of moral distress has an impact on both the individual and related exterior aspects including team dynamics, the chain of command, and the military as an organization. While Bradshaw and colleagues acknowledge the importance of these impacts, their model focuses on the personal impact of the blocked moral action. The next step in the personal impact phase outlines the mechanisms of situational resolution where nurses struggle to understand "their emotions, relationships, and ability to function as nurses and individuals" (Bradshaw, et al., 2012, p. 67). Situational resolution is followed by 'self-reflection' where nurses reflect inwardly in an attempt to "gain meaning and provide justification for their choices, and the repercussions of those choices" (Bradshaw, et al., 2010, p. 67). Bradshaw and colleagues argue that situational resolution can be resolved either completely or incompletely and, similarly, self-reflection can be experienced either positively or negatively which in turn affects the nurse's perceptions of the team, chain of command, and military organization as well as any future moral dilemmas that they face.

In discussion, Bradshaw and colleagues outline several other important implications of this model. First, they argue that if the moral dilemma remains unresolved for a long period of time it may lead to a "significant level of constant moral distress" which they call a 'crisis state' and define as "a period during which individuals no longer have the resources, both internal and external, to deal with stressful situations" (Bradshaw, et al., 2010, p. 71). Bradshaw and colleagues argue that by virtue of one's

inaction or inability to act, the nurse is placed in an unending loop of cycling back through the Moral Deliberation and Moral Impact phase that "increasingly challenge[s] the CF nurses' abilities to access their resources and personal reserves to deal with unresolved dilemmas or new moral dilemmas" and can lead to increasingly negative effects on the individual (Bradshaw, et al., 2010, p. 72).

Second, Bradshaw and colleagues argue that an individual can experience moral distress not only in the moral impact phase, but also during the moral deliberation phase as deliberating on a MAC can be just as distressing as when the MAC is blocked by either an external or internal barrier. This is especially true when the experience of unresolved past dilemmas influences the individual's future moral deliberation processes. Bradshaw and colleagues' derive this conclusion from the incorporation of a prevalent concept in stress research literature, that "the accumulation of negative energy predisposes one to a higher level of stress sensitivity, lower coping capabilities, and/or crisis" (Bradshaw, et al., 2010, p. 73). As such, they contend that the ability of an individual in this position to cope with additional stressors is hindered due to prior unresolved negative moral experiences. Previous research in the civilian literature has described these 'lingering effects' in concepts like reactive moral distress (Jameton, 1984), moral residue (Webster & Baylis, 2000), and moral reckoning (Nathaniel, 2006); however, no model thus far has outlined the effects of this concept in conjunction with the unique military environment.

Third, Bradshaw and colleagues further outline the unique impact of both the military environment and culture on the nurse encountering moral dilemmas. The deployed military environment has unique conditions that affect nurses and contribute to

the development of moral distress. The working and living conditions while deployed are full of daily challenges that are often severe and dangerous, such as "a heightened sense of danger (rocket attacks), inadequate sleep and rest, lack of or poor amenities (showers), excessive and continuous noise, limited access to normal support structures (family, trusted friends), and restricted personal movement, were constant stressors experienced by the military HCPs that were not generally noted in the current literature" (Bradshaw, et al., 2010, p. 76). While the civilian environment may have some similarities, these factors are in general more severe than the typical civilian context and contribute to the military context that Bradshaw and colleagues argue affects both the moral deliberation and moral impact phase.

Another aspect of the unique military environment is the differences in the civilian and military team mentality. While many traditional aspects of positive team collaboration are present in both civilian and military environments (e.g., common goals, shared decision making), for military HCPs a positive team collaboration is necessary for a successful mission. In a civilian context, team relationships are largely seen as important in the work place; however, in a deployed setting a positive team collaboration is necessary beyond work hours and must "encompass all aspects of life (e.g., work, support, and social relationships) over each complete day for an extended number of months to gain this strong sense of community" (Bradshaw, et al., 2010, p. 77). Military nurses that experienced negative team relationships experienced significant negative effects regarding their current and future mental health, work performance, work relationships, and strongly influenced their retention in the military.

1.1.3.3 Reflection on Bradshaw and Colleague's Model

Generally, my first impression of this model is positive as it seems intuitively correct; Bradshaw and colleagues' claims are coherent and the model is well justified. The two phases clearly delineate the initial experience of encountering a blocked action that one desires to take, encountering moral distress, and the process of resolving this moral distress which reflects the complete experience. The model also takes into account the 'unique environment' and contextual factors influencing and affecting the military HCP at each step of the model. This seems appropriate for individuals acting in the deployed environment, which inherently involves a multitude of controllable and uncontrollable stressors. However, the 'unique environment' as described by Bradshaw and colleagues is not specific to the deployed environment and could arguably be substituted for the unique environment of other professions or health professionals (e.g., humanitarian health workers). This is not a criticism as its flexible structure makes the model valuable to other populations that encounter moral distress, and allows for the distinct aspects of the unique deployed environment for military HCPs to be captured. However, one aspect of the deployed environment that seems to need further consideration is how it influences the individual's moral impact phase. Further examination of the role of the context on the personal and extended consequences of moral distress as well as the resolution process would be useful and will be discussed below.

The inclusion of a resolution process for moral distress is also reflective of the entire experience, which does not end after one initially experiences moral distress. The whole experience involves not only one's encounter with moral distress, but also its

consequences and the individual's journey to address and integrate these destabilizing experiences in an attempt to reach wellness, whether or not this attempt is successful. Incorporation of findings from the stress literature in psychology also seem to be a beneficial addition as it examines the process of resolving distress. While this literature may not specifically discuss 'moral' distress, stress research seems connected as it discusses the process of stress and distress resolution from a broader scope. Bradshaw and colleagues' inclusion of a feedback loop enhances the model as it describes connection between past, present, and future experiences with moral dilemmas and demonstrates the full potential impact of moral distress over time. However, Bradshaw and colleagues' resolution process seems to lack clarity in the theoretical foundations of its conceptualization. There is no description of the mechanism that drives this process and determines whether or not resolution is experienced positively or negatively. The model may benefit from further incorporation of stress literature and related concepts in psychology that could provide additional support and direction for the newly incorporated resolution process.

1.2 Moral Distress in Civilian HCPs

To better understand the military HCP experience of moral distress and moral injury, it is essential to consider the literature on civilian counterparts. Lutzen and Kvist (2012) find benefits to this collaborative approach, describing one general rule of research as "frequently build[ing] on theoretical frameworks or develop[ing] theories by connecting concepts to each other" (p. 15). Moral distress has been well established as an ongoing issue in the civilian health care sector which has resulted in extensive research

and can inform new research examining the fairly new field of military 'moral injury', which as discussed previously, is related to military moral distress. In the following section, a comparison will be done. Next, the learnings will be considered from the civilian HCP literature that are helpful when considering military HCPs' experiences of moral injury and moral distress. First the experience and impact of encountering moral distress on the individual HCP will be summarized as understood in the civilian HCP literature. Next, the contextual and inherent moral challenges of providing health care will be outlined, concluding with an overview of relevant civilian models of the moral distress experience for HCPs.

1.2.1 Moral Distress Experience in Civilian HCPs

Moral distress has been cited as a 'major problem' in the nursing profession in all areas of the health care system (Corley, 2002, p. 636; Fernandez-Parsons, Rodriguez, & Goyal, 2013, p. 547). Corley finds high rates of moral distress in the civilian nursing population where "over 80% of the nurses reported medium to high levels of moral distress" (2002, p. 639). Redman and Fry (2000) state that one of every three nurses reports experiencing moral distress due to perceived institutional constraints that "made it nearly impossible to pursue the right course of action" (p. 365). Encountering a moral dilemma also leads to distinct personal impacts caused by stress; "nurses are confronted with practice dilemmas that evoke distressing and stressed reactions" (Zuzelo, 2007, p. 34). Three main types of symptoms have been identified as resulting from unresolved moral distress:

Physical Symptoms	Behavioural Symptoms	Psychological Symptoms
• Heart palpitations • Diarrhoea • Nausea	• Recurring vivid nightmares • Sense of impending dread • Distraction • Crying • Easily feeling overloaded with work	• Resentment • Sorrow, Misery • Loss of self-worth • Embarrassment, Shame • Feeling helpless, powerless • Anger, Frustration • Grief
(McCarthy & Deady, 2008, p. 259)	(Corley, 2002, p. 642; De Villers & DeVon, 2012, p. 590)	(Corley, 2002, p. 642; De Villers & DeVon,2012, p. 590).

Fig. 2 – Symptoms of Moral Distress in Civilian HCPs

Research examining civilian nurses by McCormack, Joseph, and Hagger found that moral distress could lead to ongoing psychological distress and eventually psychopathology, or mental illness (2009, p. 114). In addition to individual mental health concerns, studies have also connected moral distress in the workplace to decreased work performance and satisfaction which affects the healthcare organization. Research examining nurses in critical care finds that chronic moral distress is associated with burnout as well as attrition, compassion fatigue, and patient avoidance (Fernandez-Parsons, Rodriguez, & Goyal, 2013, p. 547). Burnout is described as the "[e]motional exhaustion, depersonalization, and a reduced level of personal accomplishments caused by long-term involvement in situations that are emotionally demanding" and compassion fatigue as the "[t]he emotionally related stress that is experienced from the trauma reported by the patient"; both of these are stress related mental health issues (Gustafsson, et al., 2010, p. 23; Owen & Wanzer, 2014, p. 3)

Moreover, nurses who experience moral distress are less effective individual caregivers as "they may begin to withdraw from the work environment, lose their capacity to care, and fail to provide thorough care to the patient and family" (Wilson, et al., 2013, p. 1456). Heightened levels of moral distress increase medical errors and decrease job satisfaction, leading to an unhealthy work environment that negatively affects the overall effectiveness and wellbeing of the organization (Fernandez-Parsons, Rodriguez, & Goyal, 2013, p. 547; Wilson, et al., 2013, p. 1457). In a 2002 study, Corley found the experience of moral distress and its impact in the workplace as a major cause of leaving a work position, with upwards of 15% of nurses cite this as the reason they had left a past position (Corley, 2002, p. 639). A 2013 study identified that moral distress was the primary reason for leaving a previous position of 6.6% of nurses; however, 20% said they had previously considered leaving a position because of moral distress, and 13.3% said that this was the reason they were currently considering leaving their position (Fernandez-Parsons, Rodriguez, and Goyal, 2013, p. 547). The civilian healthcare literature clearly indicates that the experience of moral distress has a negative effect both on the psychological health of HCPs and the effectiveness of the organization.

The context in which HCP strive to provide ethical care is often uncontrollable to at least some degree, and the expectations placed on individual HCP often do not consider that they may not have the power to satisfy their moral responsibilities due to uncontrollable elements (Austin, 2012, p. 29). Austin argues that the impact that extended social structures and other systemic elements in the healthcare context have on HCPs' actions must be incorporated into considerations of moral responsibility (2012, p. 29). As

such, the extended context must also be considered when examining the personal consequences of moral distress.

1.2.2 Civilian Healthcare Models of Moral Distress

This section will provide a brief overview of the major models described in the literature examining moral distress in the civilian healthcare sector. The models created by Jameton, Wilkinson, and Epstein and Hamric will be summarized to outline the theoretical development of the moral distress experience in HCP.

1.2.2.1 The Moral Distress Experience in Civilian HCP

Jameton, a philosopher, was one of the first to describe a moral decision making process that involved moral constraint in the field of nursing (Jameton, 1984). In a context of moral constraint, Jameton argues that a phenomenon called 'moral distress' could emerge which involved "painful feelings and/or psychological disequilibrium" and outlines the cause as being when "one knows the right thing to do, but institutional constraints make it nearly impossible to pursue the right course of action" (Lutzen, et al., 2003, p. 313). Wilkinson develops Jameton's concepts of moral distress first by adding to the definition "the psychological disequilibrium and negative feeling state experienced when a person makes a moral decision but does not follow through by performing the moral behaviour indicated by that decision" (Lutzen, et al., 2003, p. 313). He further argues for the necessity of 'coping behaviour' that allows nurses to restore their psychological equilibrium and allow them to make future moral decisions (Lutzen, et al., 2003, p. 313).

Both Wilkinson and Jameton make a distinction between two different types of moral distress: 'initial distress' and 'reactive distress' (McCarthy & Deady, 2008, p. 256). They define initial distress as occurring when one first encounters a barrier that prevents a person from acting in the way they believe is moral and is associated with feelings of anger, frustration, and anxiety (McCarthy & Deady, 2008, p. 256). In contrast, reactive distress refers to what occurs when one does not act upon their experience of initial moral distress. As such, initial distress and reactive distress tend to be experienced as short-term and long-term effects, respectively (Fry et al, 2002, p. 374). This results in a complex individual emotional and psychological reaction with feelings of powerlessness, guilt, self-criticism, and low self-esteem coupled with physiological responses including crying, loss of sleep, nightmares, and loss of appetite (McCarthy & Deady, 2008, p. 256).

Epstein and Hamric built on the models developed by Jameton and Wilkinson by expanding on the concept of reactive moral distress (2009; 1984; 1987). Epstein and Hamric argue for the incorporation of the related concept of 'moral residue' into the model of moral distress (2009). Moral residue is described by Webster and Baylis as "that which each of us carries with us from those times in our lives where in the face of moral distress we have seriously compromised ourselves or allowed ourselves to be compromised" (2000). Epstein and Hamric argue that due to moral residue, the nature of moral distress and its impact on the individual are cumulative and progressive (Epstein & Hamric, 2009, p. 332).
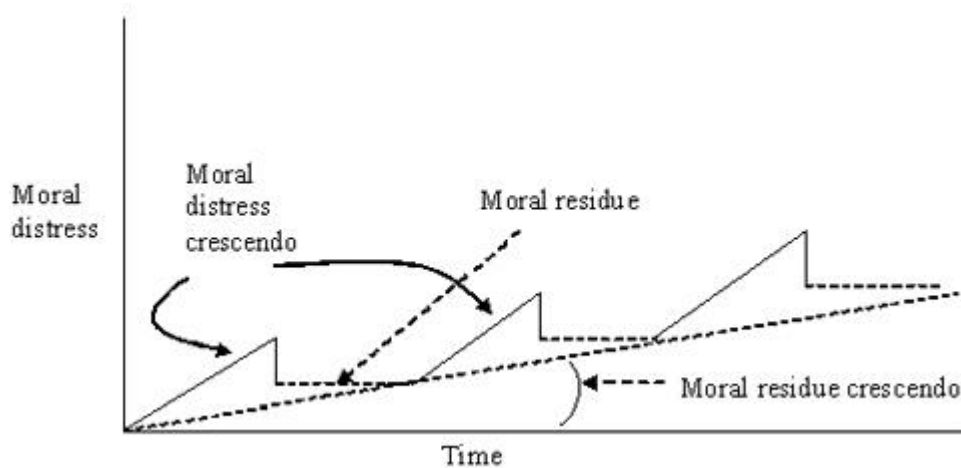
Fig. 3 – Moral Residue Crescendo Effect

This progressive and cumulative development as reflected in the experiences of nurses can be described as the 'crescendo effect' of the moral distress experience (Epstein & Hamric, 2013, p. 333). When an HCP encounters a morally challenging situation when providing care, the feelings of initial moral distress are experienced intensely and then decrease after the acute and immediate challenge is partly resolved. However, if the painful feelings associated with moral distress are not completely resolved, some moral residue persists which "serv[es] as a new baseline for moral distress" (Epstein & Hamric, 2009, p. 333). This new baseline acts as the heightened starting point for the next encounter with initial moral distress, creating "increasingly higher crescendos; new situations evoke stronger reactions as a clinician is reminded of earlier distressing situations" (Epstein & Hamric, 2009, p. 332). They argue that this build-up of moral residue is caused by a lack of personal resolution and a persistence of immediate and systemic contextual barriers (Epstein & Hamric, 2013, p. 332).

1.2.3 Application to Military HCPs

While the moral distress literature from the civilian healthcare sector does not capture the complexities of the moral injury experience for all military service members, this literature can provide insight into morally injurious experiences of military HCPs. The dual role of the military HCP as both soldier and healer has been identified as a challenging aspect of providing care in the military context, but little moral injury research thus far has examined the challenges from the perspective of a caregiver. The extensive civilian literature has investigated this perspective using the lens of moral distress, which is comparable to the phenomenon of military moral injury. By extension, the civilian moral distress literature indicates that the experience of moral injury in military HCPs may benefit from incorporating understandings such as the inherent moral nature and obstacles of healthcare in both the immediate and extended context due to largely uncontrollable systemic factors and the cumulative nature of moral distress. The civilian research examining intensive care contexts is also applicable to military HCP who are likely to encounter highly complex patients, end of life care, and futile care as discussed in the moral distress literature. As such, while the context and roles differ for military and civilian HCPs, some relevant research findings from the civilian moral distress literature may be useful in understanding the military moral injury/moral distress experience.

1.3 Stress and Distress in Psychology

The literature in psychology does not focus on moral distress or moral injury as phenomena; however, it thoroughly investigates the experience and impact of stress and

distress on the individual. This section will briefly discuss the experience of distress from the psychological perspective, focusing on the field of social and personality psychology. First, the differences and similarities between stress and distress as well as moral distress and psychological distress will be outlined and definitions established. Next, the progression from psychological stress to distress will be discussed along with the mechanism responsible for this process, termed 'ego depletion'. Then, the process of resolving stress and distress as described in a variety of psychological specialities will be discussed, specifically focusing on the process of self-reflection. Finally, both the external and internal factors that influence this stress resolution process will be described and the application to the military context outlined.

1.3.1 Differentiation of Terms and Concepts

      This section will briefly compare and discuss various related terms in psychology and civilian moral distress literature and outline the nuance of each concept.

1.3.1.1 Stress and Distress

      While the terms 'stress' and 'distress' are often used synonymously, the distinction between these concepts is important. Despite the fact that both stress and distress have physical, psychological, and professional effects on the individual, nuances exist between the two concepts. Both the psychology and moral distress literature describe stress as occurring in the interactions between a person and their environment: "stress refers to any event in the environment that strains or exceeds the adaptive resources of an individual or shared system" (Lutzen & Kvist, 2012, p. 15). In psychology, stress was originally conceptualized as a neutral phenomenon as it was found

that stress is a "physical and emotional state always present in the person as a result of living; it is intensified in a non-specific response to an internal or external change or threat and it is not always negative" (Ridner, 2004, p. 538). In this way, stress is essential to supporting life; while the experience of stress may be unpleasant, it can be useful in bringing important concerns to the conscious awareness of the agent (Ridner, 2004, p. 537). In contrast, 'distress' indicates a shift from an individual being able to continue normal functioning to a point where this cannot be maintained, which is described as being an inherently unpleasant experience (Ridner, 2004, p. 538). Ridner defines distress as "the unique, discomforting, emotional state experienced by an individual in response to a specific stressor or demand that results in harm, either temporary or permanent" (2004, p. 539). The progressive shift from stress to distress requires several antecedents including the perception that the stressor is a personal threat, a perceived or actual loss of control, and ineffective coping strategies (Ridner, 2004, p. 540).

1.3.1.2 Moral Stress vs Moral Distress

While the concepts of moral stress and moral distress are considered to be distinct from each other, the term moral distress is often used synonymously or to describe both phenomena in the literature (Lutzen & Kvist, 2012, p. 19). Lutzen and Kvist argue for consensus definitions of moral stress and moral distress that distinguishes their unique conceptual features (2012, p. 13). They find that the original conceptualization of moral distress was a state that focused mainly on negative effects on an individual: "negative emotional and psychological reactions; conflicting values or incompatible feelings… these constitute the essence of moral distress" (Lutzen & Kvist, 2012, p. 19). Conversely,

the experience of moral stress is experienced in a way that "may not necessarily lead to negative results" (Lutzen & Kvist, 2012, p. 19). They argue that moral stress can actually have some positive impacts on an individual such as preventing moral blindness, because it can "serve as a reminder of moral obligations and keep us alert when we begin to feel uncomfortable about deciding what is right and wrong" (Lutzen & Kvist, 2012, p. 19).

1.3.1.3 Moral Distress and Psychological Distress

It is important to note that while moral injury (and moral distress) is related to emotional or psychological distress, they are separate phenomena (McCarthy & Deady, 2008, p. 256). Litz and colleagues argue for a distinction between moral and psychological distress, but find that the two concepts are interconnected and that a failure to resolve morally stressful life events can lead to lasting psychological distress (2009, p. 698). When a stressor presents that involves a specifically moral dimension, an individual's existing moral values, personal standards, ethical beliefs, and worldviews are challenged in a way that is not experienced during psychological distress (Litz, et al., 2009, p. 698). With moral injury, beliefs about the world and self are "likely to be deeper and more global" which has long term effects on the individual and may alter their beliefs that "the world is benevolent, the world is meaningful, and the self is worthy" (Litz, et al., 2009, p. 698). By contrast, the experience of psychological distress is less pervasive "the frequency and intensity of the emotions usually decrease naturally" and often become extinct as the individual habituates (Litz, et al., 2009, p. 698). Epstein and Hamric argue that while psychological distress is related, it largely involves one's emotional reactions

to a situation "but does not necessarily involve violation of core values and duties" that is experienced by those with moral injury (2013, p. 331).

1.3.2 Coping with Stress and Distress

This section outlines the psychological processes involved as an individual shifts from experiencing stress to distress through the experience of ego depletion. The concept of limited self-regulation resources will be introduced followed by an examination of the process of ego depletion, its resolution, and its connection to moral process.

1.3.2.1 Self-control, Normative Functioning, and Self-Regulation Resources

Self-control, or self-regulation, is an ability required to overcome psychological and physical drives that people need to moderate, and can be defined as the "ability to attain deliberative control over impulses and abstain from gratifying immediate needs and desires" (Hagger, Wood, Stiff, & Chatzisarantis, 2010, p. 495). This ability to self-regulate is what allows people to engage in the disciplined and focused effort required for goal-directed behaviour necessary to produce long term desirable outcomes (Hagger, et al., 2010, p. 495). However, an individual's self-regulatory ability is dependent on 'resources' that are akin to the concepts of energy or willpower and cannot be sustained indefinitely as self-control is "vulnerable to deterioration over time from repeated exertions, resembling a muscle as it gets tired" (Baumeister, Vohs, & Tice, 2007, p. 351). These limited resources required for self-regulation are depleted "by any acts of self-control, causing subsequent performance even on other self-control tasks to become worse" (Baumeister, Vohs, & Tice, 2007, p. 351). Hagger and colleagues find validity in the metaphorical description of these self-regulatory processes as a muscle or energy,

because "just as a muscle requires strength and energy to exert force over a period of time, acts that have high self-control demands also require strength and energy to perform" (2010, p. 496). If self-regulation ability is the measure of strength, then the self-regulation resources are the energy necessary to be consumed in order for strength to be exerted by the self-control 'muscle' (Hagger, et al., 2010, p. 496). Baumeister, Vohs, & Tice describe this experience of depleted self-regulation resources and diminished self-control strength as 'ego depletion' (2007, p. 351).

