The Impact of Moral Exemplar Training on Moral Judgment and Decision-making in an Operational Context

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Canada

Abstract

The changing battle space is significantly impacting the Canadian Forces' (CF) operational concept. The moral domain has been identified as an increasingly important part of this. More than ever, equipping CF members at all ranks with the most effective means to make moral decisions in operations and to resolve moral and ethical dilemmas that arise is a critical priority.

This study examined the impact of two different forms of moral instruction on moral reasoning discussed in the literature, namely principle-based and character-based education (Narvaez, 2006). Although ethics instruction has often involved description of formal ethical principles, there is a growing recognition in both the academic and the military domain that moral education should consider a virtue or character-based approach.

Reserve force military personnel (n = 106) were recruited to participate in this study. Participants first filled in their demographic information and answered the Moral Identity questionnaire. They then read about a dilemma and answered questions measuring their moral judgement and ratings of the dilemmas. Participants were then given either principle-based or character-based moral instruction and answered questions assessing the relevance, comprehension and applicability to real life. Participants read the second dilemma and answered similar questions as the first. They participated in a focus group to understand what factors would influence a soldier's moral and ethical decision-making in an operational context.

Results showed the type of moral instruction did not have an impact on participants' moral reasoning ability. Participants rated the principle-based instruction to be significantly more relevant to them personally, but it held their attention significantly less and was less interesting than the character-based instruction. There was a correlation that replicated previous work from Aquino and Reed (2002) indicating participants who strongly internalized their moral identity showed higher consistency in their moral reasoning for one dilemma and both dilemmas combined. The focus group analysis assessed the factors that participants considered while making a moral and ethical decision, including CF organizational culture, self-identity, and national culture.

Possible theoretical accounts of these findings, lessons learned and future research are discussed.

Résumé

L'espace de combat changeant a un impact important sur le concept opérationnel des Forces canadiennes (FC). Le champ de la morale jouerait un rôle de plus en plus important à cet égard. Plus que jamais, il est essentiel de donner aux membres des FC de tous grades les moyens les plus efficaces de prendre des décisions morales pendant les opérations et de résoudre les dilemmes moraux et éthiques qui se présentent.

Cette étude porte sur l'impact de deux formes différentes d'instruction morale abordées dans la littérature sur le raisonnement moral, soit l'éducation fondée sur les principes et l'éducation fondée sur les modèles (Narvaez, 2006). Bien que l'instruction éthique comporte souvent une description de principes éthiques formels, on reconnaît de plus en plus, dans les domaines tant scolaire que militaire, que l'éducation morale devrait comprendre une approche fondée sur la vertu ou les modèles.

Des militaires des forces de réserve ont été recrutés (n = 106) pour participer à cette étude. Les participants ont d'abord fourni les données démographiques les concernant puis ont répondu à un questionnaire d'identité morale. Ils ont ensuite lu un texte décrivant un dilemme et ont répondu à des questions visant à mesurer leur jugement moral et leur appréciation des dilemmes. Les participants ont ensuite reçu une instruction morale fondée sur les principes ou fondée sur les modèles, puis ont répondu à des questions visant à mesurer la pertinence, la compréhension et l'applicabilité à la vraie vie. Les participants ont lu un deuxième dilemme et ont répondu à des questions similaires aux premières. Ils ont pris part à un groupe de discussion pour comprendre quels facteurs influent sur les décisions morales et éthiques d'un soldat dans un contexte opérationnel.

Les résultats indiquent que le type d'instruction morale n'a pas eu d'impact sur la capacité de raisonnement moral des participants. Les participants ont jugé que l'instruction fondée sur les principes était beaucoup plus pertinente pour eux personnellement, mais elle a beaucoup moins retenu leur attention et était moins intéressante que l'instruction fondée sur les modèles. On a constaté une corrélation similaire à celle observée dans les travaux antérieurs de Aquino et Reed (2002), soit que les participants qui avaient fortement internalisé leur identité morale présentaient un raisonnement moral plus constant pour un même dilemme et pour les deux dilemmes combinés. L'analyse des discussions de groupe a permis d'évaluer les facteurs pris en compte par les participants pour prendre une décision morale et éthique, y compris la culture organisationnelle des FC, l'identité personnelle et la culture nationale.