1.3.2.2 Ego Depletion

Since stress requires an individual to actively respond and regulate themselves during difficult circumstances, coping with stress is an active process and thus places demands on these limited self-regulation resources (Baumeister, Gailliot, DeWall, & Oaten, 2006, p. 1773). It is important to note that stress and stressful life events themselves do not drain self-regulation resources, but rather the individual's reactions and coping with stress (Baumeister, Faber, & Wallace, 1999, p. 50). When self-regulation resources are over-taxed they can eventually become completely exhausted, referred to as ego depletion or "the state of diminished resources following an exertion of self-control (or other tasks that might deplete the same resource)" (Baumeister, Vohs, & Tice, 2007, p. 352). This state of ego depletion means that no resources are available for tasks that require self-regulation, and these resources must be restored before self-regulation can be exerted and normal psychological functioning can continue (Baumeister, Vohs, & Tice, 2007, p. 352).

When the ego is depleted, recovering and restoring self-regulation resources is essential before further self-control efforts (Baumeister, Gailliot, DeWall & Oaten, 2006, p. 1773). Yet, even if a person has exhausted their self-regulation resources, it is still possible to temporarily counteract the effects of ego depletion when the right motivation is in place. But this depletes the ego even more severely and produces 'severe impairments' in subsequent self-regulation and leads ego depletion to extensive levels where one's self-regulation resources become more exhausted (Baumeister, Vohs, & Tice, 2007, p. 354). The depleted ego can eventually become strained or injured; "burnout or other pathological states [may] resemble the incapacities stemming from muscles that have been abused beyond their normal capacity for recovery" (Baumeister, Vohs, & Tice, 2007, p. 353). While it would be unethical to push people to a state of ego depletion for research purposes, Baumeister and colleagues argue that states of ego depletion likely exist in which a person may be entirely unable to practice self-control or self-regulation (Baumeister, Faber, & Wallace, 1999, p. 50).

1.3.2.3 Resolving Ego Depletion

While psychologists find that ego depletion is hard to resolve, several processes have been found to moderate or counteract the effects of ego depletion, such as inducing a state of positive emotion (Baumeister, Vohs, & Tice, 2007, p. 353). However, they warn that none of these strategies completely counteracts ego depletion or replenishes the self-regulation resources, and further research needs to see whether these strategies are not actually expending these resources (Baumeister, Vohs, & Tice, 2007, p. 353). The self-reflective thought process of benefit finding, or the practice of focusing one's attention on

the benefits as opposed to the costs of an adverse situation, can counteract ego depletion and mitigate its painful effects on the individual (Gao, et al., 2014, p. 171). Benefit finding improves 'feelings of strength and vigour' and lessens negative moods while encouraging a greater sense of wellbeing (Gao, et al., 2014, p. 171). Gao and colleagues demonstrated that benefit finding counteracts the negative effects of ego depletion, restores self-regulation resources and improved performance on subsequent tasks requiring self-control (2014, p. 196). This process allows individuals to focus on the positive aspects of both their actions and the outcomes which "may ease the emotional experience of negative outcomes and expand individual's mental capacities, thereby leading to improved performance on activities requiring self-control" (Gao, et al., 2014, p. 197).

Another practice that was found to be effective in counteracting ego depletion is self-reflection and self-affirmation, which refers to the behavioural and cognitive events that improve or bolster a person's perception of their own integrity and the general adaptive and moral adequacy of the self (Schmeichel & Vohs, 2009, p. 770). Schmeichel and Vohs found that one of the most powerful and simple practices that can decrease ego depletion is the reflective "act of expressing one's core values" (2009, p. 700). Self-reflective affirmation bolsters long-term motivations regarding personal constructs of health or self-improvement which is essential in helping people 'achieve' self-control and counteract the negative impacts of ego depletion (Schmeichel & Vohs, 2009, p. 780). However, practicing self-reflection also requires self-regulation resources, which can make it difficult for the ego-depleted individual to "reflect on their behaviour, to re-

examine the decision making process, to draw factual or counterfactual conclusions, and to store appraisal and evaluation information in memory" (Xu, Bègue, & Bushman, 2012, p. 1183). This indicates that self-reflection, and thus counteracting the negative effects of ego depletion, may be problematic for individuals who are experiencing severe ego depletion.

1.3.2.4 Ego Depletion and Moral Processes

Recent research has established that experiencing moral emotions requires the use of self-regulation resources. Since the process of ego depletion affects an individual's ability to cope with stress, understanding how moral processes use self-regulation resources is essential when considering the morally depleted or distressed individual. Similarly, concepts that discuss the 'healing' of the depleted ego and recovery of self-regulation resources required for coping after experiencing the stress of moral processing are useful when considering moral distress.

Negative self-conscious emotions such as regret and guilt require self-regulation and consume self-regulation resources; "moral, self-conscious emotions such as guilt involve controlled, conscious, higher-order cognitive processes, which are energy-taxing" (Xu, Bègue, & Bushman, 2012, p. 1183; Gao, et al., 2014, p. 170). Gao and colleagues find that experiencing regret involves self-regulation "because regret is a psychologically painful experience, individuals are motivated to regulate or suppress regret when it emerges" (2014, p. 170). Since suppressing regret is an active process and requires self-regulation it diminishes self-regulation resources and can cause ego depletion in individuals, leading to subsequent poorer performance on tasks that required self-control

(Gao, et al., 2014, p. 171). Xu, Bègue, and Bushman found that guilt was intrinsically connected to ego depletion and that ego depleted individuals find it more difficult to self-reflect (2012, p. 1183).

Despite the ego being depleted by guilt and regret, research into moral development theory finds that self-reflection after encountering a morally challenging situation can encourage moral growth and development. Lawrence Kohlberg (1981) described moral development as a process of moving through stages of increasing complexity as an individual matures in their understanding of the nature of morality. The actual movement from one stage to another occurs when an individual encounters a moral dilemma, the resolution of which does not fit with the individual's current knowledge structures of their worldview, beliefs, and understanding of morality which govern how we choose to act (collectively defined as moral schemas) (Harding, 1985). This situation plunges the individual into a state of disequilibrium and stress as their current schema has been proven ineffective at 'fitting' or explaining this new encounter with the world and morality, demonstrating that one's understanding of the world and morality are flawed (Harding, 1985).

In order to once again achieve moral equilibrium, the individual must self-reflect or reconsider their current schema and alter it using logical reasoning to fit the new information encountered during the moral dilemma (Dombo, Gray, & Earl, 2013, p. 200). Further, self-reflection consists not only of a cognitive component (logical reasoning), but also involves an emotional aspect in schema reconsideration as learning to regulate one's emotions when self-reflecting on new moral information makes the process of

synthesizing multiple viewpoints easier (Kohlberg, 1981; Rest, 1983; Harding, 1985). Without this emotional maturity, it is much more likely that an individual will ignore or avoid a moral dilemma because they find it emotionally overwhelming, which may circumvent moral reasoning and self-reflection entirely (Harding, 1985).

This process of self-reflection requires significant effort and time to achieve, but eventually will lead to changes in the individual's values, worldview, and moral understanding and can alter their perceptions of moral situations in the future (Dombo, Gray, & Earl, 2013, p. 200). Shapiro, Jazaieri, and Goldin find that self-reflection is the basis by which personal moral growth occurs over the course of one's life (2012, p. 504). Once the new moral information is incorporated into one's moral schemas through logical and emotional reasoning, the person no longer experiences the difficulties of moral disequilibrium (Harding, 1985). However, both external and internal factors affect an individual's ability to effectively achieve moral equilibrium and experience personal moral development.

1.3.2.5 Internal and External Contextual Factors Affecting Resolution
One's ability to resolve morally challenging life events is largely dependent on internal factors that can differ from person to person and external factors that change with the context or environment in which an individual acts. These internal and external factors are complex and interrelated, but research into adaptiveness and mindfulness describe a process of resolution that incorporates these aspects. These areas of research indicate that internal psychological differences between persons as well as the

controllable and uncontrollable factors in the unique, external context in which an individual is acting affects one's ability to resolve stress or distress.

Kohn and colleagues find that managing and resolving distress is significantly dependent on whether or not the context of the stressful life event is controllable (Kohn, O'Brien-Wood, & Pickering, 2003, p. 212). They argue that choosing an appropriate coping strategy based on the controllability of elements in the situation is essential to effective resolution (Kohn, O'Brien-Wood, & Pickering, 2003, p. 212). Coping is defined in psychology as the active processes involved in managing, minimizing, resolving, and mastering the stress and distress associated with personal problems and conflicts (Cummings, Greene, & Karraker, 1991, p. 92). While controllable elements in a situation are best resolved with coping approaches based on direct action and logical reasoning, uncontrollable elements are better addressed with passive coping strategies that are focused on acceptance and meaning-making (Kohn, O'Brien-Wood, & Pickering, 2003, p. 112). Kohn and colleagues argue that an internal personal ability to recognize and utilize the best thought process when addressing a stressful situation requires the trait of 'adaptiveness' (Kohn, O'Brien-Wood, & Pickering, 2003, p. 111). Adaptiveness is made up of three skill sets that determine whether or not an individual can appropriately implement the most appropriate approach to coping by allowing them to effectively assess and act on the controllable and uncontrollable elements of a morally challenging life event (Kohn, O'Brien-Wood, & Pickering, 2003, p. 112). If these three skills that make up adaptiveness are cultivated, an individual is much more likely to successfully cope and resolve stress and distress:

1) Judgement – the ability to "distinguish controllable situations that call for active coping from uncontrollable ones that are better handled passively, and to plan judiciously *what* to do in controllable situations";

2) Determination – a resolve to act despite encountering obstacles in a situation judged controllable;

3) Self-control – the ability to accept a passive response in situations judged uncontrollable despite "emotional arousal or social provocation" (Kohn, O'Brien-Wood, & Pickering, 2003, p. 112).

Individuals with advanced judgement skills are able to examine the context in which they are experiencing stress and ascertain whether or not it is controllable or uncontrollable (Kohn, O'Brien-Wood, & Pickering; 2003, p. 113). If it is controllable, determination gives a person the willpower to attempt a direct and active resolution strategy using logical reasoning, despite encountering potential obstacles (Kohn, O'Brien-Wood, & Pickering, 2003, p. 113). However, if a stressful life event is judged to be largely uncontrollable, the skill of self-control (as defined in this context) helps an individual accept a passive strategy that focuses on altering one's controllable emotions and thus indirect resolution of stress and distress (Kohn, O'Brien-Wood, & Pickering; 2003, p. 113). Kohn argues that by practicing these three skills, an individual will be able to respond more appropriately in coping with and resolving stress or distress.

Research examining the practice of mindfulness also considers internal thought processes and the controllability of the external context when self-reflecting on one's life experiences. Mindfulness refers to the "awareness that arises when an individual

intentionally attends to the present moment in an open and discerning way" (Shapiro, Jazaieri, & Goldin, 2012, p. 504). This is accomplished when one takes the opportunity to "reflect on our own thoughts and experiences and exchange these with others" (Nilsson, 2014, p. 162). Practicing mindfulness increases one's awareness of the 'best' morally correct action to take in a moral dilemma: "Through *intentionally* attending to the present moment in an open (motivation and commitment) and discerning (judgement) way, mindfulness practice helps cultivate all of the factors involved in moral reasoning. It is only through awareness that we have the opportunity for conscious choice" (Shapiro, Jazaieri, & Goldin, 2012, p. 541).

This awareness extends not only to one's internal emotions and cognition, but also to "what is happening in one's environment and in relationship to others" (Shapiro, Jazaieri, & Goldin, 2012, p. 504). A defining feature of mindfulness is the learned skill of observing external and internal phenomena that are affecting a morally challenging life event without trying to escape, avoid or change them (Irving, Dobkin, & Park, 2009, p. 62). Scheik argues that mindfulness bolsters self-control and allows an individual to "deliberately tak[e] charge of one's self and one's choices deciding what to change, what to hold on to, and what to let go" (2011, p. 115). He argues that mindfulness is key to acceptance as it encourages the individual to 'attend to context' or consider the impact of environmental factors on controllability:

> *Too much control, responsibility, or burden tends to overwhelm signaling the need to retreat temporarily into a dependent state. Too much or too little self-control plays out in mindlessness scenarios where the energy of exerting control gets depleted by back-breaking responsibility. Yet mindfully inserting context and perspective into one's perception of*

> *burdensome responsibility propels one to choose self-control again* (Scheik, 2011, p. 116).

Mindfulness theories find that consideration of both internal aspects through self-awareness of emotion and cognition as well as the acceptance of the controllability of elements in the external context is equally important for promoting effective resolution of stress and distress (Scheik, 2011, p. 116).

1.3.3 Application to Military HCPs

Psychology research findings on stress and coping can inform understanding of the military HCP experience with moral distress. This work contributes an understanding of the psychological processes and mechanisms that cause an individual to move from stress to distress to ego depletion, and also outlines potential resolution strategies that can help the individual address and resolve psychological disequilibrium and pain. In addition to individual psychological differences in resolving stress, this research indicates the importance of actively considering the external context and its impact on the controllability is also important to consider for resolution. All of these aspects are helpful for understanding the general psychological processes of military HCPs' experience with moral distress and may indicate potential strategies for resolution.

Furthermore, some research in psychology is specifically applicable to the population of military HCPs and illuminates the challenges of the context in which they work. In normal circumstances, daily stressors and hassles may use some self-regulation resources, but in circumstances of consistent daily stress or major stressful life events, these self-regulation resources can become exhausted quickly and will need to be recovered quickly (Baumeister, Gailliot, DeWall, & Oaten, 2006, p. 1773). However, if

stressors are so prevalent that an individual is not able to recover and recuperate after exertions of self-control, one can easily progress into a state of ego depletion. Since military HCPs are working in a unique context with many contextual 'high-risk demands' on the individual that are inherent in the military profession, including those that are potentially traumatic such as "being exposed to personal danger, having close friends killed, and being involved in killing" (Adler & Castro, 2013, p.43). Adler and Castro find that no one contextual element is 'most toxic' and across many military studies the "sheer number of events" was identified as the important predictor when determining adjustment and coping (2013, p. 43). These stressors and others in the military context indicate a heightened risk of ego depletion for military HCPs.

1.4 Origins of Moral Distress in Philosophy

Finally, philosophical moral theory can also be useful when considering the experience of moral distress for military HCPs. Philosophy can contribute a framework for understanding morality and moral responsibility, which is useful when discussing moral distress as a perceived sense of moral responsibility to some degree is intrinsic when one feels that their desired moral action choice is blocked. A philosophical framework can also assist in theoretically describing individual moral responsibility given considerations of the contextual elements affecting the individual's decision making processes when encountering a morally challenging life event. This section will outline the philosophical framework of Nichomachean virtue ethics and its usefulness for application to the moral distress experience. In virtue ethics, the focus of virtue is the self and is not attached to a particular action or decision making process (Husthouse, 1999, p.

68). Since the focus is on the individual and not tied to prescribed actions in a specific situation, virtue can be examined and considered in a range of diverse contexts in all of their nuance, including the military HCP deployed environment (Hursthouse, 1999, p. 68). Further, as virtue ethics situates individual moral responsibility with regards to intent, this ethical theory is useful when considering barriers to intentional moral action and the resulting moral distress of military HCPs.

The concept of moral responsibility in virtue ethics will be briefly outlined and followed by a more in-depth discussion of the impact of controllable and uncontrollable contextual elements on individual responsibility; Aristotle as well as modern virtue ethicists will be considered, notably Williams and Nagel, Card, Hursthouse, and Tessman. The impact of contextual controllability on the individual moral actor and their personal moral wellbeing will be considered, along with a description of moral suffering. Finally, resolution of moral suffering from a philosophical perspective will be described and application of virtue ethics to the military HCP population discussed.

1.4.1 Aristotle's Virtue Ethics

Nichomachean ethics or Virtue ethics was originally conceptualized by Aristotle who believed that moral goodness is based fundamentally on the virtue of an individual's character, rather than the goodness of motivations as in Kantian ethics, or the consequences of their actions as in Utilitarian schools of thought (Gottlieb, 2009, p. 5). In virtue ethics, virtue and virtuous action is a mean or middle ground between two vices; for example, the virtue of courage lies between the two extremes of fear and over-confidence (Gottlieb, 2009, p. 32). This mean is determined by practical wisdom, the

ongoing self-reflective attitude of ethical inquiry through rational activity, and allows individuals to practically consider their moral responsibility and apply their ethical values and character when confronted with a morally challenging situation (Broadie, 1991, p. 5). The practical application of ethics through logical reasoning (practical wisdom) mediated by a virtuous character allows an individual to live a supremely 'good life' that involves both happiness and human good, termed 'eudaemonia' (Broadie, 1994, p. 5).

In addition to the active contemplation of practical wisdom and cultivation of a virtuous character, Aristotle finds that eudaemonia also "presupposes good fortune (faring well)", indicating certain factors outside of an individual's control also determine a person's ability to experience eudaemonia (Curzer, 2012, p. 403): "Yet evidently, [happiness] needs the external goods as well; for it is impossible, or not easy, to do noble acts without the proper equipment... there are some things the lack of which takes the luster from blessedness, as good birth, satisfactory children, beauty" (Curzer, 2012, p. 417). While these 'moderate' aspects of good fortune are required for happiness, Aristotle argues that "small pieces of good fortune or of its opposite clearly do not weigh down the scales of life one way or the other" since a virtuous person will consider their moral responsibilities and act as best they can despite the situation, which allows them to retain their integrity and moral praiseworthiness (Curzer, 2012, p. 419; Broadie, 1991, p. 132). However, Aristotle admits that even with logical reasoning and a virtuous character "[happiness] seems to require this sort of fortunate climate in addition" (Statman, 1993, p. 93). In the end, Aristotle concedes that extreme bad luck could potentially prevent

eudaemonia, but argues that with good character and practical wisdom one would be able to resist this damage (Statman, 1993, p. 94).

1.4.2 Moral Luck: Controllability, Responsibility, and Context

This section will discuss contemporary philosophers' perspectives on the concept of luck and moral responsibility as it relates to virtue ethics. It will outline the philosophical understanding of the impact of controllable and uncontrollable contextual elements when pursuing moral action by examining luck, moral luck, and systemic bad moral luck. The concept of 'luck' implies that contextual factors can impact which aspects of a situation are controllable. This concept is essential when considering moral distress which involves a perceived responsibility to act in a certain way, but where an individual is blocked from doing so by a contextual barrier. In a given moral dilemma, one's MAC may remain consistent but whether or not an individual is able to act on their MAC can be determined by how the 'luck' of the context affects the controllability of the situation and an individual's ability to make autonomous choices. As such, examining the concept of luck is essential to understanding the impact of context in both phases of the moral distress experience as described in Bradshaw and colleagues' model.

1.4.2.1 Moral Luck and Context

Contemporary philosophers have expanded Aristotle's discussion of luck when facing morally challenging life events to describe a broader and more systemic understanding of the impact of contextual controllability when choosing a best course of action. Nagel and Williams developed the description of moral luck to take into account a much broader scope of uncontrollable contextual factors for which individual's should

not be held responsible because "the 'luck' of agents relates to those elements which are essential to the outcome but lie outside their control" (1976, p. 126). They argue that many areas of a person's life are susceptible to moral luck, specifically the circumstances in which an agent is acting, as the context often determines the problems and challenging situations they will face (Nagel & Williams, 1976, p. 145). If a person cannot be held responsible for uncontrollable circumstances, then they also should not be held responsible for their intentional actions that produce results outside of their control (Nagel & Williams, 1976, p. 146).

Card finds that moral luck can effect certain groups of people in specific situations or contexts in a consistent way, which she argues tends to create moral luck that is 'bad' for some individuals or groups (Card, 1996, p. 22). Certain "hostile environments" can influence an agent's autonomy, or their ability to control their own decisions and action choices in a morally challenging situation, as these contexts can give rise to social structures and institutions that oppress certain groups and increase their likelihood of experiencing bad moral luck (Card, 1996, p. 30, 47). This power disadvantage takes many complex forms and leads to consistently bad moral luck for the oppressed (Card, 1996, p. 6). Bad moral luck indicates that individuals may have unequal chances to act virtuously which creates for the oppressed "an absence of justice in who we are and what we can do." (Card, 1996, p. 6, 22). As such, it is necessary to consider the contextual factors that are uncontrollable due to bad moral luck since it directly impacts an individual's moral responsibility in a situation (1996, p. 30).

Tessman, a feminist ethicist who draws heavily on virtue ethics, furthers Card's discussion and argues for the concept of systemic bad moral luck. She finds that in contexts of oppression, it is possible to point to a systemic cause of consistently bad moral luck that is not 'natural, accidental, or idiosyncratic', such as the system of capitalism being a source of someone suffering from poverty (Tessman, 2005, p. 13). Systemic bad moral luck and oppressive circumstances can create tragic moral dilemmas that limit an agent's control and ability to act as best they can: "It creates circumstances external to the oppressed agent (whether that agent be virtuous or not) that limit options so that every way one turns one runs into barriers that make it difficult or impossible to gain or be granted freedom, material resources, political power, and respect of personhood – all of which are needed to live well" (Tessman, 2005, p. 26).

For many people striving to be moral agents in oppressed environments, systemic luck means that they are more likely to experience bad moral luck and uncontrollable contextual elements that block their attempt to act as best as possible, regardless of their moral character or use of practical wisdom (Tessman, 2005, p. 13). Tessman argues that systemic bad moral luck must be considered when evaluating moral responsibility in a given situation.

1.4.3 The Impact of Moral Luck

Aristotle argued that while certain uncontrollable events can "crush and maim blessedness", a virtuous person will not be 'miserable' nor their life 'marred' even when encountering very bad luck (Curzer, 2012, p. 419). However, contemporary philosophers note that it can be difficult if not impossible for an agent to experience eudaemonia when

encountering bad moral luck. Nagel and Williams describe the impact of experiencing bad moral luck on an individual as 'agent-regret' or feeling that something could be "much better if it had been otherwise" and recognize that it is experienced by individuals who do not voluntarily commit a regrettable action (1976, p. 123). Agent-regret acknowledges that even without complete control, the agent feels a sense of responsibility for the outcomes and consequences of their actions (Nagel & Williams, 1976, p. 128).

Hursthouse argues that bad moral luck leads to situations that damage a person and prevent them from flourishing as it creates 'irresolvable' moral situations where there are no good options available to the individual, and they are unable to act in a way that they believe to be best (Husthouse, 1999, p. 77). She describes this type of tragic dilemma as "damned" as the process of deciding on an action choice is painful when the 'right' answer cannot be found, despite an individual being "passionately concerned to find a determinate answer to the question" (Hursthouse, 1999, p. 77; 66). Despite these individuals being virtuous, they can experience suffering characterized by sorrow, a feeling of being haunted, and a lack of peace within oneself that may be so profound as to potentially ruin a person's life (Hursthouse, 1999, p. 75).

Card and Tessman agree with Hursthouse and argue that individuals who are oppressed or struggling to act in oppressed contexts are likely to experience 'moral damage' and may be prevented from experiencing eudaemonia. Individuals who suffer moral damage experience feelings of a self "whose inclinations are at war with deeply held convictions" and experience intense internal conflict that can be described as a lack of integration of the self, leading to an intensely painful mental state (Card, 1996, p. 41-

42). Tessman terms this 'psychic pain' where one feels regret and sorrow when reflecting on the damage that was inflicted on oneself and others, which can mar one's life and prevent flourishing and eudaemonia (2005, p. 29).

1.4.3.1 Resolution of Moral Suffering

Card asks "how is it possible for us damaged agents to liberate ourselves from the damage?" and finds that the only way to address moral damage caused by systemic bad moral luck is to focus on character, as suggested by Aristotle (1996, p. 41). Tessman agrees and acknowledges that while it may be impossible to completely overcome moral damage, individuals need to learn "how one takes responsibility for a self whose constitution is not fully in one's control and which one cannot necessarily 'repair'" (Tessman, 2005, p. 20). Tessman describes a specific self-reflective disposition that deliberates on systemic bad moral luck when considering the extent of one's responsibility in a tragic moral dilemma:

> *There is one other disposition that seems to capture a quality that one must have in order to navigate the complexities of taking responsibility under conditions of systemic bad moral luck. It can be described as a willingness to engage in a self-reflective understanding (and perhaps acceptance) of the limitations on the moral health of a self under oppression, including the resistant self. This disposition helps one not to assign too much responsibility (to oneself or others) when it is not deserved. It helps one to say, 'This is the best I (or she, or he) can do under the circumstances of bad luck'. That is, it allows for a recognition that there are many equally acceptable answers to the questions of how one ought to live, a question that will have no one right answer as long as it is applied not to some imagined ideal circumstances, but to the circumstances one finds oneself in, for when faced with no good choice, different virtuous agents may well act differently (Tessman, 2005, p. 31).*

Tessman argues that taking responsibility is essential even when considering moral luck, but that it is equally essential to 'stand behind' the imperfect character and choices of

oneself and others; she argues that one must value these imperfections as 'virtues under oppression' (2005, p. 31).

1.4.4 Application to Military HCPs

Virtue ethics is well suited to discussions of moral distress as Aristotle defines the purpose of moral theory as holding practical advantage in the real world (Broadie, 1991, p. 5). Virtue ethics directs attention to the character and motivation of the individual self when considering moral responsibility, whereas other normative ethical theories tend to focus on duty and prescribe action. As such, this ethical system allows for limitations on the self due to contextual elements, to be discussed when considering moral responsibility. This is helpful when applied to the case of military HCPs who are often acting in a context with many uncontrollable elements. When encountering a barrier that limits or blocks one's moral action choice, virtue ethics argues that the application of logical reasoning (practical wisdom) mediated by one's virtuous character along with consideration of the controllable and uncontrollable elements in the context, are essential for determining a military HCP's moral responsibility. However, due to working in the difficult and often hostile deployed context, military HCPs may be more likely to experience uncontrollable immediate and systemic factors, leading to bad moral luck and a higher likelihood of experiencing barriers to one's MAC. As such, virtue ethics provides a useful framework for understanding military HCPs and their moral responsibilities while considering the impact of the immediate and extended context in which they are striving to act virtuously.

Contemporary virtue ethics can also assist in understanding the impact of experiencing moral distress on the individual military HCP as well as indicating a theoretical resolution process. When a military HCP's MAC is blocked, the philosophical literature indicates that one can become morally damaged and experience psychological pain that can lead to internal turmoil and a life that is marred so that eudaemonia is not possible. This implies that military HCP may be prevented from flourishing if experiencing bad moral luck. However, Tessman finds that it is possible to resolve moral damage if people, e.g., military HCPs, are able to self-reflect and consider their perhaps imperfect MAC within the immediate and extended oppressive context in which they act. In so doing, they may be able to accept that virtue can be expressed differently for different people in less than ideal circumstances.

1.5 Summary of Literature Review

Literature specifically examining HCPs working in the military indicates that the phenomena of both moral distress and moral injury are experienced by this group. Though moral injury implies a perhaps more immediate and intense experience, these two concepts are comparable as both discuss barriers to one's implicit or explicit responsibility to act, followed by personal psychological and moral disequilibrium that requires resolution. Bradshaw and colleagues' model of moral distress uses a two phase approach to describe military HCPs' complete experience of facing a moral dilemma and deciding on a MAC, encountering a barrier to one's MAC and the resulting moral distress, the internal and external consequences, and the resolution process.

A variety of disciplines of study can contribute to our further understanding of the moral distress experienced by military HCPs, despite not investigating this population specifically. The large body of research examining moral distress in civilian HCPs can contribute to the understanding of the moral challenges and consequences specifically involved in providing health care as well as the cumulative and progressive nature of unresolved moral distress. Furthermore, the stress literature in psychology discusses the progression of stress to distress through the mechanism of ego depletion and its resolution, which is connected to moral processes and thus may inform further consideration of the conceptualization of moral distress. Finally, virtue ethics in philosophy can assist in furthering our understanding of the impact of context on perceived responsibility in the moral distress experience given varying controllability due to moral luck. The findings of the literature review will be used in the discussion (Chapter 4) to support potential refinements and revisions suggested by the results of the analysis of EMMRG narratives.

Chapter 2 – Methodology and methods

This section presents the methods and approach used in this thesis to analyse the stories of EMMRG participants through the lens of Bradshaw and colleagues' model of moral distress. First, a general overview of the research group associated with this project is presented, followed by a discussion of the data collection process including participant recruitment and a description of the interviews. Next, the research question will be described and the two step analytic strategy of the thesis outlined. The first step of the analysis involved coding of EMMRG participant interviews and conducting a combined inductive and deductive approach to analysis (Miles & Huberman, 1994). The second step involved analysing EMMRG participant experiences through the lens of Bradshaw and colleagues' model using deductive coding and decision modeling and finally outlining emerging themes that challenged aspects of the model.

2.1 Background and Data Collection

The research in this thesis is based on the data collected in a CIHR funded study conducted by the Ethics in Military Medicine Research Group (EMMRG) examining the ethical challenges of military health care professionals. The research question addressed by this study is: "what are the ethical tensions experienced by Canadian HCPs in peacekeeping or disaster response missions, both with regards to their role with patients and their role within the mission, and how are these tensions addressed?" (www.emmrg.ca; Williams-Jones, de Laa, Rochon, Okhowat, Schwartz, & Horning, 2015). This study follows on research by Schwartz, Hunt et al that examined ethical challenges experienced by HCPs working in the context of humanitarian assistance and

development work (Williams-Jones, et al. 2015; Schwartz, et al., 2010). This thesis examines the EMMRG interview data and argues that moral distress is experienced in distinctive ways in the military HCP population, and strives to represent this process by analysing EMMRG participant interviews and applying the research findings from the different disciplines outlined in the literature review.

The thesis is based on the qualitative analysis of 27 of a total of 50 interviews from non-civilian HCP in the Canadian Armed Forces (CAF). While the initial sample was of physicians – presented in the PhD thesis of Christiane Rochon (Rochon, 2015) – the project was expanded to other military HCP, including nurses, physicians assistants, medical technicians, and physiotherapists. A purposive sampling approach was used to identify potential participants from all types of roles in the health professions, with a variety of experiences, and who had spent at least 6 months in the last 5 years (2005-2010) working on medical missions in an international context with the CAF. Participants were recruited between 2010 and 2012 over the course of 18 months. Recruitment occurred in three stages:

1) Invitations were mailed in English and French to # of units and 350 physicians and nurses were given individual invitations to participate along with a letter of support from the Deputy Surgeon General

2) Snowball recruitment as early participants shared recruitment materials with other Units led to further contacts

3) Participants were also able to contact the research team through the www.emmrg.ca website as well as through advisory board members (Dr. L Redwood-Campbell, Ms N Weizmann, Dr. A Irwin, and Dr. A McCarthy)

Communicating by email/written invitation allowed participants to reflect on whether or not they would like to give their informed consent to participate in the project. The email invitation was followed up and a meeting was arranged to conduct the interview. Participants were selected with the aim of capturing the experiences of as wide a variety of military HCPs as possible (Nilsson, et al., 2011, p. 51).

Interviews were approximately 1½ hours and conducted by one of two researchers over Skype or phone. Conversations were recorded, with consent of participants, to ensure accuracy of data. A prepared interview guide allowed for a semi-structured interview process. The open-ended questions were paired with individually adapted follow-up questions which encouraged participants to explore their experiences in depth. Interviewers sought to avoid imposing their own understandings of HCPs' ethical dilemmas and instead encouraged participants to elaborate on their experiences and allow them to outline their personal perspective on their experiences with ethical dilemmas. This method allowed participants to explore their perceptions and personal meaning of the experience within their context as well as offering greater ownership of their stories as they can include any information that they believe is necessary to understand their experience as a whole (McCormack, Joseph, & Hagger, 2009, p. 111). As opposed to a structured and more rigid questionnaire, the interview guide was created with the intent of

prompting participants to discuss different and dynamic aspects of their personal experiences.

2.1.1 Analysis – Summary

When Bradshaw and colleagues' model was shared with myself and the EMMRG team, it had not yet been fully tested. The research question for this thesis was developed after looking at the model at a surface level and asking how it could be extended to the narratives EMMRG had collected. As such, the research question for this project was: *Can the EMMRG narratives be used to validate and refine Bradshaw and colleagues' model while conversely helping to inform new insights about the EMMRG data?* A sub-question also implicitly exists in this research question as Bradshaw and colleagues' model was based on data from military nurses: *Does the model also extend to other health care professions?*

The goal of this thesis is to better understand moral distress of military HCPs by using Bradshaw and colleagues' model as a lens to analyse the EMMRG participant stories while simultaneously critically reflecting on the model; this required that several stages of analysis have been conducted. First, 'moral distress' was understood to mean the "painful feelings and/or psychological disequilibrium" that occurs when an individual must choose between equally treasured moral values or is aware of a morally appropriate action in a moral dilemma[2] but cannot carry out this action due to obstacles or barriers (Nilsson et al., 2011, p. 50). Second, the interviews were coded using an inductive approach and descriptive qualitative analysis to develop themes relevant to the

---

[2] This thesis uses the term 'moral' and 'ethical' interchangeably.

phenomenon of moral distress in military HCP. The type of 'low-inference' interpretation in descriptive qualitative analysis captures the individual's meaning regarding their personal experiences with the phenomenon of moral distress (Sandelowski, 2000, p. 336). This approach requires that the researcher interpret the language used by participants as a 'vehicle of communication' to convey the facts of military HCPs' experiences with moral distress and the meaning that they associate to these facts (Sandelowski, 2000, p. 336). As such, the focus of the research is to accurately describe the meaning and experiences of participants and does not strive to understand language as an interpretive structure to be investigated in-depth (Sandelowski, 2000, p. 336).

2.1.1.1 Analytic Strategy – Interview Coding

Interviews were conducted, transcribed from audio recording to text, and coded concurrently. Transcribed text was formatted and any personal or identifying information removed to preserve confidentiality (e.g., names of participants and team members, or mission details that could identify interviewees). The transcribed interview text was then uploaded to the software program NVivo 10 and coded by four members of the EMMRG research team (McCormack, Joseph, Hagger, 2009, p. 111). The approach by Miles and Huberman was used which combines both deductive and inductive analysis to offer a rigorous comparative analysis of codes (1994). Before analysis began, an initial coding hierarchy was created based on the interview question guide to be used as a starting point for creating new codes; however, new thematic elements that emerge from the stories during the coding process were incorporated into the coding hierarchy. This combined deductive and inductive approach allowed for development of an understanding of a

phenomenon based on a progressive coding strategy whereby a prior conceptualization of a framework is tested and then refined as more sophisticated understandings are developed through inductive analysis.

In NVivo 10, nodes were created that allowed researchers to tag data based on the elements of the interview guide as well as those that emerged in the interviews. This guide was discussed among members of the research team and common definitions were created for each major node category created in the initial code book, which allowed for a common understanding and preserved the integrity of future coding. From here, multiple team members read through the interview transcripts line by line and added new node categories and sub-categories as new elements emerged from the interviews. These nodes and sub-nodes were then compared to different participant data to determine hierarchical affiliation (Nilsson et al., 2011, p. 53). This process was completed while making constant comparisons between the transcripts, codes, and nodes.

Due to technical difficulties and the strategy of having multiple team members work on coding the interviews, the NVivo file 'forked' and multiple versions of the analysis document were created. This resulted in inconsistent node hierarchies as different researchers found different trends from the data. As such, it was necessary, after approximately half of the interviews were coded, for these documents to be merged back into one single file. The team then met at length and discussed each node in the hierarchy and re-worked the definitions and structure to combine their individual findings into one consensus-based uniform hierarchy. From this point on, the last half of the interviews were analyzed and coded based on the new node hierarchy. In order to preserve a self-

critical, but efficient eye on the work, any further questions regarding node definition or placing was discussed over email or in meetings and decisions were derived from group consensus.

2.1.1.2 Analysis – Bradshaw and Colleagues' Model of Moral Distress
While the EMMRG hierarchy was being coded and created, separate NVivo codes were created that specifically related to moral distress and how it is experienced by HCPs. Afterwards, a secondary set of deductive codes were created that outlined Bradshaw and colleagues' model and its associated steps as well as the other general findings. Bradshaw and colleagues' model was used primarily to better understand the experience of moral distress in the population of military HCPs. Their work was selected as the model for analysis as it is the most recent and fully developed model that examined the military HCP nurse experience; in addition, it incorporates findings from the discipline of psychology including aspects of stress models (Bradshaw, et al., 2010). Also, Bradshaw and colleagues' model included a conceptualization of the resolution process directly into the model while previous models did not include this feature of the moral distress experience.

The strengths and potential limitations of Bradshaw and colleagues' model were considered by analysing EMMRG participants' narratives and codes. EMMRG interviews were coded deductively based on each step of the model and descriptively analysed so as to understand participants' experiences through the lens of Bradshaw and colleagues' model. Participants' descriptions of their experiences were analysed and mapped using decision modeling to determine how they aligned with the described steps of Bradshaw

and colleagues' model; from the initial encounter with the morally challenging life event to the short and long term consequences, including attempts at resolution and impacts on future decision-making. EMMRG participant experiences that were both similar and divergent from the described steps of Bradshaw and colleagues' model were coded.

Next, the emerging themes evident through the analysis that challenged aspects or broader conceptualizations of steps in Bradshaw and colleagues' model were outlined. Differences were captured between EMMRG participants' described experiences and the process outlined by the model. Through the analysis process, pattern codes were identified that indicated thematic differences in EMMRG participant experiences that challenged either specific aspects or conceptualizations of steps used in Bradshaw and colleagues' model (Miles & Huberman, 1994, p. 69). These pattern codes were tested against EMMRG participant stories as data collection progressed and memoing was used extensively to track revisions and emerging themes that challenged the model (Miles & Huberman, 2994, p 70). Themes that were divergent from the model's steps that emerged from EMMRG participant narratives were then synthesized using clustering and the generated meaning for Bradshaw and colleagues' model outlined in the discussion section.

2.1.1.3 Discussion – Suggested Refinements for Bradshaw and Colleague's Model
The Chapter 4 discussion section will outline the broader implications, and meanings of these themes will be applied to Bradshaw and colleagues' model. In the discussion section, the results of the analysis are examined in relation to the findings of the Chapter 1 literature review. The literature reviewed was interdisciplinary, spanning

many sub-fields within the disciplines of psychology and philosophy as well as examining the specific moral distress literature pertaining to civilian and military HCPs. Due to the broad complexity of the experience of moral distress, it is necessary to maintain a diverse literature set when discussing the resulting challenges to Bradshaw and colleagues' model. This multidisciplinary perspective was called for and used by Bradshaw and colleagues as well as other experts in the field of moral distress (2010; Lutzen & Kvist, 2012). By combining the coding and analysis of the EMMRG interviews with the application of a diverse literature review, a thorough examination of Bradshaw and colleagues' model and analysis of the experience of moral distress in military HCPs in the deployed context was possible.

2.2 Ethical Concerns

The nature of the EMMRG research involved an acute awareness of the need for sensitivity to the participants involved in the study and their personal stories and experiences with ethical challenges. Due to the sensitive nature of this research and the inter-institutional collaboration, EMMRG sought research ethics board (REB) approval from the University of Montreal (PI: B. Williams-Jones), McMaster University (Co-PI: L. Schwartz), the Department of National Defence/CAF. As discussing ethical challenges may have raised difficult memories for participants to manage, resources were provided for counselling if desired. To address privacy and confidentiality concerns, all transcribed data was de-identified and personal information was removed before being shared with the research group.

I became involved in EMMRG and this study during the analysis stage. Since my research did not require any contact with participants, no additional REB approvals were required for my part of the project. I signed a confidentiality form before starting my involvement with EMMRG and was briefed on privacy and confidentiality concerns by Dr. Lisa Schwartz; I had no access to raw data and only had access to de-identified data throughout analysis.

2.3 Limitations

There are three potential limiting factors of this thesis: (1) a potential bias when selecting participants; (2) participants were not asked directly about the concept or experience of 'moral distress'; (3) a need for further incorporation of expert knowledge from the field of psychology.

Military HCPs for the EMMRG study were recruited by describing that potential participants would have had experience with 'ethical dilemmas', however this may have led to more individuals who had experienced an ethical dilemma negatively to participate. If an ethical dilemma was previously resolved successfully and positively by an individual it may be less salient for an individual to identify themselves as a potential participant. In contrast, if an ethical dilemma went unresolved and a person experienced it negatively, the HCP may be more readily be able to identify themselves with the study criteria and perhaps even motivated to participate as a means of attempting to address and resolve it. This type of selection bias is difficult to overcome, but future research

describing the prevalence of these experience in the military HCP population would help to contextualize the findings of this thesis.

Secondly, participants in the EMMRG study were not directly asked about the concept or experience of moral distress in the individual interview process. The EMMRG interview questions were created before my involvement with the project and could not be tailored to fit this specific thesis. While participants were asked about their experiences with ethical dilemmas, the specific terminology of 'moral distress' was not explained or used in the interview guide. However, since moral distress by definition is the experience and consequences of encountering a barrier to one's desired MAC in an ethical dilemma, it is possible to identify potential moral distress without directly referring to the concept. The experiences of participants who described encountering a barrier to their MAC were included in the analysis. Further research that directly and specifically asks participants about moral distress is recommended as a next step to test the findings of this thesis.

Finally, while this thesis utilized research from the discipline of psychology, further incorporation of expert knowledge is essential to solidifying the findings. The suggested refinements for Bradshaw and colleagues' model discussed the psychology concepts of ego depletion as a mechanism for moral distress progression as well as adaptiveness and moral development theory when proposing an alternate framework for the resolution process. While these concepts in psychology were thoroughly investigated in the literature review, more direct inclusion of expert knowledge and research in psychology is suggested when examining models of moral distress in the future.

Chapter 3 –Results

In this chapter, Bradshaw and colleagues' model of the moral distress experience will be compared to the experiences of EMMRG participants, military health care professionals (military HCPs), in the deployed environment. The model will be analysed step-by-step with EMMRG participant's stories offering data that either supports or challenges the elements of Bradshaw and colleagues' model (1.1.3). The model consists of two phases. The Moral Deliberation includes the military HCP recognizing a situation as involving a moral dilemma, considering perceptions as well as internal and external influencers and then choosing a moral action choice (MAC), and experiencing an internal or external barrier that causes moral distress. Next, the military HCP experiences the Moral Impact Phase which involves both a personal moral impact on the individual and additional moral impacts on the immediate and extended military context. The individual military HCP then attempts to resolve the moral distress by situational resolution and self-reflection that can be complete/incomplete or a positive/negative experience. This resolution experience in turn affects the individual HCP's perceptions of the external military context (the team, chain-of-command, and larger organization) while simultaneously influencing their perspectives of future moral dilemmas. As described in Chapter 2 (2.1.1), quotes from EMMRG participants will be used to illustrate the analysis of the strengths and challenges to Bradshaw and colleagues' model of moral distress.

3.1 EMMRG Participant's Experiences and Bradshaw and Colleagues' Model

The model designed by Bradshaw and colleagues' included novel insights that helped to better understand the EMMRG participant experiences with moral dilemmas

and moral distress. By incorporating the impact of the military context and aspects of stress models from psychology, Bradshaw and colleagues' model helped discern the full extent and impact of EMMRG participants' moral distress experiences. While previous models did not incorporate the military context as a factor influencing the moral distress experience, they argue that the unique deployed environment affects all aspects of the moral distress experience – from recognition of a moral dilemma to the resolution of moral distress (Bradshaw, et al., 2010). This was useful when considering EMMRG participant stories which tended to emphasize and entrench the contextual elements of a challenging moral situation in their depiction of their encounters. EMMRG participants often situated their description of their experiences with moral dilemmas within the contextual elements that influenced the situation and emphasized the importance of these factors when explaining their decision-making process and the impact of a blocked MAC. Furthermore, Bradshaw and colleagues' inclusion of 'additional moral impacts' expands considerations of the impact of moral distress to the extended military context as well as the individual HCP. This helped better understand EMMRG participants' complex experiences as not only effecting themselves, but also the larger military team, chain-of-command, and organization as well as their perceptions of these external contextual factors.