Les explications théoriques possibles de ces résultats, les leçons apprises et les pistes de recherche future sont aussi abordées.

Executive Summary

The changing battle space is significantly impacting the Canadian Forces' (CF) operational concept. The moral domain has been identified as an increasingly important part of this. More than ever, equipping CF members at all ranks with the most effective means to make ethical decisions in operations and to resolve moral and ethical dilemmas that arise is a critical priority.

This study examined the impact of two different forms of moral instruction on moral reasoning discussed in the literature, namely principle-based and character-based education (Narvaez, 2006) Although each instructional approach has its own merits, these two approaches are very different. For example, rational moral education attempts to develop autonomous moral judgement and decision-making. Character-based approaches, on the other hand, may assist moral reasoning because they show inspirational people committing virtuous acts, perhaps inspiring others to behave similarly. However, there is a growing recognition in both the academic and the military domain that moral education should consider a virtue or character-based approach. This study explores the impact of these two forms of instruction on moral reasoning within operational contexts.

One hundred and six reserve force military personnel were recruited to participate in this study from an infantry regiment in southwestern Ontario. Participants provided demographic information before completing a measure assessing their own moral identity. Each participant then read a dilemma and answered questions measuring their moral judgement and ratings of the dilemmas. Participants then received either principle-based moral instruction or character-based moral instruction. The principle-based instruction presented and discussed 3 ethical principles. The character-based instruction presented a military person committing an unselfish act of courage, fighting his way through a crowd to rescue a couple from being beaten by the crowd. Following this, participants rated the relevancy, comprehension and applicability of each instruction method. Then, participants read a second dilemma and answered similar questions measuring their moral judgement and ratings of the dilemma. Lastly, participants took part in a focus group to understand the factors that influenced moral and ethical decision-making in an operational context.

Results showed that the type of moral instruction that participants received did not have an impact on their moral reasoning ability. Participants rated the principle-based instruction to be significantly more relevant to them personally, but it held their attention significantly less and was less interesting than the character-based instruction. Participants reasoned through and viewed the moral dilemmas somewhat differently, and the order in which dilemmas were completed did impact ratings. However, this study did replicate previous work from Aquino and Reed (2002) indicating that participants who strongly internalized their moral identity showed higher consistency in their moral reasoning for both dilemmas combined. The focus group analysis showed strong impacts on moral and ethical decision-making, most prominently including the CF organizational culture, self-identity, and national culture.

Possible theoretical accounts of these findings are explored and lessons learned, and future research are addressed. Better understanding of how soldiers make moral and ethical decisions will be critical as the CF moves toward increasingly dynamic, diverse and distributed operations.

Sommaire

L'espace de combat changeant a un impact important sur le concept opérationnel des Forces canadiennes (FC). Le champ de la morale jouerait un rôle de plus en plus important à cet égard. Plus que jamais, il est essentiel de donner aux membres des FC de tous grades les moyens les plus efficaces de prendre des décisions éthiques pendant les opérations et de résoudre les dilemmes moraux et éthiques qui se présentent.

Cette étude porte sur l'impact sur le raisonnement moral de deux formes différentes d'instruction morale abordées dans la littérature, soit l'éducation fondée sur les principes et l'éducation fondée sur les modèles (Narvaez, 2006). Ces deux approches, quoique très différentes, ont chacune leurs propres mérites. Par exemple, l'éducation morale rationnelle tente de développer le jugement moral autonome et la capacité de prendre des décisions. Les approches fondées sur les modèles, quant à elles, peuvent faciliter le jugement moral en montrant des personnes inspirantes qui commettent des actes vertueux, ce qui peut inciter les autres à faire de même. On reconnaît de plus en plus, dans les domaines tant scolaire que militaire, que l'éducation morale devrait comprendre une approche fondée sur la vertu ou les modèles. Cette étude examine l'impact de ces deux formes d'instruction sur le raisonnement moral dans un contexte opérationnel.