A second novel feature in Bradshaw and colleagues' model is the inclusion the aspects of distress resolution and a feedback loop as outlined in the stress models described in the psychology literature. They describe situational resolution that can be either completely or incompletely resolved and self-reflection that can be positively or

negatively experienced, a conceptualization that allows for a better understanding of the complex impact of moral distress. This is useful when considering EMMRG participant encounters with moral distress as it provides a framework for considering the subtle complexities of their experience as well as explaining why moral distress may continue to have a negative impact on some individual military HCPs and not others. Further, Bradshaw and colleagues' incorporation of a feedback loop from stress research assists when reflecting on the extended impact of moral distress as influencing perceptions of future moral dilemmas as well as the environment and context in which the military HCP is acting. This concept is useful when discussing EMMRG participant experiences with multiple blocked moral dilemmas and considering the cumulative impact of encountering recurring barriers to their MAC. The feedback loop allows for moral distress to be understood as influencing the ongoing narrative and experiences with moral dilemmas and the military environment throughout a HCP's career. Stories shared by EMMRG participants describing the impact of their experiences even long after the initial moral dilemma can be interpreted as relevant and even essential to the moral distress experience if the individual sees them as related.

The model designed by Bradshaw and colleagues' assisted in discovering and discerning features of the moral distress experiences of EMMRG participants. While the model was helpful for understanding these experiences, analysis of EMMRG participant experiences did not always align with all the steps and components of Bradshaw and colleagues' model. EMMRG participant stories indicated support as their experiences were reflective of many aspects of the model. However, elements of EMMRG participant

narratives reflected challenges to some features of the model as less representative of their encounters with moral distress. The following sections will outline these supports and challenges discerned from the EMMRG participant stories for each step of Bradshaw and colleagues' model.

3.2 Moral Deliberation Phase

The EMMRG data both supported and challenged the elements of the Moral Deliberation Phase. Participant stories reflect many aspects of the processes outlined in Bradshaw and colleagues' model including recognizing a moral dilemma, considering both the internal/external contextual factors when deciding how to act, and encountering potential external and internal barriers to this action. Aspects of the narratives also offered challenges to Bradshaw and colleagues' model including the 'blocked but satisfied' outcome of acting on a Moral Action Choice (MAC) and the motivation for self-imposed barriers. This section will outline the Moral Deliberation phase and will describe how EMMRG participant experiences supported or challenged each step described in the model.

3.2.1 Recognizing the Moral Dilemma and Deciding on a Moral Action Choice

Bradshaw and colleagues' first step in the moral distress process is the recognition of the situation as a moral dilemma which was overtly recognized and expressed by EMMRG participants regarding many of their experiences. EMMRG participants often described the challenging situations they faced as involving a 'moral' or 'ethical' component:

> *"Ethically is it the right thing to actually give this person life saving medical care or is actually the right ethical thing to do is not give this person care at all"* *– EMMRG-03*

> *"So there's you know ethical issues right from the start" – EMMRG-14*

After recognizing the moral component, EMMRG data supports Bradshaw and colleagues' argument that internal and external factors are taken into consideration when deciding upon a moral action choice. EMMRG participants discussed personal moral values as well as other internal factors consistent with Bradshaw and colleagues' description of perceptions as well as internal and external influencers:

> *"I think it's a blend of everything right, it's a blend of how you are raised, it's a blend of how you work, of your society. I think it's just, honestly from the, the profession I am in, both military has ethics and the nursing world has ethics and values. {emotional} But mostly, it's just treat others how you want to be treated."* *– EMMRG-02*

> *"I rely on my ethics and values… as a member of the Canadian forces. I rely on my training, my ethics and values as… a human being. Ah, as an Anglican, as a religious person, all these factors come into play" –* EMMRG-27

EMMRG military HCPs identify many influential internal factors when determining their MAC through individual decision making process. They include a variety of sources of influence on their MAC such as their familial, societal, and religious values in addition to beliefs regarding ethical professional actions and human rights. This provides evidence to support Bradshaw and colleagues' argument that military HCPs consider internal factors when considering a MAC.

In addition, EMMRG participants specifically describe taking into account the impact of the unique environment of the deployed setting when deciding upon their MAC. Participants outline their consideration of the military deployed environment in

their decision making processes by taking into account the impact of immediate and

extended external contextual influences such as institutional policies and procedures,

organizational policies, hierarchical management systems, and the nurse-physician

relationship, which have been widely recognized as important factors in moral decision

making for years in the nursing literature (Davis, Schrader, & Belcheir, 2012, p. 739).

Another primary external influence that affects military HCPs' MAC is the realities of a

deployed context of war that is often uncontrollable.

> *"I remember for severe closed-head injuries where we felt this was not compatible with life… basically we lied sometimes and said this is unsurvivable injuries basically and we're not going to do anything. So you just draw the curtain and wait for those cases to uh pass out basically, to decease… We knew damn well that in North America this would be, you know it would be a severe neurological injury, but you know it was compatible with life. But over there it was just something, like it would probably be better to let this individual die from his injuries than save him and have him starve to death you know, in a month from now"* – EMMRG-14

These quotes support Bradshaw and colleagues' arguments that external factors

impact the MAC decision making process. EMMRG-14, a physician, depicts his

understanding of the importance of context when deliberating on a MAC regarding the

treatment of a local combatant. This participant outlines how a survivable injury in a

civilian environment in North America may be 'unsurvivable' when for civilian casualties

in a deployed context. EMMRG-14 depicts understanding the realistic consequences of

providing healthcare in a context of war and demonstrates consideration of the

uncontrollable elements in the extended context, including resource constriction. This

physician describes considering these uncontrollable elements and influences when

considering his MAC and implies that in a resource rich setting like North America he

would have more control and so his MAC might have been different. In the North American context, the MAC would have been to continue treatment, but in this situation the decision was to withdraw care due to recognition of a lack of control over access to treatment options due to the context of war. This description indicates an awareness of uncontrollable contextual elements at play in the deployed environment and considers their influence and impact when deciding upon an MAC.

As such, EMMRG participant experiences supported Bradshaw and colleagues' steps of recognizing a moral dilemma as well as the consideration of perceptions, internal factors, and external factors when deciding upon an MAC.

3.2.2. Enacting a MAC and Encountering Barriers
Once a MAC is selected, the participant strives to act upon it. Bradshaw and colleagues' study argues that four possible outcomes could result from acting on a MAC:

1. The MAC was not blocked, and implemented fully

2. The MAC was blocked by outside factors (external barrier)

3. The MAC was blocked by the military HCP alone (self-imposed barrier/internal barrier)

4. The MAC was blocked, but the nurse was still satisfied with the outcome

EMMRG participant stories reflect support for Bradshaw and colleagues' first outcome: when a MAC is implemented fully and not blocked, participants did not describe experiencing moral distress. Furthermore, the stories of EMMRG participants describe the second and third outcomes of external barriers and self-imposed or internal barriers, but challenged Bradshaw and colleagues' arguments for the underlying motivations.

Stories of EMMRG participants also challenged the fourth outcome of a scenario where a MAC is blocked, but the military HCP remains satisfied.

3.2.2.1 External Barriers

The EMMRG study data corroborates Bradshaw and colleagues' argument that external barriers were most frequently encountered and most often lead to moral distress. External barriers are usually what is referred to in the typical construct of a barrier to a MAC; a situation where the MAC chosen by the military HCP is beyond their ability to act due to a barrier in their environment that leaves them powerless to follow their MAC. It is important to distinguish between 'external barriers' which prevent a military HCP from acting on their MAC once it has been decided and 'external factors' (1.1.3), which describes the impact of the context when deciding upon a MAC. Many participants in this study substantiated Bradshaw and colleagues' findings that external barriers exist in the deployment environment that block a military HCP's MAC:

> *"We were trying to build up the capability [of the Afghan National Army Hospital]… and they had a lot of supplies, the medications, the technology, but not the training to use it and they were even missing some of the basics. So to send people there you know their outcome isn't as good as it would be if we would have them. At the same time, you know, we are not a big holding facility, we have to move our patients out fairly quickly because if our hospital is full operations stop because we have nowhere to put them."* – EMMRG-05

> *"A woman is injured… her son was an interpreter working for the Americans, so he came up and was asking for a medic… and he wouldn't let me [a male medic] touch her, and I kept looking at her and saying your mother might be going to die if I don't.... And he even said it's better she die than I touch her"* – EMMRG-25

These quotes demonstrate how external factors including organizational policies, resource limitations, and cultural struggles can erect external barriers to the HCPs' MAC. EMMRG-05 discusses feeling torn as her desired MAC is to both give the patient the best

care possible as well as support and build capability of the local healthcare system. All positions require something of moral significance be given up and deciding on one MAC over any other produces serious consequences. Similarly, EMMRG-25 explains that due to being male, he was unable to treat a local female patient in dire need of care. While his desired MAC may be to offer the best possible care, he encounters an external barrier to this MAC in the form of differing cultural beliefs. His duty as a military HCP is not only to offer the best treatment, but to respect the national culture in which he is acting but over which he has no control. These EMMRG quotes demonstrate support for Bradshaw and colleagues' inclusion of external barriers as a potential outcome of acting on a MAC.

3.2.2.2. Internal Barriers/Self-Imposed Barriers
       In addition to external barriers, the study data verifies Bradshaw and colleagues' findings that 'self-blocking' is present in military HCP. The erection of self-imposed barriers when deciding on a MAC was seen in several interviews and was consistent with some aspects of the reasons outlined by Bradshaw and colleagues. They argue that the CAF nurses who erected self-imposed barriers did so largely "when they believed their actions were not worth the cost (e.g. energy, deployment length, potential fracturing of relationships)" (62).

       EMMRG military HCPs often described self-imposed barriers in situations where they were forced to choose between the wellbeing of the individual and the group. The most common situation where participants discussed this need to construct a self-imposed barrier was in triage, where limited resources forced allocation choices. While triage situations are influenced by external factors, the active choice to block a MAC (e.g.,

choosing not to treat a patient with available resources based on prognosis) means that these situations can be considered an internal or self-imposed barrier.

> *"[A patient was] burnt head to toe...And [treatment] would be a lot, a lot, a lot of work...she was going to take up time, space and our equipment and we are not likely to resolve this issue...It was heart wrenching putting her back in the ambulance, because we basically knew we were sealing her fate...But I think we made the right decision at the beginning, we didn't even try to start anything, it was a good decision"* (EMMRG-12)

> *"Um, where the sticky part went is we're mandated 48 hours to move them on, right. 48 hours, move them on doesn't work with the locals...there were no ventilators in Afghanistan, you send them someone who was ventilated to the local facility when there is nothing? So then you ended up with an individual that was very resource heavy, but then there was a point where you would have to make a choice. So very often when you reached quotas...we had to sit down and you know, one of the catch phrases...was 'withdraw care'... give them their dignity...and just make them comfortable until they go."* (EMMRG-13)

Both EMMRG participants describe situations where they encountered self-imposed barriers to their MAC, their desire to provide the best possible care for their patients. EMMRG-12 describes a morally challenging situation where treating a severely injured patient presenting at triage would have required significant resources that could not be spared. EMMRG-12 describes feeling distressed by this self-imposed barrier but acknowledges that she believes it was the correct course of action to withhold treatment completely despite her desired MAC since: *"We are trying to do the greatest good for the greatest number, I think is one of the things that we really try to do. And that's one of the things that we have to keep fixed in our head." (EMMRG-12).* Participant EMMRG-13 describes a similar triage process regarding discharge that can also lead to self-imposed barriers to one's desire to provide the best patient care possible. While a policy mandated the discharge of local patients to a local facility, a lack of resources at these facilities led

EMMRG-13's team to believe that this would cause the patient to suffer before dying. While EMMRG-13 implies that her MAC would be to continue care, a self-imposed barrier is encountered that led the team to believe that withdrawing care and allowing a dignified death was better for the patient despite the MAC.

In these triage situations, military HCPs would have preferred to act on their MAC to treat patients, but created a self-imposed barrier based on a need for optimally allocating medical resources. Most often, EMMRG participants describe the 'cost' as medical resources and a military HCP encountered an internal barrier when they felt that acting on a MAC would be detrimental to the overall health care goals and mandates of the organization or the overall wellbeing of the patient. While a lack of resources can also be categorized as an external barrier, this study data showed that triage situations also often involve internal, self-imposed barriers. This distinction can be defined where external barriers are when one is unable to act based on a lack of resources, and internal barriers when one chooses to allocate resources away from some patients who will not receive care in order to protect and provide care for others.

In addition to the cost-benefit reasons stated by Bradshaw and colleagues for the creation of a self-imposed barrier, EMMRG interview data specifically indicate that self-imposed barriers are experienced by military HCPs for compassionate reasons. Often military HCPs encounter patients, whether local or military, who are in great pain due to illness or injury caused by the dangers of the context of war. Due to uncontrollable contextual elements (e.g., resource challenges, lack of local infrastructure), military HCPs may be unable to care for the patient in the way they would like, which could result in

prolonging unnecessary patient suffering. In response, military HCPs often erected a self-imposed barrier to treatment and care that allowed them to act compassionately and end or prevent the patient's undue suffering.

> *"You have somebody that is in serious pain, what do you do for them?... You [would] put down an animal that is in that much pain, no hope of saving... Do you pull the trigger? And pulling the trigger is flat out illegal. But at the same time if that person happens to be screaming in pain, holy cow, there is a whole gut instinct that says 'put him out of his misery.'"* – EMMRG-27

> *"[There was a child] and he had eight drains coming out of his abdomen and it was ridiculous that they kept him alive... Yes, we don't want to see kids die, but this isn't going to get better."* – EMMRG-05

> *"Am I an advocate for euthanasia, no, [but] we don't have to deal with [these situations] really in Canada...but in her situation there was no good outcome."* – EMMRG-01

In these situations, EMMRG participants erected a self-imposed barrier against traditional military and medical ethical obligations of caring for patients. When faced with a difficult moral dilemma, EMMRG participants strived to take into account the intensive care environment and uncontrollable aspects of deployed context while making their decisions and felt that erecting a self-imposed barrier to the actions demanded by their own moral values was the most compassionate strategy possible. In these situations, EMMRG military HCP indicated either knowingly or unknowingly sacrificing their moral values in order to ease the uncontrollable suffering of an individual. As such, EMMRG participants indicated that the motivation of compassion may also be considered a source of a self-imposed barrier that can lead to moral distress.

Overall, analysis of participant stories support the inclusion of self-imposed or internal barriers in Bradshaw and colleagues' model of military moral distress. EMMRG

data is consistent with Bradshaw and colleagues' argument for the cost-benefit motivations or source of an internal barrier, but finds that compassion was an additional motivation common for EMMRG participants.

3.2.2.3 Blocked, But Satisfied

This analysis finds that Bradshaw and colleagues' third possible outcome of enacting a MAC, where it is blocked but the military HCP feels satisfied with the result, may not be necessary to include in the moral distress model based on current information. Bradshaw and colleagues describe how in this situation "some CF nurses became satisfied with their moral action choice, despite it having been blocked" (2010, p. 60). They argue that this largely occurred when the context surrounding the moral dilemma was a situation that was beyond the nurse's control where they consequently "could not have influenced the outcome, regardless of what they did or did not do" and includes uncontrollable factors such as the type of casualty, poor resupply, restrictions on transfers, etc (Bradshaw, et al., 2010, p. 60). In this situation, Bradshaw and colleagues argue that the nurse would not experience moral distress.

Yet, while they argue for a blocked MAC where the military HCP is still satisfied, they also noted that it is only after "a period of self-reflection" that it was possible for a nurse to feel satisfied with a blocked MAC (2010, p. 60). This contradicts a 'blocked, but satisfied' scenario where Bradshaw and colleagues do not include a self-reflection or situational resolution component in this process. In other words, this indicates that the nurse has experienced moral distress and positively resolved it rather than not encountering moral distress. Bradshaw and colleagues' supporting quotes, such as "I did

everything in my power to rectify the situation…and nothing was done…at the end of the day, there was nothing different that I could've done (Nurse 6)" do not indicate an absence of moral distress, but an encounter with moral distress that was positively resolved. Even in situations where military HCP encounter a barrier that is beyond their control, EMMRG participants indicate that some degree of moral distress is still experienced, such as feelings of frustration, anger, powerlessness, etc (2010, p. 61). Yet, they often describe how that the salience of the 'uncontrollableness' of the situation combined with previous experience with morally challenging situations allowed for a smoother and faster positive self-reflection and resolution process.

EMMRG-12 discussed an experience with a blocked MAC as well as the experience of a reserve nurse attempting to provide treatment to a difficult patient. The patient had burns over 93% of her body and after much deliberation by both the doctors and the nurses the team decided that it was best not to start treatment due to the dire prognosis and lack of resources. The EMMRG participant felt that this course of action was regrettable, but the best option for both the patient and the unit. However, the nurse experienced significant negative effects from this encounter with moral distress. The participant talked with the crying and vocal nurse who felt that the team should have provided care. Yet, she disagreed and stated that while it was a "heart-wrenching" situation, from a rational perspective the lack of resources meant that complete care would not have been possible and only would have served to make the HCPs feel better about themselves and prolong the patient's suffering. As we can see, the participant indicated being troubled by the inability of the unit to help a particularly sick patient, but

accepted that for several reasons beyond their control it was unwise to pursue treatment. While the participant experienced some degree of stress because of this morally challenging situation, this did not appear to be moral distress. In contrast, the reserve nurse working with EMMRG-12, when confronted with the same situations, appeared to experience moral distress and negative effects.

According to Bradshaw and colleagues' model, the influence of previous encounters with moral stress and moral distress influence future experiences, and thus if the military HCP had previously had positive moral distress resolution, they would be more likely to have a positive resolution experience. In these situations, it is possible that military HCP encountering a blocked MAC were able to quickly resolve and thus no longer experience the negative impact of moral distress. This is supported by EMMRG-12 who cites a lack of experience as increasing the negative impacts of moral distress:

> *"The Reserve nurse hasn't had a lot of experience yet overseas [and] is thinking 'we should do this, we should take care of her... I can take her on'. And I'm like, the result of this is not going to be very good… [the Reserve nurse] can tell by the look on our face that we are not, we are reluctant to take her on... so the reserve nurse became very upset [and] left." – EMMRG-12*

> *"That was one of those where you're sitting there looking at a situation where with previous experience I understand, you know, you can rationalize it, yes I understand this is the reason why. And when we had to go and talk to the other nurse, you know, you are trying to rationalize it to her, she is like no we should have done something for her . . . And how would that have made it better, it would have made you feel better, but not her, right? But you would have started care. And she's like, 'this is terrible, this is just, we can't do this', and I'm like we didn't do this to her." – EMMRG-12*

EMMRG-12 indicated not being satisfied with the outcome of her blocked MAC, but found that previous experience allowed consideration of the impact of the deployed environment on the controllability of aspects of the morally challenging situation. While

not approving of the elements that blocked the MAC, she indicates that considering the controllability of elements in the context allowed an acceptance of the uncontrollable barrier encountered as well as an inability to fulfill the MAC. EMMRG012 describes how previous experiences facilitated consideration of contextual controllability which improved her ability to resolve the negative impacts of moral distress. As such, EMMRG participant narratives in conjunction with Bradshaw and colleagues' requirement of self-reflection for successful resolution and satisfaction with a blocked MAC imply a challenge to the concept of a 'blocked, but satisfied' outcome scenario for a model of military HCP moral distress.

3.2.3 (Initial) Moral Distress

EMMRG participants were not specifically asked about 'moral distress' and thus this study is unable to definitively assess whether or not initial moral distress was experienced by participating military HCPs. However, in reviewing the definition and experiences of moral distress in a variety of literatures, the conclusions of these fields can be practically applied to the experiences of EMMRG military HCPs. While the definitions of moral distress vary between fields and professions, a consensus definition has been argued for by Lutzen and Kvist who conducted a comparative analysis of theoretical understandings and interrelated concepts for understanding moral distress in the fields of both psychology and philosophy (2012). Their analysis indicates that a consensus definition of the initial moral distress experience was captured aptly by Corley et al who describe it as "the painful psychological disequilibrium that results from recognizing the ethically appropriate action, yet not taking it, because of obstacles"

(2001, p. 250; Lutzen & Kvist, 2012, p. 17). This definition of moral distress can then be applied to the narratives of EMMRG participants. First, as described above (3.2.1), EMMRG participants often recognized an 'ethical' or 'moral' component of when describing a challenging situation they faced. Additionally, EMMRG participants indicated experiencing psychological suffering as a result of encountering a barrier when striving to implement their desired moral action choice. EMMRG-11 describes an experience of psychological suffering after encountering barriers to a MAC:

> *"It's just, it got to be a little sickening"*
> *"I couldn't even talk about it because it would make me so angry"*
> *"It's hard"*
> *"I find that very difficult, it's very stressful"*
> *"Yeah, everyone was sort of working in their own little private hell I think"*

After recognizing a challenging life event in the field as a moral dilemma, EMMRG-11 encountered a barrier to a MAC. The result of this experience were feelings of psychological suffering consistent with Corley et al's definition of moral distress (2001, p. 250).

Other EMMRG participants also described feelings of suffering in themselves and others of their team that are consistent with Corley's description of moral distress:

> *"You just feel horrified, you feel, this guy's got a timer on his head counting down as to how much life he has left and you have to tell him 'sorry I can't help you'. Carry on."* – EMMRG-22

> *"There are so many people [in the military] that went that were so sick after, you know, and suicidal."* – EMMRG-07

These participants also described experiences of often profound suffering after encountering a barrier to their desired MAC. They described this personal experience of suffering as manifesting uniquely and to a different extent depending on the individual

military HCP who encountered it as well as the controllable and uncontrollable contextual elements involved in the situation. However, participants clearly indicated that experiencing a blocked MAC led to feelings of suffering and attributed feelings of horror, upset, and even suicidal behaviours to encountering a blocked moral dilemma. Thus, while this study cannot conclude with certainty that EMMRG participants experienced moral distress, they did describe recognition of the moral component of difficult situations, encountering a barrier(s) to their desired actions (MAC), and experienced psychological suffering as a result of a blocked MAC. As such, through the practical application of Corley et al's conceptual definition, this thesis argues that some EMMRG participants likely experienced moral distress.

3.3 Moral Impact Phase

After the Moral Deliberation Phase, Bradshaw and colleagues outline the second phase of their model, the Moral Impact Phase, which describes the impact of moral distress on both the individual as well as the various levels of the external military organization. The data collected by the EMMRG study indicates support for Bradshaw and colleagues' overall argument that there are 'additional moral impacts' on the military team, chain of command, and organization as a whole as well as on the HCP themselves. While analysis of EMMRG participant's stories supported some of Bradshaw and colleagues' findings regarding the personal impact of moral distress and the steps of situational resolution and self-reflecting as components of the resolution process, they also indicated that expansion may be beneficial for some areas of the model. This section will describe how EMMRG participant narratives both indicated support and challenged

Bradshaw and colleagues' concepts of the moral distress impact on military HCPs'

perceptions of the team, chain of command, and organization while also influencing

encounters with future moral dilemmas.

3.3.1. Additional Moral Impacts

Bradshaw and colleagues argue that nurses who encounter a barrier to their MAC

affect not only the individual, but also the team, chain of command, and organization as a

whole. EMMRG participant narratives support all three of these additional impacts. The

following quotes reflect how, like Bradshaw and colleagues' nurse participants, EMMRG

military HCP experiences with moral distress impact the military healthcare team as a

whole.

> *"I think there was a lot of internal blame, um, I think there are a lot of outwardly aggressive people right that are frustrated and you feel that. And then there's the other side where a lot of us internalize it and are frustrated that we don't know more. I mean we can't know everything about everything and I certainly would never expect the military could ever prepare every clinician to be an expert in [everything]"* – EMMRG-01

> *"I really felt it created a divide, like a 'me versus them', they banded together obviously. They all lived in the same shacks, I was really quite isolated from them, even living in the same quarters. So, they would hang out socially, so I never got part of that circle… And it caused a lot of discord on my team because I was willing to stand up and try to protect the patient's rights"* – EMMRG-02

EMMRG-01 felt that encountering barriers to a MAC, and likely experiencing moral

distress, was responsible for the negative affect of many team members. She describes the

team environment as generally frustrated by their lack of control manifested by their

inability to act on their MAC of providing expert care to their patients. EMMRG-02

explained how her desire to recognize and directly address difficult moral issues created

tensions between herself and her teammates, who she described as being less concerned

with the moral dimension of care. Analysis of EMMRG participant data supports Bradshaw and colleagues' argument for the potential of moral distress to impact the team as a whole.

Additionally, Bradshaw and colleagues find that experiencing moral distress as a result of a barrier to a nurse's MAC can also impact the chain of command, which was corroborated by EMMRG participant stories:

> *"We had a patient [who] was in so much pain and he was literally dying on the bed…Everybody was so focused on helping him survive and we were not focused on his pain. And I remember saying 'okay, we need to put him on a pain regime that is going to work for him', like I kind of lost it during rounds and there was a bunch of doctors there and here I am the nurse…And my boss came to me and he was like, 'you need to remove yourself', instead of like I wish somebody would have said 'wow…you want to help your patient'…And my boss was kind of like, you know, you seemed kind of upset there, I think you just should step away and calm down. I'm like 'oh, it's because you're not caring for the patients every day, you don't see, you don't understand'…[but] they have a lot more experience than me and a lot more training they get paid a lot more and they are high rank"* – EMMRG-01

EMMRG-01 described feeling the support from her chain of command shift as she struggled against objection to provide care for her patient in a way that would help to manage his pain. When her commanding officer stepped in, he criticized her desire to recognize and prioritize the moral component of the situation. EMMRG-01 explained that she felt unsupported in her decision to address the moral dilemma as her commanding officer implied that she has become too involved with the patient and situation and needed to become more distanced. She described coming to view her commanding officer as someone who was distanced, with priorities shifted away from caring for and treating patients. EMMRG-01 implied that this encounter made her feel powerless to change the

outcome and pursue her MAC due to his higher rank, experience, and pay of the commanding officer.

Another EMMRG participant described a similar experience that changed her perspective of the chain of command due to feeling unsupported:

> *"The charge nurse at the time was more concerned about [the off duty staff] getting rest…than we get the support we needed to care for patients safely. In the middle of the night, no breaks, because you can't take a break because you are running back and forth from bed to bed. I made a medication error and when I found that out I just stood at the IV pole and I just started to cry {emotional} because it just upset me so much…And at that point the charge nurse came over and said 'well what can I do for you?' And at that point it was too late, I had spent half the day arguing with him to bring in help… He tried to use that as a defense the next day when we were having a meeting with the nurse admin whatever. But of course beside him is the other…charge nurse and defending his actions as well. I said I just can't work with you guys…you are going to put me in an unsafe position and I am so uncomfortable with that." – EMMRG-02*

EMMRG-02 describes a situation in which she requests that her commanding officer bring in more HCPs to help care for a high influx of patients. The commanding officer disagreed with her request for additional resources, which she perceived as resulting in her making a medication error due to exhaustion. This affected the chain of command, and EMMRG-02 depicted feeling unsupported, attacked, and unsafe leading her to be uncomfortable to the point of not wanting to continue working in that team context.

Finally, in addition to consequences for the team and chain of command, Bradshaw and colleagues argue the military organization as a whole also experiences consequences due to encountering moral distress. Bradshaw and colleagues' argument for the impact on the military organization as a whole was supported by analysis of EMMRG participant's stories.

"I think unresolved issues have a way of spurring you to go back overseas because you feel you have unfinished business. My life kind of came apart a little bit in 2007, I was preparing to go overseas and I realized at the time that one of the reasons I am going or wanted to go overseas so badly was because I had unresolved issues from the first tour. And I needed to prove to myself that I could do this, which is not a good reason to go overseas. But I definitely think there will be a segment of the guys who go overseas who that is at least a factor…"
– EMMRG-27

"The reason I got out [of the military] was because I knew I couldn't deploy anymore and it was difficult {emotional} because it was the thing I was really good at…I can't handle [being deployed] anymore, it's too much…I'm really done with it, I'm proud of the time I did but it's been a hard pill to swallow…I really think if I had to deploy again, um, I think I would be done." – EMMRG-07

EMMRG-27 and EMMRG-07 described two different impacts on the military organization due to their experiences with moral distress. EMMRG-27 described unresolved moral issues overseas which he felt led to altered motivations for his return to the deployed context and admitted that he did not believe these reasons were constructive or even healthy. Alternately, EMMRG-07 felt that due in part to her experiences with moral distress she could no longer cope with working in the deployed military environment. This demonstrates that encountering moral distress may affect the military as an organization in the form of employment motivation and employee retention.

EMMRG participants described how individual experiences with moral distress had additional effects on each level of the military organization and describe negative impacts in regards to cohesiveness, effectiveness, motivation, and retention. As such, analysis of EMMRG participants statements indicate support for Bradshaw and colleagues' inclusion of the additional impact of moral distress on the team, chain-of-command, and entire military organization into the model of military moral distress.

<u>3.3.2 Individual Impact</u>

In addition to affecting the external military organization, Bradshaw and colleagues discuss the impact of encountering moral distress on the individual and the process necessary to resolve moral distress. In order to examine the impact of moral distress, it is first necessary to examine the process that an HCP experiences after encountering a barrier to their MAC. Bradshaw and colleagues' description of this personal process outlines how military nurses engage in two different approaches to resolving their moral distress; the first is situational resolution and the second is self-reflection, both of which are necessary for an individual to resolve their feelings of moral distress. They argue that whether or not HCPs experience these two steps positively or negatively significantly affects their ability to "move past the moral distress experience towards acceptance, reconciliation, self-protection, and the ability to cope with the outcomes" (Bradshaw, et al., 2010, p. 67). This thesis also finds that the concepts of situational resolution and self-reflection are key components of the moral distress process as EMMRG military HCPs discuss addressing both of these concepts when attempting to resolve moral distress. Bradshaw and colleagues outline the movement through these two steps as linear and found that situational resolution could either be complete or incomplete and that self-reflection could be perceived as either positive or negative (2010, p. 67).

If the HCP is able to have a positive and complete experience with these two steps, Bradshaw and colleagues argue that they will be able to successfully resolve their moral distress. However, if they are not able to achieve resolution, they find that nurses will continue to experience the negative personal impacts of moral distress (Bradshaw, et

al., 2010). This section will follow this individual process and offer both supportive and challenging evidence from the analysis of the EMMRG data set regarding Bradshaw and colleagues' description of situational resolution and self-reflection.

3.3.3 Situational Resolution

Bradshaw and colleagues define situational resolution for military nurses as the struggle to understand their "emotions, relationships, and ability to function as nurses and individuals" (2010, p. 67). The concept of situational resolution was supported by analysis of EMMRG participant's narratives which recounted having struggled with these personal aspects after encountering moral distress:

> *"I think there was a lot of internal blame"* – EMMRG-01

> *"When children die it just doesn't add up and it just seems too unfair and then you just, people go to a bad place, like what the frig are we even doing here, you know, this is crazy and extremely emotional"* – EMMRG-01

> *"Sometimes we'd be shoulder to shoulder, maybe experiencing the very same things but because there wasn't that safety to have those kind of discussions that I since found out that I maybe I shared almost identical {trails off}…I felt so isolated but I was sharing some similar experiences with some of my colleagues. But because everyone, there's a bit of a culture that everyone wants to be seen as a team player, and, ah, so no one wants to say anything."* – EMMRG-11

> *"And we feel, we get emotionally involved in [the moral dilemma]"* – EMMRG-13

> *"And after awhile it gets, if you let it get to you it can get almost demoralizing and make you feel angry and you do not want to help these people."* – EMMRG-22

These participants all describe attempting to understand their emotions, relationships, and role as HCPs after encountering moral distress. Participants describe attempting to understand the emotional impact of the experience using words to describe their psychological state as 'extremely emotional', 'emotionally involved', 'demoralizing', and

'angry'. EMMRG-11 describes altered relationships and a resulting feeling of isolation because of an encounter with moral distress. While EMMRG-11 implies a desire to share and work through the difficult discussions necessary to understand moral distress experienced by the team, she feels prevented from doing so by the other members of the team, which alters her understanding of her relationship with the team from cohesive to fragmented. Similarly, EMMRG-22 explains that understanding one's role as a military HCP can also be difficult after moral distress. The participant describes how cultural and social challenges of the resource-limited nationals created a barrier to his MAC of caring for locals. EMMRG-22 describes the potential for one's perceptions of their role as a military HCP to shift negatively to a point where offering care can become difficult, regardless of one's initial MAC.

One aspect of EMMRG narratives that may indicate a challenge to Bradshaw and colleagues' description of situational resolution is the attempts of EMMRG participants to directly or indirectly resolve the controllable elements of the context that are creating the moral dilemma. After encountering a MAC that is blocked, many participants in the EMMRG study discussed attempting to resolve the barrier, by addressing or removing the barrier that blocked the original desired MAC. This type of approach could be considered a direct attempt at resolving the immediate and extended contextual barriers in a situation in order to reduce the impact of experiencing moral distress. EMMRG military HCPs discussed attempts to remove the barrier to their original MAC after it is initially encountered:

> *"A significant decision like that to withdraw care was made by a team….Essentially you got at least three or four people putting our heads together*

> *and deciding whether, you know, running through the pros and cons and the alternate course of action and the pros and cons of those and deciding"* – EMMRG-20

> *"I went through my team captain who was there and we passed it up the chain of command through both his army chain of command and then I passed it up through my medical chain of command"* – EMMRG-22

For many EMMRG participants examined in our study, this type of direct barrier resolution involved other team members, superiors, and working through official channels. Some military HCPs, such as EMMRG-20, describe collaborative attempts to consider alternate strategies that are inside the military HCPs' locus of control in the immediate context that could circumvent a barrier and perhaps allow for the MAC to come to fruition. Others, such as EMMRG-22, described directly attempting to remove barriers in the extended context by addressing moral issues through official channels and the chain of command. Furthermore, military HCPs indicate additional approaches where they attempt to indirectly remove barriers in the extended context so as to prevent barriers to the future MACs of themselves or other military HCPs in similar situations:

> *"I'm one of those people that will stay awake at night thinking about things until I find a solution... I find at 2am I will find an answer to just about anything whether I want to or not. Yeah, um, I usually do find a way to find the answer, not sure how I get to that sometimes. But then other times, like in Medevac we didn't have disaster stores... That was terrible and at the time we were dealing with it and we were able to get what we could. But afterwards I created a standard operating procedure on how to set up medical stores, I got approval from Ottawa, we got the funding, it's all set up, you can Medevac 150 people with the stores set aside right now. So maybe I can't fix it for that day, but I can try to make it better for later. It helps me sleep at night once I do that."* – EMMRG-04

Participant EMMRG-04 described encountering a barrier to her desired MAC due to resource scarcity. While she was unable to directly remove this barrier, she indirectly addressed the elements of the moral dilemma that were in her locus of control, and

created a new procedure that would circumvent the barrier to similar MACs in the future. Although these actions may not resolve the immediate uncontrollable contextual barrier to a MAC, some military HCPs describe finding satisfaction in knowing that they will have made struggling with related moral dilemmas easier in the future.

Each of the strategies and approaches used by EMMRG participants involves either the direct or indirect resolution of the barrier to one's MAC rather than the resolution of the military HCP's moral distress. EMMRG participants describe addressing the controllable elements of a moral dilemma and the barrier they encountered either directly or indirectly. They further indicate that addressing the controllable elements of a barrier in addition to considering one's emotions, relationships, and ability to function as nurses and individuals is important for resolution to take place.

3.3.3.1 Complete or Incomplete Experience

While these narratives indicate that EMMRG participants strive to achieve Bradshaw and colleagues' situational resolution, it is difficult to conclusively determine whether or not these participants had an overall positive or negative/incomplete experience with situational resolution. However, EMMRG-01 specifically reports negatively experiencing situational resolution, as defined by Bradshaw and colleagues, when attempting to resolve her moral distress:

> *"But in my experience, when I did speak up about things, I don't have a problem saying this, but I was given a you know, sort of a mid-tour evaluation and I've always been a very high performer but I was told that I was not a team player and also that I um, I put ethical concerns ahead of clinical concerns and that doesn't even make sense to me, I have that in writing."* – EMMRG-01

EMMRG-01 describes a formal organizational report where she was reprimanded for striving to act morally when her doing so involved disagreeing with other members of the team. As she strives to understand her emotions, relationships, and role as a nurse she implies feeling negatively about the experience due to being penalized for attempting to pursue a successful resolution of the morally challenging situation in the immediate context that is causing her moral distress. Conversely, EMMRG-27 reports feeling positively about his attempt at situational resolution:

> *"My vehicle I was riding in at the time was a good 600 meters distant and that was a long walk and actually I was bawling every step of the way. And the guys saw it, the troops I was with and ah, I got a lot of support from them and a number of them patted me on the back and said 'don't worry about it doc you did your best', which was appreciated." – EMMRG-27*

EMMRG-27 depicts struggling to resolve his emotions after encountering moral distress, physically upset as he walks back to his vehicle. However, his teammates provided immediate care and support, which EMMRG-27 describes as well received and positive. While he may not have achieved complete understanding of his emotions regarding his likely encounter with moral distress, his reaction to his teammates' support implies that his experience with situational resolution was at least in part positive as it allowed for some understanding of his team relationships and role as a medical technician.

As such, analysis of the EMMRG data reflects support of Bradshaw and colleagues' findings that military HCPs struggle to understand their emotions, relationships, and role as a HCP after encountering a barrier to one's MAC and the resulting moral distress. Furthermore, the stories of EMMRG participants also support Bradshaw and colleagues' argument that struggling for situational resolution can result in

an overall positive or negative/incomplete experience with this step in the resolution process.

3.3.4 Self-Reflection

Bradshaw and colleagues' self-reflection was also found to be a prominent theme for EMMRG participants struggling to resolve their moral distress. They argue that self-reflection follows situational resolution and can be defined as the "ongoing process used by the CF nurses to gain meaning and provide justification for their choices, and the repercussions for these choices" [67]. EMMRG participant's narratives indicate support for the argument that military HCPs practice Bradshaw and colleagues' self-reflection and strive to justify and define meaning for their choices and the consequences of their actions:

> *"I did a lot of journaling, I found pens and paper, made the scenarios kind of, this is what happened today…this is how this happened. And then I disemboweled my feelings about it, once it was on paper, left it there." (EMMRG-12)*

> *"My experience with any part of the ethical, specific to the ethical concerns are, I would apply that to my future deployments, anything that I have learned I would apply. And the thing is the more you deploy the more experience you gain and the more value your opinion is when you're actually deployed. So you start to rise through the ranks, the chain of command that type of thing, you can be more influential when you are within an ethical dilemma. That's a good thing."*
> *– EMMRG-16*

These excerpts indicate that meaning-making through self-reflection is prevalent amongst morally distressed military HCPs as Bradshaw and colleagues suggest. EMMRG-12 described her overt and external practice of self-reflection through journaling after experiencing barriers to her MAC. She explained that through the process of describing her experiences and her reactions and feelings about them, she was able to overcome the

negative personal effects of moral distress as self-reflection allowed her to 'leave' the experience on the paper, supporting Bradshaw and colleagues' argument that self-reflection leads to resolution of moral distress. EMMRG-16 also justifies and finds meaning in her encounters with moral distress as part of her personal, holistic learning experience. She implies accepting her choices by finding meaning in the possibility of being able to affect greater influence regarding moral dilemmas in the military as she continues to learn and progress her position.

While Bradshaw and colleagues argue that military nurses consider and seek to attribute meaning and justification for the consequences of their actions; they do not discuss the influence of the unique deployed environment on controllability during this reflective process. EMMRG participants indicate overtly considering the controllability of the elements of the morally challenging situations they are facing, particularly when reflecting on the meaning and consequences of actions in light of experiencing a barrier to their MAC.

> *"They didn't have control and I think that lack of control makes it even more upsetting"* – EMMRG-20

> *"But you see a lot of people that are good people that are just in the wrong spot at the wrong time and in a situation that they have no control over whatsoever, between a rock and a hard place."* – EMMRG-13

> *"I'm like, we didn't do this to her. And had we known about it earlier, maybe we would have done something about it but we didn't and we don't know about it til now and so therefore we can't blame ourselves for this issue"* – EMMRG-12

EMMRG participants described consideration of uncontrollable elements in the deployed context as a necessary aspect for self-reflection. EMMRG-20 overtly described her observation that a lack of control in a situation can increase the negative personal impacts

on a military HCP. EMMRG-13 described how the uncontrollable context in which military HCPs strive to act, regardless of their 'good' intentions as good people, can still lead to a barrier to one's MAC. She implies that consideration of one's ability to effect change and the controllability of elements in a situation due to the uncontrollable context must be considered. Similarly EMMRG-12 described how unknown and uncontrollable elements in a case caused by contextual elements outside of her control have caused barriers to her MAC. EMMRG-12 explains that while a moral dilemma resulted in difficult negative consequences, she argues that it is not appropriate to feel blame for these undesired and unexpected outcomes since the circumstances that caused them were not within the military HCP's locus of control.

After considering the influence of the unique deployed context on the controllability of elements in a moral dilemma, EMMRG participants describe their process of self-reflection:

> *"Well I just convinced myself that was how it had to be… I practice medicine exactly as I was trained and I would in Canada until I couldn't and then I didn't and I believe that. So if you can't then it's not your fault anymore… I don't feel personally responsible you know, when I had to choose A or when I was part of the team that chose person A or person B, that had to happen, that was not my personal responsibility and we made the right decision under the circumstances, but I didn't create the circumstances… And as a team if we had not been there it would have been much worse, I imagine worse, so we were making things better even if it wasn't 100% solution every time as we would aim for in Canada"* – EMMRG-20

> *"It wasn't something that could be identified as a problem at the beginning, you thought you had everything under control and because of her size and the amount of bleeding it was internal, you missed it and that happens, sometimes you miss things ... you give it everything you can and positively learn from this and maybe the next time round you'll be quicker to identify it, but I said you may not"* – EMMRG-12

EMMRG-20 described her experiences as a physician in the field as one that is significantly influenced by the controllability of the circumstances in the deployed context. She argued that she cared for her patients as best as she could and acted to the best of her abilities on the controllable components of a moral dilemma. However, when she could not act on her MAC or in the way that she desired when uncontrollable contextual elements prevented her from doing so, she explained that she did not feel "personally responsible". She implied that her self-reflection process involved considering whether or not she acted as best and fully as possible given the controllable elements of a situation that were not blocked by a barrier, and shows acceptance of those aspects of the moral dilemma that were uncontrollable due to context and circumstances in the deployed environment. Similarly, EMMRG-12 argued that the appropriate response when confronted with a barrier is to act on all aspects of the situation that are within one's control, learn from mistakes that were largely caused by the uncontrollable circumstances, and apply them to future patient care and moral challenges. However, she also cautioned that the uncontrollable circumstances may persist and cause barriers to future MACs, indicating that the ongoing consideration of contextual controllability is an essential component of self-reflection.

As such, the stories of EMMRG participants reflect support for Bradshaw and colleagues' argument of the importance of positive justification, meaning-making, and understanding of a HCP's choices and their consequences after encountering a barrier to moral action is a vital component of successful self-reflection and resolution of moral

distress. However, they also indicated that consideration of contextual controllability to be an essential aspect of this self-reflection process.

3.3.4.1 Positive or Negative Experience

The quotes in the previous section largely depict positive experiences with the self-reflection process where the HCP finds meaning and justification in their moral distress. However, analysis of EMMRG data implied that it was possible for HCPs to have either a positive or negative experience with self-reflection, as described by Bradshaw and colleagues. If a HCP has a negative experience with self-reflection, they argue that acceptance of the situation and associated blocked MAC is not possible. One EMMRG participant discussed the impact of having a negative experience with self-reflection:

> *"And I always thought to me, to myself I thought you know what, I'm tough I grew up in Toronto, I can get past it. So no matter what comes my way we are just going to work with it and deal with it later. And that was kind of my mentality through the whole thing, but in the end I ended up with PTSD and I also had a lot of issues with some of the ethical things"* – EMMRG-15

> *"Like I said, in 2010 I was diagnosed with PTSD…it took me a year and a half to stabilize it, to start thinking I was normal again."* – EMMRG-15

> *"I thought I was dealing with it really well but what I was doing was just stuffing it into a closet and not addressing any of it"* – EMMRG-15

Participant EMMRG-15 had a negative resolution experience by not allowing herself to engage in this self-reflective process. She stated she thought she was "tough" enough to cope with the dilemmas encountered throughout the "whole thing", the course of her time in the deployed context. According to Bradshaw and colleagues, by repressing the moral stress experienced when encountering a blocked MAC and circumventing the situational

resolution or self-reflection process, resolution is experienced negatively, with acceptance and 'moving on' made difficult to achieve. EMMRG-15 described a connection between repressing her self-reflection processes and the development of post-traumatic stress disorder. She connects this internal psychological and personal damage to her experiencing 'issues' with the moral dilemmas. The participant outlines a causative relationship between experiencing blocked moral dilemmas, having a negative experience with self-reflection, and developing a serious stress disorder that has damaged her health. Not only does EMMRG-15 connect these experiences to negative psychological health impacts, but she described perceiving herself differently as well, iterating that her experiences caused her to feel that she was not her normal self. She explained that while she felt that she was coping with the stressful moral dilemmas effectively, by not reflecting on her morally challenging experiences and moral distress she continued to experience negative consequences. As such, EMMRG-15 indicates support for Bradshaw and colleagues' argument that self-reflection is essential for moral distress to be resolved effectively in order to prevent future negative impact on military HCPs.

While self-reflection may lead to positive impacts on military HCPs, an inability to positively self-reflect can create negative impacts for the HCP service member as Bradshaw and colleagues suggest. Therefore, this thesis supports Bradshaw and colleagues' claim that self-reflection can be experienced either positively or negatively and consequentially impacts one's personal resolution of moral distress.

3.3.5 Impact on Perceptions

As Bradshaw and colleagues' model suggests, EMMRG military HCPs found that their perceptions of the team, chain of command, and the military organization as a whole were altered as a result of their encounter with moral distress. EMMRG-15 discussed how her negative experience with resolving her moral distress affected her future perceptions:

> *"Um, I don't, I don't, honestly, I don't know if I will ever go back to a theatre of war. I can see myself deploying but it will not, I don't think it will be back to a theatre of war. I just think that the, it's the stress, I had long, um, when I was diagnosed with PTSD it was because I had long-term chronic stress…after a while of seeing so many young people just so devastatedly injured like that and the emotions... It's hard for you to be the caregiver…it's crazy, it's like a constant rollercoaster ride" – EMMRG-15*

The perceptions of EMMRG-15 regarding many aspects of the military have been altered due to prolonged exposure to long-term chronic stress, much of which the participant attributes to stress from ethical dilemmas. While moral distress may not have been responsible for EMMRG-15's mental health issues after deployment, she implied that her unresolved negative experiences with moral stress contributed significantly to her perception that she is no longer capable of acting in the deployed military environment.

Participant EMMRG-05 also discussed feeling that her personal perceptions of the team, chain of command, and military were altered by her experience encountering a barrier to her moral action:

> *"I had a couple of times in the trauma bays I had to stop med techs, not Canadian again, but I stopped them from inserting really large or IV catheters that were unnecessary,…'well he's from the Taliban, we're going to cause more pain'. I said 'no, you're not'. There were a couple of people that I had to physically stop from providing inappropriate care"* – EMMRG-05

> *"Some people worshiped the ground that this doctor walked on and the nurses couldn't quite figure out why the doctors loved him. But ah, yeah, there were several [morally questionable] incidences with him that we were just not*

> *impressed with… I remember saying to the doctor after we had resuscitated [a national patient] for who knows what reason for an hour… I said, 'Yes I think we have disrespected his body enough' And afterwards I thought oh, maybe, he was the head trauma person, maybe, but I was so angry you know, like I was just disgusted that I was there, you know, that I was a part of that"* – EMMRG-05

While her view of the military as an organization do not appear to have changed, EMMRG-05's perceptions of the team she worked with and the chain of command were drastically altered after encountering a blocked MAC in a moral dilemma. Having to figuratively and literally stand up to her teammates altered her perception of their character as well as her relationship to them. Furthermore, her view of the chain-of-command was changed as she felt that after her moral encounter it instilled fear instead of support in the HCP.

The analysis of the experiences recounted by EMMRG participants indicate support for Bradshaw and colleagues' arguments that military HCPs' perceptions of their team members, chain-of-command, and the military as an organization can be altered by experiencing a barrier to one's MAC.

3.3.6 Impact on Future Moral Dilemmas

EMMRG participants also indicated that, as Bradshaw and colleagues suggest, individual perceptions of future moral dilemmas are altered due to an encounter with moral distress. EMMRG data found that many HCPs felt that their expectations, awareness, and view of moral dilemmas were dramatically altered. EMMRG participants discussed how their experiences with blocked MACs have affected their perceptions of encountering future moral dilemmas.

> *"It's kind of like when you're in your early 20's and you party and you drink and you can be hung over or not hung over the next day and then you can go back and*

do it again on the Saturday night, right. And then you know, you kind of go off a bit, you get a little older, you know, I mean I don't want to feel like that anymore." – EMMRG-07

"Many of my coworkers, nurses from that tour, who are sick and not even at work today and some are out of the military" – EMMRG-11

"[Barriers to MACs] messes up healthcare professionals and I know many have come back, with you know, whether it's PTSD, compassionate fatigue, caregiver fatigue, um, various traumatization, whatever, burnout. A lot of it has to do with the ethical dilemmas we are put into and a lot of times we are put into ethical dilemmas because we don't have the training we need to do the right thing"
– EMMRG-01

EMMRG participants described feeling unable or unwilling to being placed in the deployed environment again due to the suffering experienced as a result of encountering difficult moral dilemmas. EMMRG-11 also pointed to experiencing moral distress as a reason for HCPs leaving their careers in the military. EMMRG-01 implied feeling that moral dilemmas and experiencing barriers to one's MAC are directly related to developing stress related mental health issues.

In contrast, EMMRG-20 explained that their experiences with blocked MACs positively affected perceptions of future moral dilemmas.

"I really like my job a lot and so I can't imagine doing anything else with my life at least at this time. And absolutely if they ask me to deploy in, in any capacity… I would go again. But it is true that [moral dilemmas] were learning experiences" – EMMRG-20

"I am happy to re-deploy, I am looking forward to re-deploy. My experiences overseas that I had encouraged me to continue my career in the military and continue deploying. My experience with any part…specific to the ethical concerns… I would apply that to my future deployments, anything that I have learned I would apply. And the thing is, the more you deploy the more experience you gain the more value your opinion is when you're actually deployed. So you start to rise through the ranks, the chain of command that type of thing, you can be more influential when you are within an ethical dilemma. That's a good thing"
– EMMRG-16

EMMRG-20 advocated returning to the deployed context with the knowledge learned from prior encounters with moral distress. This implies a positive impact on EMMRG-20's perception of future moral challenges and potential moral distress as experiences that are not personally damaging, but can be positive lessons. Similarly, EMMRG-16 described how she perceived her experiences with challenging moral dilemmas as something to be learned from and applied to future experiences. Furthermore, she found that her encounters with blocked moral dilemmas and moral distress encouraged her to persevere as she believed that by learning and applying her learned experiences, she would be able to facilitate wider systemic changes in the military context based on considering and prioritizing moral concerns.

As such, EMMRG data supports Bradshaw and colleagues' finding that encounters with blocked MACs and the consequential moral distress affects the personal perceptions of experiencing future moral dilemmas both positively or negatively.

3.4 Summary

Overall, analysis of the EMMRG participant experiences suggested both support and challenges for the steps of Bradshaw and colleagues' model of military moral distress in both the Moral Deliberation and Moral Impact Phase.

In the Moral Deliberation Phase, EMMRG stories demonstrate how these military HCPs recognized a situation as having a moral component and considered internal and external factor when deciding upon a MAC. Once this MAC is enacted, EMMRG military HCPs' narratives suggest that it is possible for a MAC to be blocked by either an

external barrier or internal barrier; however, EMMRG participants largely described their reasons for erecting an internal barrier as primarily motivated by compassion, though Bradshaw and colleagues' argument for a protective motivation was also supported. Additionally, EMMRG participants did not describe situations where a MAC is blocked and the HCP is still satisfied with the outcome, indicating a challenge to its continued presence in the model. While diagnosing participants with moral distress is outside of the scope of this study, EMMRG participants do describe experiencing the intense suffering consistent with the accepted definition of initial moral distress after experiencing a barrier to their MAC.

EMMRG participants' stories also indicated support and challenges for the steps of the Moral Impact Phase. Participants' recounted experiences that support Bradshaw and colleagues' argument for incorporating the additional moral impacts on the external team, chain-of-command, and the military organization as a whole. EMMRG participants felt that they experienced long term personal impact of moral distress, as Bradshaw and colleagues describe, but also felt immediate personal effects upon experiencing a blocked MAC, which was not incorporated into the model. Participants agreed that after experiencing moral distress they had either positive or negative experiences with situational resolution and self-reflection; however, they indicate that considerations of contextual controllability play a significant role in moral distress resolution. Finally, EMMRG stories supported Bradshaw and colleagues' argument for the future impact of experiencing moral distress with regards to shifts in perceptions of future moral dilemmas and the various levels of the military organization, while also indicating that the personal

effects and consequences of moral distress cumulatively affected an individual if resolution was experienced incompletely or negatively.

In the following discussion chapter, the supports and challenges outlined in the results of the analysis of EMMRG participants will be synthesized and potential revisions to the model suggested. These recommended revisions and concepts for inclusion will be supported by relevant findings from the literature review that are useful when applied to the military HCP population and their experiences. Together, the EMMRG results and the applied literature review of different, but relevant disciplines and concepts will be used to recommend revisions to Bradshaw and colleagues' model of military moral distress.

Chapter 4 – Discussion

4.1 Incorporating Challenges into the Model

  Results of the analysis of the EMMRG participant interviews indicates overall support for the process of moral distress as outlined in Bradshaw and colleagues' model. EMMRG military HCPs indicated that both phases of the model were reflective of their overall moral distress process – from encountering a blocked action that one desires to take, experiencing moral distress, and resolving this moral distress. Furthermore, Bradshaw and colleagues' incorporation of the influence of the 'unique' deployed environment and its resulting contextual factors was also supported; with results indicating that it was a significant component of military HCPs' moral distress experience. Finally, the inclusion of a resolution process was also congruent with the results of the EMMRG narrative analysis. Military HCPs described striving to resolve the negative consequences of their moral distress and found that their resolution experience could be negative or positive. The impact of these resolution experiences affected military HCPs' perceptions of future moral dilemmas as well as the team, chain of command, and military organization as a whole.

  While the EMMRG data supports many features of the model, it also raises challenges to some aspects of Bradshaw and colleagues' moral distress process. Through interpretive thematic analysis, two important challenges emerged as themes through the results of the descriptive analysis of EMMRG participant's experiences. These two themes resulting from the EMMRG data will be supported with evidence from the interdisciplinary literature in this discussion section and the implications for the model

discussed. First, EMMRG results indicate that while the model somewhat implies a cumulative progression of moral distress, participants describe it as an integral and distinct feature of their experiences. Additionally, the mechanism behind this cumulative effect is not discussed by Bradshaw and colleagues and the progressive impact of moral distress not clearly or overtly represented in the model. Second, while the EMMRG themes and the scientific literature support the inclusion of the elements of Bradshaw and colleagues' situational resolution and self-reflection, results of the analysis indicate that alternative conceptualizations of these resolution processes based on a framework of controllability may be more reflective of participant's experiences and thus important to include in the conceptualization of the model. In this chapter, both challenges will be outlined, supported by EMMRG data and the interdisciplinary literature review, and the implications for the model discussed.

4.2 Potential Mechanism of Progression of Moral Distress

Bradshaw and colleagues imply that the development of moral 'distress' as opposed to 'stress' is characterized by the effects being "ongoing and long-term" as well as cumulative unless resolved (Bradshaw, et al., p. 12). They cite research from the field of psychology as key to understanding the cumulative nature of moral distress, since the models by Wilkinson and Jameton do not clearly reflect this 'snowballing' of chronically unresolved stress captured by psychological models of stress and distress (Bradshaw, et al., 2010). Bradshaw and colleagues find that psychological insights from stress research indicate that the cumulative stress from unresolved moral stressors may lead to a 'loopback effect' of increasingly negative outcomes and consequences which culminates

in a state of crisis where an individual is no longer able to function or cope, "the accumulation of negative energy predisposes one to a higher level of stress sensitivity, lower coping capabilities, and/or crisis" (Bradshaw, et al., 2010, p. 73). This cumulative nature is well documented in the civilian moral distress literature, most clearly by Epstein and Hamric's 'crescendo effect' (2009), and EMMRG participants' stories also provide support for a cumulative nature of moral distress. EMMRG participants discussed experiencing long term effects of encountering a barrier to their MAC, which often became increasingly severe (Epstein & Hamric, 2009). Furthermore, EMMRG participants tended to experience these cumulative negative effects when barriers to their MAC went unresolved. EMMRG-15 describes the impact of unresolved moral distress in section 3.3.4.1 (p. 102).

Bradshaw and colleagues call for further research examining the connections between psychology and moral distress research so that an informed and comprehensive model of moral distress can be established which captures the cumulative nature of unresolved moral distress. Bradshaw and colleagues' model introduces the psychological loop-back which infers that the cumulative and progressive nature of moral distress is determined by the resolution process and effects the individual's perceptions of their team, chain of command, and organization while influencing future moral dilemmas. However, the structure of the model does not overtly portray the complete development of cumulative negative effects on the individual as their ability to function and cope is diminished. Furthermore, the mechanism by which this loop-back process develops and progresses in moral distress is not discussed. The cumulative and progressive impact

described by EMMRG participants will be used to support the inclusion of the concept of ego depletion from the field of psychology and to suggest potential revisions to Bradshaw and colleagues' model with support from philosophy literature regarding the concept of cumulative moral pain.

4.2.1 Ego Depletion in Psychology

Psychology research finds that ego depletion may be a useful mechanism to consider when discussing the cumulative progression from stress to distress. As discussed (1.3.2.2), ego depletion occurs when an individual's self-regulation resources that allow them to 'cope' or self-regulate their thoughts, emotions, and behaviours are exhausted (Baumeister, et al., 2006, p. 1774). Since all active undertakings of self-regulation require self-regulation resources, ego depletion results in the impairment of a person's functioning across a spectrum of life activities (Baumeister, Vohs, & Tice, 2007, p. 352; Baumeister, Faber, & Wallace, 1999, p. 50). The process of ego depletion as the mechanism driving moral distress suggests an explanation for this progression and supports the cumulative nature of moral distress described in the civilian nursing literature and Bradshaw and colleagues' findings.

The process of struggling with a moral dilemma is an active process that requires self-regulation (Sheikh & Janoff-Bulman, 2010, p. 215). Therefore, when an individual experiences frequent moral stressors, the self-regulatory demand on one's self-regulation resources is increased. As such, if an individual is experiencing a blocked moral dilemma and the resulting moral distress, the self-regulation required for the active undertaking of coping with and/or resolving moral distress would likely place a high demand on self-

regulation resources. This is supported by new research into ego depletion which finds that negative self-conscious emotions such as regret require higher-order cognitive processing, self-regulation, and thus tax self-regulation resources (Gao, et al., 2014, p. 170).

Since moral distress is associated with negative self-conscious emotions, individuals who experience moral distress are more likely to experience ego depletion and less likely to be able to successfully exert control over their thoughts, feelings, impulses, appetites, and task performance abilities (Gao et al., 2014, p. 170; Baumeister, et al., 2006, p. 1774). This was supported by EMMRG participants who outlined feeling that their abilities to control and regulate their thoughts, emotions, and behaviours were atypically compromised during and after a blocked moral dilemma was experienced. EMMRG-01 indicated that she was surprised by her own reaction upon experiencing a blocked MAC since her lack of control over her emotions resulted in an outburst that she believed was not typical of her personality "I kind of lost it". She also describes the diminished ability of team members to function and cope after experiencing moral distress:

> *"I think there was a lot of internal blame, um, I think there are a lot of outwardly aggressive people right that are frustrated and you feel that. And then there's the other side where a lot of us internalize it and are frustrated that we don't know more. I mean we can't know everything about everything"* – EMMRG-01

> *"[Experiencing moral dilemmas] messes up healthcare professionals and I know many have come back with you know, whether it's PTSD, compassion fatigue, caregiver fatigue, um, vicarious traumatization, whatever, burnout. A lot of it has to do with the ethical dilemmas we are put into"* – EMMRG-01

Applying the psychological framework of ego depletion may explain the mechanism behind the cumulative nature of moral distress as described by Bradshaw and colleagues and EMMRG participants. If the self-regulation demands for exerting control over one's thoughts, emotions, and behaviours are overwhelmed after experiencing a blocked moral dilemma and surpass an individual's self-regulation resources, then it follows that they are likely to experience ego depletion. EMMRG-07 describes her experience with moral distress as one of depletion and exertion "You are a cross between feeling weak and exhausted". However, ego depletion may happen over a long period of time with each successive blocked moral dilemma and encounter with moral distress making aggregate demands on the self-regulation resources, leading to increasingly negative impacts of moral distress as an individual's ego becomes progressively depleted as suggested by moral residue and the crescendo effect (Epstein & Hamric, 2009). Further research is necessary to investigate the potential relationship between the process of ego depletion and moral distress to determine its feasibility as a mechanism.

4.2.2 Moral Crisis State

Ego depletion as the mechanism for the progression of moral distress is also supported by Bradshaw and colleagues' finding of the existence of a moral distress crisis state. Bradshaw and colleagues draw upon the stress literature in psychology which finds that cumulative distress involves a loopback effect which indicates that unresolved stressors and/or negative experiences with a distress resolution process place an individual in a crisis state. When discussing moral distress, Bradshaw and colleagues utilize a definition of a crisis state from the psychology literature "a period during which

individuals no longer have the resources, both internal and external, to deal with a stressful situation" (2010, p. 72). They found that CF nurses who experience multiple negative moral impact phase outcomes and moral distress from encountering subsequent moral dilemmas were predisposed to entering a crisis state. They observed that these nurses found it increasingly difficult to access "their resources and personal reserves to deal with unresolved dilemmas or new moral dilemmas" (Bradshaw, et al., 2010, p. 72). While Bradshaw and colleagues do not outline terminology for this condition, in this thesis I use the term 'moral crisis state' when the crisis state is specifically related to moral distress. They found that the moral crisis state was most likely to develop when an individual military HCP felt a sense of responsibility and had pre-existing unresolved moral distress from other incidents. When military HCP participants reached this point of moral crisis they felt that unless action occurred "the repercussions would be so great that they would lose themselves [and/or] do something unthinkable" (Bradshaw, et al., 2010, p. 125). This was supported by EMMRG participants who encountered blocked MACs. EMMRG-07 discussed her decision to no longer work in the deployed context and described her disappointment with this choice, but indicated feeling that it was necessary to prevent significant personal damage:

> *"The reason I got out was because I knew I couldn't deploy anymore and it was difficult {emotional} because it was the thing that I was really good at… I'm proud of the time I did, but it was a hard pill to swallow… Because I really think that if I had to deploy again, um, I think I would be done"* – EMMRG-07

> *"I wasn't able to do it anymore. I kind of think I's like when you're in your early 20s and…you can be hung over or not hung over the next day and then you can go back and do it again on the Saturday night… I don't want to feel like that anymore… I guess I know the answer but I don't. I just think I have had too many"* – EMMRG-07

EMMRG-07 expresses how the experience of encountering moral dilemmas and barriers to her MAC were increasingly damaging to her health and wellbeing. She explains feeling unable to continuously cope with the distress she experienced as a result of encountering moral dilemmas. EMMRG-07 describes her experiences with moral distress as cumulatively affecting and progressively damaging to her personal wellbeing "at some point you are just really bitter and twisted".

This crisis state is also supported by the moral distress nursing literature with researchers finding that continuous moral distress leads to HCPs becoming 'psychologically wounded' beyond typical moral distress presentations (Corley, 2002, p. 645). Litz et al supports this conclusion for the military population as well, finding that service members who are unable to resolve their moral distress often experience "lingering psychological distress" (2009, p. 698). Fry et al also find that military nurses who experience 'chronic reactive moral distress' often have symptoms similar to burn-out, a connection also established in civilian HCP (2002, p. 376). Findings from both military and civilian HCPs indicate that ongoing or chronic moral distress can eventually lead to psychological symptoms including resentment, sorrow, loss of self-worth, embarrassment, shame, helplessness, frustration, anger, misery, grief, and powerlessness as well as eventually psychopathology and mental illness (Corley, 2002, p. 642; McCormack, 2013, p. 114; DeVillers & DeVon, 2012, p. 590; Fry, et al., 2002, p. 375).

The existence of a moral crisis state is also supported by the literature in philosophy, but involves a distinctly moral element in addition to typical conceptions of a crisis state. Hursthouse finds that individuals who experience a blocked MAC "must

engage in an act they do not choose and that is truly terrible" (1999, p. 77). Some

individuals may suffer so profoundly when encountering a blocked moral dilemma that

their life becomes "marred or ruined" (Hursthouse, 1999, p. 77). Tessman believes that

this occurs when one is facing the 'worst sorts' of bad moral luck (2005, p. 28).

Oppressed contexts tend to produce systemic bad moral luck, regardless of whether or not

an individual strives to act virtuously, and are more likely to cause blocked moral

dilemmas which increases the likelihood of experiencing personal 'psychic damage'

(Tessman, 2005, p. 37). Over time a person's belief in their integrity may become

compromised, leading to an irreversibly altered sense of self (Webster & Baylis, 2000;

McCarthy & Deady, 2008, p. 257). Card also finds that those who are morally damaged

because of bad moral luck progressively develop 'damaged character traits' as survival

mechanisms as moral damage is not only inflicted on an individual, but reinforced as they

continue to exist in a context of systemic bad moral luck (Tessman, 2005, p. 19-23).

Tessman finds that this psychic damage interferes with flourishing and eudaemonia and

contributes "not to an agent's well-being, but their distress" (2005, p. 28). Eventually, a

person may begin to feel that their character is not virtuous and that they are no longer a

good person (Tessman, 2005, p. 37). These descriptions of progressive and severe pain

resulting from a blocked moral dilemma are also supported by the literature on moral

residue which finds that the experience of moral distress can 'sear the heart', "people who

have lived through serious moral compromise carry the remnants of the experience for

many years if not a lifetime" (DeVillers & DeVon, 2012, p. 590). These descriptions from

philosophy indicate that if unresolved, moral distress can be an ongoing and cumulatively

damaging experience that may ultimately lead to an extensively painful state for the morally distressed person and prevent their flourishing.

These observations and findings from the analysis of Bradshaw and colleagues' military HCP participants, EMMRG participant themes, and the literature findings in philosophy and psychology indicate support for the concept of a 'moral crisis state'. The moral crisis state also fits with the conceptualization of ego depletion as the mechanism for moral distress progression. Individuals who are experiencing a moral crisis state may be experiencing chronic depletion of self-regulation resources as a result of persistent moral stress and distress due to bad moral luck in the oppressed context. These findings imply that a moral crisis state may represent either advanced, extensive ego depletion or perhaps even the ego depleted – more research is required to investigate this possible interpretation as well as its connection to the specific phenomenon of moral injury.

4.2.3 Implications for the Moral Distress Model

Some aspects of Bradshaw and colleagues' model may be altered to more clearly reflect the insights of EMMRG participants and the multidisciplinary literature review regarding the progressive and cumulative nature of moral distress. The process of ego depletion may act as the mechanism of cumulative moral distress; however, if this connection is established in the future, it is unclear how this process could be best represented in the model itself as it is largely embedded and conceptual. Yet, it may be possible to represent the accumulation of moral distress itself and the implicit ego depletion process by incorporating the moral crisis state into the model to indicate progression from an initial moral distress experience. While more research is necessary to

establish these connections, this thesis argues for the inclusion of a moral crisis state into Bradshaw and colleagues' model as it would demonstrate the full extent of the impact of moral distress on military HCP by outlining the potential progression from the initial experience of moral distress to the eventual painful psychological and moral state described in the literature and by EMMRG participants.

4.3 Controllability – An Alternate Framework for the Resolution Process

While Bradshaw and colleagues include situational resolution and self-reflection in the model, the foundation for this conceptualization of these processes is based primarily on the study participant's experiences. However, incorporating a theoretical foundation from the fields of philosophy and psychology would strengthen the conceptualization of these resolution processes and thus their practical usefulness. This thesis explores the potential of basing the conceptualization of self-reflection and situational resolution on the philosophical and psychological concept of controllability. First, the nature of controllability will be outlined from both the philosophical and psychological perspectives and its potential connection to moral distress will be discussed. Then, alternative re-conceptualizations of self-reflection and situational resolution that are based on both a philosophical and psychological framework of controllability will be established.

4.3.1 Controllability in Philosophy and Psychology

In virtue ethics, the basis for responsibility or blameworthiness when encountering a blocked moral dilemma is dependent on controllability (Broadie, 1996). If it is within an individual's locus of control to act in a morally correct/virtuous way, then it is their

responsibility to do so; and, in doing so, one demonstrates a virtuous character which is required for eudaemonia or personal flourishing (Broadie, 1996). Aristotle recognizes that in some situations the concepts of the 'tragic dilemma' and 'incident luck' may indicate a shift in responsibility away from the individual since contextual factors that are outside a person's control may prevent them from acting in a way they consider moral (Gottlieb, 2009). Aristotle does not consider the individual experiencing bad luck as a result of context to be responsible or blameworthy for the unfavourable outcome of a moral dilemma (Gottlieb, 2009). Tessman agrees that controllability is a major factor in responsibility and furthers Aristotle's argument to consider the impact of systemic uncontrollability (2005). As discussed in section 1.4.3, oppressed contexts fundamentally shift some elements of a moral dilemma outside of one's locus of control and may force an individual to make a decision that they otherwise would never make (Tessman, 2005, p. 38). This systemic uncontrollability leads to a significantly increased likelihood of experiencing barriers to one's MAC; Tessman terms this systemic version of Aristotle's incident luck as 'bad moral luck', a term "characterizing the moral damage of the oppressed as a product of bad, constitutive, systemic moral luck . . . is meant to convey the notion of a different, more-complex relationship of responsibility for that damage" (Tessman, 2005, p. 38). Card agrees and states that it is necessary to consider an individual's context and moral luck "to determine whether it makes sense to hold an agent responsible" (Tessman, 2005, p. 19). As such, both virtue ethics and feminist ethics indicate that immediate and systemic controllability is a significant factor that must be

considered when evaluating an individual's responsibility for the outcome of a blocked moral dilemma, and the consequential moral distress.

Research in the field of adaptiveness in psychology also finds that controllability is essential in determining an individual's capacity to consistently cope with stressors so as to reduce distress (Kohn, et al., 2003). As discussed in section 1.3.2.5, adaptiveness is an amalgam of three different skills or abilities: judgement, determination, and self-control. Judgement is the ability to determine between controllable and uncontrollable factors, determination is the strength of will to act despite obstacles in situations that are deemed controllable, and self-control is the ability to respond passively in uncontrollable situations despite emotional arousal or social provocation (Kohn, et al., 2003). If an individual is able to employ these three skills, they will be able to evaluate the controllable and uncontrollable elements in a situation and act appropriately in a manner that will not result in the experience of stressors escalating to cause a person distress (Kohn, et al., 2003).

When applied specifically to moral stressors, moral luck and adaptiveness indicate the importance of considering controllability when conceptualizing the resolution process. If applying and understanding controllability in a given situation determines an individual's ability to cope with moral stressors so as to reduce moral distress, then it may be an essential component in the process of resolving moral distress. Bradshaw and colleagues find that "mechanisms of situational resolution and self-reflection were employed by the CF nurses that enabled them to move past the moral distress experience towards acceptance, reconciliation, self-protection, and the ability to cope with the

outcomes" (p. 67); however, the conceptual framework for the resolution practices and processes are not speculated on. This thesis argues for the potential of basing both steps of the resolution process, self-reflection and situational resolution, on the philosophical and psychological conceptual framework of evaluating controllability and autonomy when considering one's moral responsibility toward resolving military HCPs' moral distress.

4.3.2 Self-Reflection

Bradshaw and colleagues define self-reflection as an ongoing process that military HCPs use "to gain meaning and provide justification for their choices and the repercussions of those choices" (p. 67). While EMMRG participants supported the elements of this process as defined by Bradshaw and colleagues, a review of the literature indicates that this description of the process may be more comprehensive when aligned with the concept of controllability, moral responsibility, and established definitions and descriptions of the self-reflection process in the philosophy and psychology literature.

4.3.2.1 Self-Reflection and Philosophy

Many philosophical schools of thought have discussed the value of releasing attachment to the uncontrollable elements in one's life. Aristotle argued that practical wisdom, or the self-reflective attitude of ethical inquiry, was necessary to determine the virtuous action one is responsible to undertake one's MAC in light of controllable and uncontrollable contextual factors (Broadie, 1994, p. 5). Tessman finds that for individuals experiencing the pain of encountering a blocked MAC and moral distress, considering the

influence of context on controllability when determining one's moral responsibility is an

essential component of self-reflection:

> *There is one other disposition that seems to capture a quality that one must have in order to navigate the complexities of taking responsibility under conditions of systemic bad moral luck. It can be described as a willingness to engage in a self-reflective understanding (and perhaps acceptance) of the limitations on the moral health of a self under oppression, including the resistant self. This disposition helps one to not assign too much responsibility (to oneself or others) when it is not deserved. It helps one to say, "This is the best I (or she, or he) can do under the circumstances of bad luck." That is, it allows for a recognition that there are many equally acceptable answers to the question of how one ought to live, a question that will have no one right answer as long as it is applied not to some imagined ideal circumstances, but to the circumstances one finds oneself in, for when faced with no good choice, different virtuous agents may well act differently.* (Tessman, 2005, p. 31)

Tessman argues that it is necessary for an individual to reflect on the controllability of the

elements of a blocked moral dilemma. It is essential for a person to self-reflect and

consider which elements of a blocked moral dilemma were inside and outside their ability

to control and affect change on the situation – and to consider the influence of systemic

bad moral luck when doing so (Tessman, 2005, p. 31). Self-reflection allows an

individual to consider their extended context and appropriately assign responsibility to

oneself for only those elements of a situation which are inside their locus of control

(2005). In certain situations when assessing one's virtuosity, it may be necessary to

reconsider one's understanding and pre-existing conceptions of moral responsibility "to

develop and maintain integrity, we need to discover, assess, and sometimes make changes

to our values, traits, and capacities" (Card, 1996, p. 32). Aristotle supports this ongoing

questioning and shifting of one's moral worldview and argues for the importance of self-

oriented 'ethical inquiry', a reflective practice that is vital for eudaemonia "happiness

extends, then, just so far as contemplation does, and those to whom contemplation more fully belongs are more truly happy, not accidentally, but in virtue of the contemplation" (Broadie, 1994, p. 5; Curzer, 2012, p. 393).

4.3.2.2 Self-Reflection and Psychology

Since a blocked moral dilemma involves a barrier to one's MAC, military HCPs experiencing the resulting moral distress may inappropriately feel that they are morally responsible despite aspects of the moral dilemma being uncontrollable. Research in psychology indicates that it is important for an individual to understand and accept the uncontrollable elements of a challenging life event through self-reflection to achieve positive resolution. An argument for how self-reflection is necessary for the resolution of moral stress or distress is indirectly proposed by Kohlberg in the field of psychological moral development. As discussed in section 1.3.2.4, Kohlberg describes a staged approach to moral development that explains how individuals experience and adapt to moral challenges. When a person's pre-existing knowledge structures and worldviews regarding morality (moral schemas) are challenged, they are plunged into a state of disequilibrium and cognitive dissonance as they grapple with understanding and integrating the new moral challenge into their existing moral schemas (Kohlberg, 1981). Kohlberg argues that self-reflection allows a person to reconsider current schemas and alter them to fit the new information encountered in the moral dilemma (1981). Rest found that Kohlberg's self-reflection also involves integration of emotional aspect since advanced moral reasoning utilizes emotion to inform problem solving (Harding, 1985, p. 2). While Kohlberg does not discuss moral distress specifically, he finds that self-

reflection is a necessary step when encountering a blocked moral dilemma that challenges one's current schemas (1981). Chalmers, Dunngalvin, & Shorten expand on the Kohlbergian model and define this self-reflective ability as an individual's capacity to question and critically analyse experience. They argue that reflective thinking allows an individual to integrate uncertainty and complexity into a justifiable opinion for a judgement to be formed, which aligns with Tessman's definition and function of self-reflection based on controllability (Chalmers, Dunngalvin, & Shorten, 2011, p. 281; Tessman, 2005). The study of mindfulness practice in psychology also indicates that re-framing difficult situations allows for stress resolution, "being aware of what is arising without changing the experience, but rather changing the relationship to the experience" (Shapiro, Jazaieri, & Goldin, 2012, p. 505). Mindfulness theory is congruent with the open-minded introspective re-framing process of self-reflection as described by Kohlberg. Kohn's skill of judgement also supports the argument for self-reflection as it requires an individual to consider and "the ability to distinguish controllable situations that call for active coping from uncontrollable ones that are better handled passively" (Kohn, et al., 2003, p. 112). Kohn finds that judgment is necessary, but not sufficient for consistent adaptive response as "knowing what best to do or not to do does not guarantee adaptive response"; and further argues that the characteristic of self-control allows an individual to understand that an uncontrollable situation cannot be directly and actively remedied and accept that a passive coping style may be more effective (Kohn et al., 2003, p. 111).

4.3.2.3 Self-Reflection in EMMRG Participants

The different descriptions of a similar self-reflection phenomenon in the philosophy and psychology literature indicate that considering controllability is a significant factor for self-reflection. Tessman's self-reflection and Kohn's judgment may be understood as related to Kohlberg's self-reflection and re-evaluation of personal moral schemas defining an individual's understanding of moral responsibility and controllability. While the examination of the nuanced relationships between these individual concepts is beyond the scope of this thesis, together the descriptions of these phenomena indicate that the concept of controllability may be a useful framework for conceptualizing self-reflection and explaining how it can lead to either a positive of negative experience of the moral distress resolution process.

Controllability was described by EMMRG participants as an important aspect of encountering and resolving a blocked MAC. Participant EMMRG-15 described her experiences with a blocked moral dilemma as intrinsically related to controllability and indicates feeling 'haunted' which implies an unresolved perception of responsibility:

> *"It was just multiple things of, things that were so wrong that we, that I, had no control over – I think it was that that came back to haunt me"* – EMMRG-15

Practicing self-reflection, considering the influence of the controllable and uncontrollable extended context, and integrating it into understanding of morality may lead to an increased likelihood of positive resolution. If a military HCP can practice judgement to understand the influence of systemic bad moral luck into their moral schemas it may be easier to accept their lack of control of situational aspects in the deployed context, reconsider and alter their personal moral schemas, and more appropriately attribute

responsibility for a blocked MAC (Kohn, et al., 2003; Tessman, 2005; Kohlberg, 1981). This is supported by EMMRG participants who indicated that considering contextual controllability and accepting one's realistic limitations to affect change allowed them to better function when faced with a blocked MAC. EMMRG-12 implies that the considering her moral responsibility in a framework of controllability allowed her to achieve a positive resolution experience (section 3.3.4, p. 100).

Once these schemas are reconsidered, the individual may no longer need to actively cope with the uncontrollable and distressing aspects of the blocked moral dilemma. Kohn and colleagues finds that if a situation is deemed uncontrollable, it warrants being "handled passively" as opposed to controllable aspects which call for "active coping" (2003, p.112). Participant EMMRG-12 demonstrates how her personal self-reflective journaling facilitated her positive resolution experience:

> *"I did a lot of journaling, I found pens and paper, made the scenarios kind of, this is what happened today…this is how this happened. And then I disemboweled my feelings about it, once it was on paper, left it there."* – EMMRG-12

While consideration of controllability through self-reflection may increase the likelihood of a military HCP having a positive resolution experience, it is an active psychological process and thus inherently requires self-regulation (Kohn, et al., 2003; Baumeister, Vohs, & Tice, 2007). As established in section 1.1.1, the context of the deployed environment inherently places demands on a military HCP's ability to self-regulate as contextual stressors contribute to the depletion of self-regulation resources. Furthermore, individual military HCPs have varying levels of ego strength. Strengthening the 'ego muscle' to prevent depletion, bolstering self-regulation resources, and improving self-

reflection skills can be accomplished, but requires active practices such as mindfulness that deplete self-regulation resources (Irving, Dobkin, & Park, 2009). As such, both using and strengthening self-regulation abilities can be challenging for military HCPs in the deployed context. EMMRG participants indicated that the stressors in the deployed environment affected their ability to successfully self-reflect:

> *"You're totally in survival mode when you're there, right. The hours are so long the pace is so heavy, the work is so dirty, it's hot, whatever, and you just put your head down and you just do your job. I think it's when you get home and have some time to reflect and to try and sort it all out that… some of us don't feel very good about what happened"* – EMMRG-11

Since military HCPs working in the deployed context are exposed to a heightened number of stressors, allocating self-regulation resources to the process of self-reflection may be challenging, and in some circumstances perhaps impossible.

Disciplines in philosophy and psychology indicate that consideration of the controllability of the extended systemic context and its impact on a military HCP's moral responsibility may lead to a positive resolution experience. Examining and accepting the uncontrollable aspects of a blocked MAC may liberate psychological self-regulation resources previously allocated towards coping with moral distress and its negative personal consequences. As such, positive self-reflection experiences may contribute to the resolution of moral distress and prevent ego depletion. However, further practical research is necessary to establish the validity and usefulness of this self-reflection framework in the population of military HCPs, particularly given the often stressful nature of the deployed context.

4.3.3 Situational Resolution

While self-reflection involves understanding and accepting the uncontrollable elements in a situation to achieve resolution, both philosophy and psychology indicate that it is also necessary to act appropriately and to the full extent possible on the controllable elements of a blocked situation. Bradshaw and colleagues define the process of situational resolution as the first step in the resolution process that occurs when military HCPs struggle to understand their emotions, relationships, and ability to function as nurses and individuals (p. 67). EMMRG participants also found that they struggled with the aspects of Bradshaw and colleagues' situational resolution, but the literature on self-reflection indicates that the concept that Bradshaw and colleagues outline may be better described as a facet of the self-reflection process rather than an independent occurrence (3.3.3). Bradshaw and colleagues' description of military HCPs struggling to understand their emotions, relationships, and ability to function may fit better as an aspect of schema reconsideration as described by Kohlberg and Rest (1981; 1983). As such, this paper explores an alternate approach to situational resolution and argues for its reconceptualization based on the principle of controllability.

4.3.3.1 Situational Resolution and Philosophy

The philosophical literature indicates the importance and responsibility of the individual to act on controllable elements of a blocked moral dilemma. As discussed previously, moral responsibility is defined largely in feminist and virtue ethics as dependent on the controllability of a situation. Aristotelian virtue ethics states that by using practical wisdom to self-reflect, an individual can determine how to virtuously act on the aspects of a situation that are within their locus of control (Broadie, 1991, p. 5).

131

While many aspects may be outside of an individual's locus of control, it is considered one's responsibility to act on those elements in a moral dilemma that are within their control to affect change (Broadie, 1991). In this way self-reflection is integrally related to situational resolution as it is necessary for an individual to identify the controllable aspects upon which one is responsible to act (Curzer, 2012). The virtuous character uses self-reflection and acts on the controllable while the morally blameworthy does not act when they should and could (Broadie, 1991). Philosophers including Card, Hursthouse, and Tessman expand on this understanding of practical wisdom and self-reflection, arguing that certain contexts, such as the deployed context, create systemically bad moral luck where an increased number of situational elements are routinely removed from one's locus of control (1996, 1999, 2005; Litz et al., 2009). In these contexts where a military HCP's moral autonomy is regularly challenged, it can be more difficult to identify which elements of a situation are within one's locus of control and their thus responsibility to act upon, especially given the impact of the negative consequences of moral damage and moral distress (Card, 1996; Tessman, 2005).

However, Williams and Nagel find that some individuals through self-reflection on the extended context and the influence of systemic bad moral luck, are able to identify subtle elements of a situation even where they may have indirect control and accept responsibility to further act after a tragic dilemma, or blocked MAC, has resulted in moral distress (1976, p. 125; Tessman, 2005). They find that individuals often experience a sense of some responsibility for their actions, even if they did not have complete control in a situation, and express "a desire to make any reparations that are possible" (Tessman,

2005 p. 28). In situations where there are few if any controllable elements, Williams and Nagel finds that "only the desire to make reparation remains, with the painful consciousness that nothing can be done about it; some other action, perhaps less directed to the victims may come to express this" (1976, p. 125). They find that individuals may act to express regret by taking on a sense of indirect responsibility and "may act in some way which he hopes will constitute or at least symbolise some kind of recompense or restitution" (Nagel & Williams, 1976, p. 124). Individuals who commit a regrettable action due to the influence of moral luck and uncontrollable contextual factors may feel a desire and perhaps responsibility to act in a way that might have 'some reparative significance' (Nagel & Williams, 1976, p. 125).

4.3.3.2 Situational Resolution and Psychology

This conceptualization of situational resolution as addressing and acting to the best of one's abilities on the controllable aspects of a blocked moral dilemma is also supported by literature in psychology. Stress and coping research finds that acting to resolve the controllable aspects of a challenging life event are necessary if a person is to consistently cope with stressors and reduce or resolve distress (Kohn, et al., 2003; Baumeister, Vohs, & Tice, 2007). Adaptiveness research requires the characteristic of determination as the strength to "act in the face of obstacles in situations judged controllable" (Kohn, et al., 2003, p. 112). He argues that determination is key when addressing controllable stressors as even when an active rather than passive response is appropriate, overcoming challenges such as personal inertia and social opposition can be difficult (Kohn, et al., 2003, p. 112). As such, determination is an active process and thus

requires self-regulation resources and thus contributes to ego depletion (Baumeister, Faber, & Wallace, 1999).

Due to the systemic bad moral luck present in contexts like to deployed environment, military HCP are more likely to encounter frequent barriers to their MAC, and thus moral distress that must be resolved to prevent furthering ego depletion. The increased number of blocked moral dilemmas necessitates the requirement for resolution and moral processing which increases the requirement for self-reflection and moral schema evaluation and reconsideration, which depletes self-regulation resources (Gao, et al., 2014; Tessman, 2005; Litz, et al., 2009; Kohlberg, 1981). Furthermore, the deployed environment also includes a prevalence of other contextual stressors that require coping and thus tax self-regulation resources (Gibbons, et al., 2013; Baumeister, Vohs, & Tice, 2007). In combination, the deployed environment can make it more difficult to allocate self-regulation resources to the active cognitive skills required for adaptiveness, including determination to act on the controllable elements of a blocked moral dilemma, and also contributes to the further depletion of the ego and the risk of reaching a moral crisis state. Military HCPs who have developed skills of adaptiveness may be able to effectively utilize self-regulation resources in order to determine how to best act on the controllable elements of a situation, despite encountering obstacles. However, for military HCPs experiencing ego depletion in the deployed context, acting with determination on the controllable aspects of a situation to resolve moral distress can be difficult or impossible.

4.3.3.3 Situational Resolution in EMMRG Participants

EMMRG participants not only supported the need for determination to act on the controllable elements of the blocked moral dilemma, but also revealed a desire and tendency to act on controllable elements that are beyond the immediate situational context. EMMRG participants described feeling a strong urge to 'make things right' and actively seek resolution of controllable aspects of a moral dilemma after encountering their blocked ethical dilemma. EMMRG-04 portrays her situational resolution experiences with encountering blocked MACs (section 3.3.3, p. 95). After encountering a blocked MAC and moral distress, she describes self-reflecting on the moral dilemma and considering ways in which she could act in the extended context on the controllable aspects of the moral dilemma she encountered. She depicts this as a struggle, but describes using willpower and persistence to overcome obstacles to resolve the controllable contextual factors. This demonstrates how EMMRG participants utilize the skill of determination to resolve the negative consequences of moral distress.

EMMRG participants often struggled to act and remove the immediate barrier blocking their MAC; however, they were frequently unsuccessful because of uncontrollable factors due to systemic bad moral luck in the deployed context. Yet, participants often sought out means to take responsibility for controllable, but indirect elements of the moral dilemma. EMMRG participants sometimes attempted to change factors that would remove a barrier to future military HCPs' moral action choices and described finding resolution in this endeavour. After practicing self-reflection, EMMRG-04 uses determination to find a solution to an indirect, but controllable aspect of the moral dilemma she encountered:

> *"…in Medevac we didn't have disaster stores… That was terrible and at the time we were dealing with it and we were able to get what we could. But afterwards I created a standard operating procedure on how to set up medical stores, I got approval from Ottawa, we got the funding, it's all set up, you can Medevac 150 people with the stores set aside right now. So maybe I can't fix it for that day, but I can try to make it better for later. It helps me sleep at night once I do that."* – EMMRG-04

While unable to directly help the 'victims' of her blocked MAC, she acts to prevent the consequential tragic moral dilemma from happening again to other military HCPs and their patients (Nagel & Williams, 1976, p. 125). She acts with determination and discerns elements of the situation that were indirectly controllable. Several EMMRG participants described acting on indirect, less salient controllable aspects so as to remove either the immediate barrier they encountered or to proactively prevent help future military HCP from experiencing a blocked MAC. Another common route taken by EMMRG participants to accomplish this goal was by bringing up the issue with superiors and attempting to change policies or practices that they perceive lead them to experience the blocked moral dilemma. Participants described finding meaning in their struggle to protect others from feeling the moral distress they experienced. This indicates that some military HCPs consider moral luck and employ determination to address indirect, controllable elements in their extended as well as immediate context as a means of positively experiencing situational resolution and resolving their moral distress.

4.3.4 Implications for the Model

Despite this re-framing of the resolution process and Bradshaw and colleagues' conceptualization of self-reflection and situational resolution, this paper still finds support for the findings behind the concepts. As discussed in section 3.3.3 and 3.3.4, EMMRG

participants indicated support for Bradshaw and colleagues' definitions of self-reflection and situational resolution; military HCPs attempted to "gain meaning and provide justification for their choices and the repercussions of those choices" and "struggled to understand their emotions, relationships, and ability to function as nurses and individuals" (p. 67). However, by reconceptualising the resolution process to a framework based on controllability, Bradshaw and colleagues' definitions of self-reflection and situational resolution become inappropriate, despite their observed validity. The new framework based on controllability strives to place Bradshaw and colleagues' findings in a wider context informed by psychological research as was suggested in Bradshaw and colleagues' work. As such, the following potential definitions are suggested for the processes of self-reflection and situational resolution that are based on a framework depicting the influence of contextual controllability on moral responsibility in psychology and philosophy:

> *Self-reflection* – evaluating the influence of context on the controllability of elements in a moral dilemma when considering moral responsibility, accepting the consequences of the uncontrollable aspects, and responding passively
>
> *Situational resolution* – acting directly in the immediate context or indirectly in the extended context on the controllable elements of a blocked moral dilemma to the best of one's ability, despite obstacles

This thesis argues that military HCPs do struggle to understand their emotions, relationships, and personal/professional identity as well as gain meaning and justify their choices and associated repercussions; however, it advocates that the conceptualizations of

self-reflection and situational resolution be placed in a broader conceptualization of the resolution process as one based on contextual controllability. Further research is necessary to test the potential usefulness of the suggested refined definitions of the resolution process components.

4.3 Summary

Results from the analysis of EMMRG narratives verifies many aspects of Bradshaw and colleagues' model of military moral distress, while also indicating two areas that may benefit from refinement. First, the concept of ego depletion may be a useful if incorporated into the model as the mechanism by which moral stress progresses into moral distress. Analysis of EMMRG narratives indicates that the experience of moral distress may be cumulative if unresolved. Literature in psychology establishes the experience of moral distress as an active process that requires taxing self-regulation resources; which can lead to ego depletion. This indicates that moral distress can be cumulative unless self-regulation resources can be recovered. This cumulative nature is also supported by the philosophy literature which describes progressive moral damage for virtuous individuals due to the impact of systemic bad moral luck. The concept of a moral crisis state is also supported by EMMRG narrative results and the psychology literature as the ego depleted or taxed beyond depletion. As such, inclusion of a moral crisis state into Bradshaw and colleagues' model may be beneficial in conveying the cumulative progression of unresolved moral distress and indicate the implicit mechanism of ego depletion.

Second, the resolution process may benefit if reconceptualised based on a framework of individual processing contextual controllability and moral responsibility. EMMRG participants depict the consideration of controllable and uncontrollable elements in the immediate moral dilemma and extended deployed context as essential to the moral distress resolution process. Literature in psychology indicates that self-

reflection for military HCPs may be best characterized as intentional examination of the contextual controllability of the aspects of a moral dilemma. Philosophy indicates that the influence of systemic bad moral luck in the deployed context should also be considered and adaptiveness research demonstrates that acceptance of uncontrollable elements is essential for positive resolution. Moreover, situational resolution can be re-framed as acting with determination to address the immediate and perhaps extended aspects of a moral dilemma that are within a military HCP's locus of control. Together, self-reflection and situational resolution represent a dynamic process that is not linear but complex and dynamic.

Chapter 5 – Conclusion

This thesis discussed Canadian Forces military health care professional's experiences with moral distress in the deployed environment, from encountering a blocked moral dilemma to attempting its resolution. The progression of this experience was analysed in EMMRG participants and compared to the most recent model of military moral distress that outlines this process, designed by Bradshaw and colleagues (2010). While this thesis argues for the refinement of certain aspects of the model, the usefulness and importance of Bradshaw and colleague's observations and findings are recognized. Analysis of EMMRG participant's experiences supported many features and steps of the model, particularly the influence at all stages of the environment and context, while also indicating some challenges. Two major thematic elements that EMMRG participants indicate as important for their moral distress experiences were the concept of controllability and responsibility as well as the cumulative impact of being unable to achieve satisfactory resolution. These challenges were then supported by research findings from the fields of psychology, philosophy, as well as the moral distress research in civilian HCP counterparts. The diverse literature review supports the challenges to the model from results of analysing EMMRG participant narratives and outlines alternate concepts and processes that may be useful when considering revisions to Bradshaw and colleagues' model. Together, analysis of EMMRG participant stories and the application of the diverse literature review indicated that two significant revisions to the model may be beneficial: representing and integrating the cumulative experience of moral distress, and re-conceptualization of the resolution process based on considering contextual

controllability on responsibility. In making these revisions, the experience of moral distress for EMMRG military HCPs would be better reflected in the model.

When considering Bradshaw and colleagues' findings of the cumulative nature of moral distress, the psychological concept of ego depletion may act as the mechanism of moral distress progression – from moral stress to moral distress to a moral crisis state. EMMRG military HCPs described varying degrees of personal impact after encountering a blocked MAC. Analysis of these narratives indicated that unresolved moral distress may have an increasingly negative effect on an individual if they are unable to experience a positive and complete resolution of the experience and their moral distress, as the model suggests (Bradshaw, et al., 2010). However, EMMRG participant's stories also indicated that the impact of moral distress was cumulative in a way not entirely captured by the model. While the model by Bradshaw and colleagues incorporates aspects of moral distress as cumulative by indicating that experience impacts perceptions and future encounters with morally challenging situations, EMMRG participants indicated that the experience of moral distress itself was also progressively cumulative. The field of stress research in psychology also indicates that the experience of stress and distress progress cumulatively due to the characteristics of the ego's exertion of psychological coping and self-regulation resources acting like a muscle that can become overtaxed and depleted. Since moral stressors also tax these ego resources, it may be beneficial to consider ego depletion as a possible mechanism for the cumulative progression of moral distress. Additionally, the degree to which the controllability of the context, or the moral luck of the elements in a situation, should also be investigated in future research as these

uncontrollable stressors may potentially impact the cumulative progression. While ego depletion as a mechanism of moral distress progression may not be directly incorporated into the model, EMMRG participant's narratives and research in psychology indicates that the cumulative impact of moral distress has significant consequences for an individual beyond changes in their perceptions of external relationships (team, chain-of-command, and organization) and future moral dilemmas. Analysis of EMMRG stories indicated that having a negative resolution experience directly affected their experience of the personal consequences of moral distress in a substantial way. These results indicate a challenge to Bradshaw and colleagues' model to consider refinements that capture the progression of this cumulative personal experience and its impact on the individual. For a military HCP, the demands of coping with and resolving moral distress in the deployed context that is fraught with bad moral luck could place significant burdens on a military HCP's self-regulation resources and lead to ego depletion. The process of ego depletion may provide insight into the prevalence of mental health issues often described in the nursing literature regarding individuals struggling with moral distress.

Furthermore, it may be beneficial to reframe the resolution process based on the philosophical and psychological understanding of contextual controllability and moral responsibility. EMMRG military HCPs depicted the influence of the contextual elements of a challenging moral dilemma and identified both controllable and uncontrollable aspects of encountering a blocked MAC. Participants described a self-reflective process of considering the controllability of contextual aspects and indicated this practice as affecting their understanding of responsibility as the military HCPs attempted moral

distress resolution. Participants indicated that acting as fully as possible on controllable contextual aspects while accepting and passively coping with uncontrollable aspects was crucial for understanding one's personal responsibility in the situation as well as for the resolution of moral distress.

The consideration of controllability is also found to be essential for resolution of moral distress in both the fields of philosophy and psychology. Contemporary virtue ethicists explain that considering one's moral luck in both the immediate and extended context are necessary when determining responsibility for a blocked MAC in a morally challenging situation. Research in psychology concurs, finding that considering controllability is essential to adaptiveness and determining an individual's capability to reduce distress; where judgement is used to distinguish controllable from uncontrollable aspects, determination is the strength of will to act on the controllable, and self-control means responding passively in uncontrollable situations. This result, as discerned from EMMRG participant narratives and supported by the literature review, indicates that understanding contextual controllability is crucial for the resolution of moral distress. While the features of Bradshaw and colleagues' resolution process, self-reflection and situational resolution, are supported by EMMRG participant's experiences, re-conceptualizing these steps based on a framework of controllability may be beneficial for understanding moral distress resolution in military HCPs. Conceptualizing self-reflection as resolving the uncontrollable elements of a situation and situational resolution as addressing the controllable aspects, allows for the immediate and extended, systemic context to be taken into consideration when discussing military HCP moral distress

resolution. This allows for the influence of elements such as bad moral luck to be factored into the model which better reflects the experiences of EMMRG military HCPs.

The results of this thesis indicate that further investigation of research from a variety of fields and disciplines may be beneficial when considering and modeling the moral distress experiences of military HCPs. As such, some research outlining the comparability and connections between terms and phenomena is essential; specifically, further research comparing the experiences of moral injury and moral distress and outlining the relationship between these two experiences from military HCPs perspectives is essential to progressing the discussion of these challenges. While the literature from psychology, philosophy, and civilian nursing suggest potential avenues of refinement for the model, research directly examining both of these suggestions in the population of military HCPs is required. Further investigation and application of findings from the field of moral psychology may be useful as it integrates both psychological and philosophical thought when discussing moral reasoning, action, and responsibility. This interdisciplinary approach to the model is supported by Bradshaw and colleagues and the analysis of EMMRG participant's narratives which indicated that incorporating aspects of psychology's stress modeling and philosophy's consideration of context and moral responsibility to be useful and reflective of military HCPs' experiences with moral distress. Consideration of other models that incorporate the cumulative and progressive nature of moral distress as well as the relationships between the personal, immediate, and extended context may also be helpful in understanding the full impact and consequences of experience moral distress while working in an organization such as the military.

Further application and investigation of models and potential mechanisms in psychology that describe the process of moving from a stressed to distressed state, such as ego depletion, would be beneficial if directly examined in the military HCP population.

Furthermore, research analysing both positive and negative resolution experiences with moral distress may be useful in refining or reconceptualising the resolution process is necessary. While this thesis discussed revising the resolution process to be based on the concepts of controllability and responsibility, further research is necessary that directly explores the resolution process specifically in the population of military HCPs so as to understand how positive or negative resolution occurs for this population. In addition, inquiry into the phenomenon and experience of moral distress in military HCPs must be expanded to consider all HCP roles present in the military organization. Direct testing of the model using a broader population than the military nursing population would potentially point to additional refinements required to strengthen Bradshaw and colleagues' model further.

Understanding the process of moral distress in military HCPs is essential for the military organization. While the most salient and easily observable aspects of the moral distress experience may be the initial encounter and distress, considering the more subtle aspects and incorporating them into the model is essential for capturing and reflecting the entire moral distress experience. Bradshaw and colleagues bring these subtle elements into their model of the military moral distress experience by including the dynamic influence of the deployed context as well as a resolution process that can be experienced positively or negatively and impacts future worldviews and perceptions. Results from the

146

analysis of EMMRG participant's narratives indicate that other subtle aspects of the moral distress experience may also be beneficial if incorporated into the model. The cumulative and progressive nature of moral distress, potentially through the mechanism of ego depletion, should be incorporated as it conveys the full extent of the impact of experiencing unresolved moral distress. Furthermore, the resolution process should incorporate consideration of immediate and extended contextual controllability which influences perceptions of personal responsibility for a blocked MAC and may be a more reflective framework for conceptualizing the resolution process. These suggested refinements to Bradshaw and colleagues' model may make it more reflective of the moral distress experience for military HCPs. Moral distress and the related phenomenon of moral injury continue to be significant challenges for military HCPs, both for the individuals and the military as a whole. By continuing to examine and refine our understanding of the entire moral distress experience in this military population, greater comprehension of the struggles of both military HCP and the military organization will be reached. Such comprehension is essential to improve the health and wellbeing of deployed military HCPs as well as the effectiveness of the military organization as a whole.

Bibliography

Adler, A. B., & Castro, C. A. (2013). An Occupational Mental Health Model for the Military. *Military Behavioral Health*, 41-51.

Austin, W. (2012). Moral Distress and the Contemporary Plight of Health Professionals. *HEC Forum*, 27-38.

Baumeister, R. F., Faber, J. E., & Wallace, H. M. (1999). Coping and ego depletion: Recovery after the coping process. In C. R. Snyder, *Coping: The psychology of what works* (pp. 50-69). Oxford: University Press.

Baumeister, R. F., Gailliot, M., Nathan, D. C., & Oaten, M. (2006). Self-Regulation and Personality: How Interventions Increase Regulatory Success, and How Depletion Moderates the Effects of Traits on Behavior. *Journal of Personality*, 1773-1801.

Baumeister, R. F., Vohs, K. D., & Tice, D. M. (2007). The Strength Model of Self-Control. *Current Directions in Psychological Science*, 351-355.

Bradshaw, C. T., Brajtman, S., Cragg, B., & Higuchi, K. (2010). Canadian forces military nursing officers and moral distress: A grounded theory approach. *(Unpublished master's thesis for master's degree).* Ottawa, Ontario, Canada: University of Ottawa.

Broadie, S. (1991). *Ethics with Aristotle.* New York: Oxford University Press.

Card, C. (1996). *The Unnatural Lottery: Character and Moral Luck.* Philadelphia: Temple University Press.

Chalmers, P., Dunngalvin, A., & Shorten, G. (2011). Reflective ability and moral reasoning in final year medical students: A semi-qualitative cohort study. *Medical Teacher*, 281-289.

Corley, M. C. (2002). Nurse Moral Distress: A Proposed Theory and Research Agenda. *Nursing Ethics*, 636-650.

Cummings, E. M., Greene, A., & Karraker, K. H. (1991). *Life-span Developmental Psychology: Perspectives on Stress and Coping.* Psychology Press.

Curzer, H. (2012). *Aristotle and the virtues.* New York: Oxford University Press.

Davis, S., Schrader, V., & Belcheir, M. J. (2012). Influencers of ethical beliefs and the impact on moral distress and conscientious objection. *Nursing Ethics*, 738-749.

De Villers, M. J., & DeVon, H. A. (2012). Moral distress and avoidance behavior in nurses working in critical care and noncritical care units. *Nursing Ethics*, 589-603.

Dombo, E. A., Gray, C., & Early, B. P. (2013). The Trauma of Moral Injury: Beyond the Battlefield. *Journal of Reltion & Spirituality in Social Work: Social Thought*, 197-210.

Epstein, E. G., & Hamric, A. B. (2009). Moral Distress, Moral Residue, and the Crescendo Effect. *Journal of Clinical Ethics*, 330-342.

Fernandez-Parsons, R., Rodriguez, L., & Goyal, D. (2013). Moral Distress in Emergency Nurses. *Journal of Emergency Nursing*, 547-552.

Fry, S. T., Harvey, R. M., Hurley, A. C., & Foley, B. J. (2002). Development of a Model of Moral Distress in Military Nursing. *Nursing Ethics*, 373-387.

Gao, H., Zhang, Y., Wang, F., Xu, Y., Hong, Y.-Y., & Jiang, J. (2014). Regret Causes Ego-Depletion and Finding Benefits in the Regrettable Events Alleviates Ego-Depletion. *The Journal of General Psychology*, 169-206.

Gibbons, S. W., Schafer, M., Hickling, E. J., & Ramsey, G. (2013). How Do Deployed Health Care Providers Experience Moral Injury. *Narative Inquiry in Bioethics*, 247-259.

Gottlieb, P. (2009). *Virtue of Aristotle's Ethics.* New York: Cambridge University Press.

Gustafsson, G., Eriksson, S., Strandberg, G., & Norberg, A. (2010). Burnout and perceptions of conscience among health care personnel: A pilot study. *Nursing Ethics*, 23-38.

Hagger, M. S., Wood, C., Stiff, C., & Chatzisarantis, N. (2010). Ego Depletion and the Strength Model of Self-Control: A Meta-Analysis. *Psychological Bulletin*, 495-525.

Hall, J., & Fincham, F. (2005). Self-forgiveness: The stepchild of forgiveness research. *Journal of Social and Clinical Psychology*, 621-637.

Harding, C. (1985). *Moral Dilemmas: Philosophical and Psychological Issues in the Development of Moral Reasoning.* Chicago: Precedent Publishing Inc.

Hursthouse, R. (1999). *On virtue ethics.* New York: Oxford University Press.

Irving, J. A., Dobkin, P. L., & Park, J. (2009). Cultivating mindfulness in health care professionals: A review of empirical studies in mindfulness-based stress reduction. *Complementary Therapies in Clinical Practice*, 61-66.

Jameton, A. (1984). *Nursing Practice: The ethical issues.* Englewood Cliffs, NJ: Prentice-Hall.

Jones, M., Fear, N. T., Greenberg, N., Jones, N., Hull, L., Hotopf, M., . . . Rona, R. J. (2008). Do medical services personnel who deployed to the Iraq war have worse mental health than other deployed personnel? *European Journal of Public Health*, 422-427.

Kohlberg, L. (1981). *Essays on moral development: Vol 1. The philosophy of moral development.* San Francisco: Harper and Row.

Kohn, P. M., O'Brien-Wood, C., Pickering, D., & Decicco, T. L. (2003). The Personal Functioning Inventory: A Reliable and Valid Measure of Adaptiveness in Coping. *Canadian Journal of Behavioural Science*, 111-123.

Litz, B. T., Stein, N., Delaney, E., Lebowitz, L., Nash, W. P., Silva, C., & Maguen, S. (2009). Moral injury and moral repair in war veterans: A preliminary model and intervention strategy. *Clinical Psychology Review*, 695-706.

Lutzen, K., & Kvist, B. E. (2012). Moral Distress: A Comparative Analysis of Theoretical Understandings and Inter-related Concepts. *HEC Forum*, 13-25.

Lutzen, K., Cronqvist, A., Magnusson, A., & Andersson, L. (2003). Moral Stress: Synthesis of a Concept. *Nursing Ethics*, 312-322.

McCarthy, J., & Deady, R. (2008). Moral Distress Reconsidered. *Nursing Ethics*, 254-262.

McCormack, L., & Joseph, S. (2013). Psychological growth in humanitarian aid personnel: reintegrating with family and community . *Communitym, Work & Family*, 147-163.

McCormack, L., Joseph, S., & Hagger, M. S. (2009). Sustaining a Positive Altruistic Identity in Humanitarian Aid Work: A Qualitative Case Study. *Traumatology*, 109-118.

Miles, M. B., & Huberman, A. M. (1994). *QUalitative data analysis: an expanded sourcebook.* Thousand Oaks: Sage Publications.

Nathaniel, A. K. (2006). Moral Reckoning in Nurses. *Western Journal of Nursing Research*, 419-438.

Nilsson, S., Sjöberg, M., Kallenberg, K., & Larsson, G. (2011). Moral Stress in International Humanitarian Aid and Rescue Operations: A Grounded Theory Study. *Ethics & Behavior*, 49-68.

Owen, R. P., & Wanzer, L. (2014). Compassion Fatigue in Military Healthcare Teams. *Archives of Psychiatric Nursing*, 2-9.

Redman, B. K., & Fry, S. T. (2000). Nurses' Ethical Conflicts: What Is Really Known About Them? *Nursing Ethics*, 360-366.

Rest, J. R. (1983). Morality. In J. Flavell, & E. (. Markman, *Carmichael's Manual of Child Psychology.* New Jersey: John Wiley & Sons.

Ridner, S. H. (2004). Psychological distress: concept analysis. *Nursing Theory and Concept Development of Analysis*, 536-545.

Sandelowski, M. (2000). Whatever Happened to Qualitative Description. *Research in Nursing & Health*, 334-340.

Scheick, D. M. (2011). Developing Self-Aware Mindfulness to Manage Countertransference in the Nurse-Client Relationship: An Evaluation and Developmental Study. *Journal of Professional Nursing*, 114-123.

Schmeichel, B. J., & Vohs, K. (2009). Self-Affirmation and Self-Control: Affirming Core Values Counteracts Ego Depletion. *Journal of Personality and Social Psychology*, 770-782.

Schwartz, L., Sinding, C., Hunt, M., Elit, L., Redwood-Campbell, L., Adelson, N., . . . DeLaat, S. (2010). Ethics in Humanitarian Aid Word: Learning From the Narratives of Humanitarian Health Workers. *AJOB Primary Research*, 45-54.

Shapiro, S. L., Jazaieri, H., & Goldin, P. R. (2012). 2012. *Mindfulness-based stress reduction effects on moral reasoning and decision making*, 504-515.

Sheikh, S., & Janoff-Bulman, R. (2010). The "Shoulds" and "Should Nots" of Moral Emotions: A Self-Regulatory Perspective on Shame and Guilt. *Personality and Social Psychology Bulletin*, 213-224.

Simmons, A., & Yoder, L. (2013). Military Resilience: A Concept Analysis. *Nursing Forum*, 17-25.

Statman, D. (1993). *Moral Luck.* New York: New York Press.

Stewart, D. W. (2009). Casualties of war: Compassion fatigue and health care providers. *MEDSURG Nursing*, 91-94.

Tessman, L. (2005). *Burdened virtues: virtue ethics for liberatory struggles.* New York: Oxford.

Vargas, A. F., Hanson, T., Kraus, D., Drescher, K., & Foy, D. (2013). Moral Injury Themes in Combat Veterans' Narrative Responses From the National Vietnam Veterans' Readjustment Study. *Traumatology*, 243-250.

Webster, G. C., & Baylis, F. (2000). Moral residue. In S. B. Rubin, & L. Zoloth, *Margin of Error: The ethics of mistakes in the practice of medicine.* Hagerstown: MD: University Publishing.

Wilkinson, J. M. (1987). Moral Distress in Nursing Practice. *Nursing Forum*, 16-29.

Willams, B. A., & Nagel, T. (1976). Moral Luck. *The Aristotelian Society*, 115-151.

Wilson, M. A., Goettemoeller, D. M., Bevan, N. A., & McCord, J. M. (2013). Moral distress: levels, coping and preferred interventions in critical care and transitional care nurses. *Journal of Clinical Nursing*, 1455-1466.

Xu, H., Begue, L., & Bushman, B. J. (2012). Too fatigued to care: Ego depletion, guilt, and prosocial behavior. *Journal of Experimental Social Psychology*, 1183-1186.

Zuzelo, P. R. (2007). Exploring the Moral Distress of Registered Nurses. *Nursing Ethics*, 344-359.