Cent six militaires des forces de réserve membres d'un régiment d'infanterie du Sud-Ouest de l'Ontario ont été recrutés pour participer à cette étude. Les participants ont fourni des données démographiques avant de répondre à un questionnaire mesurant leur identité morale. Chaque participant a ensuite lu un dilemme et a répondu à des questions visant à mesurer son jugement moral et son appréciation des dilemmes. Les participants ont ensuite reçu une instruction morale fondée sur les principes ou une instruction morale fondée sur les modèles. Dans le cadre de l'instruction fondée sur les principes, trois principes éthiques ont été présentés et ont fait l'objet de discussions. Dans le cadre de l'instruction fondée sur les modèles, on a présenté aux participants un militaire commettant un acte désintéressé de courage, en luttant pour se frayer un chemin dans une foule pour sauver un couple que la foule s'apprête à malmener. Par la suite, les participants ont donné leur évaluation de la pertinence, de la compréhension et de l'applicabilité de chaque méthode d'instruction. Les participants ont ensuite lu un deuxième dilemme et ont répondu à des questions similaires aux premières mesurant leur jugement moral et leur appréciation du dilemme. Pour finir, ils ont pris part à un groupe de discussion pour comprendre les facteurs qui influent sur les décisions morales et éthiques dans un contexte opérationnel.

Les résultats indiquent que le type d'instruction morale reçu par les participants n'a pas eu d'impact sur leur capacité de raisonnement moral. Les participants ont jugé que l'instruction fondée sur les principes était beaucoup plus pertinente pour eux personnellement, mais elle a beaucoup moins retenu leur attention et était moins intéressante que l'instruction fondée sur les modèles. Les participants raisonnaient et percevaient les dilemmes moraux quelque peu différemment, et l'ordre dans lequel ces dilemmes étaient présentés avait un impact sur leur appréciation. Toutefois, les résultats obtenus répliquaient ceux des travaux antérieurs de Aquino et Reed (2002), indiquant que les participants qui avaient fortement internalisé leur identité morale présentaient un raisonnement moral plus constant pour les deux dilemmes combinés. L'analyse des discussions de groupe a révélé de forts impacts sur les décisions morales et éthiques, principalement liés aux facteurs de la culture organisationnelle des FC, de l'identité personnelle et de la culture nationale.

Les explications théoriques possibles de ces résultats, les leçons apprises et les pistes de recherche future sont aussi abordées. Il sera essentiel pour les FC de mieux comprendre comment les soldats prennent des décisions morales et éthiques tandis que les opérations sont appelées à être de plus en plus dynamiques, diversifiées et disséminées.

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1 Introduction

The Canadian Forces' (CF) role on the international stage has substantially changed over the past decade. For most of the latter part of the twentieth century, the CF primarily participated in peacekeeping missions (e.g., the former Yugoslavia, Rwanda, etc.). These operations were typically restricted to non-coercive, diplomatic efforts to uphold a volatile peace agreement between two domestic warring factions. Rarely did CF personnel engage with lethal force. However, with its most recent deployment to southern Afghanistan (Kandahar province), the CF is involved in counterinsurgent operations on a regular basis. Unlike conventional state-to-state wars, these wars are fought among the people that both insurgent and counterinsurgent forces are trying to win over. Insurgents wage political war through military means, making it extremely difficult for opposing forces to win the hearts and minds of the people they are meant to protect.

With relatively few resources in comparison to conventional forces, insurgents use small arms, homemade bombs, and most recently improvised explosive devices (IEDs) as their primary means of offensive action. As Chief of Defence Staff Rick Hillier has explained, insurgents can be very effective in generating the perception of threat and destabilization because they often have the initiative, they move in and out of the population well, and they choose the targets and the fights (Stein & Lange, 2007). More significantly, they often work effectively to alienate opposing forces (e.g., NATO) from the local population, because these forces must give more emphasis to force protection and general security rather than to winning the hearts and minds of the local population. Although close interaction with the locals during reconstruction efforts bolsters the legitimacy of intervention, uncertainty around suicide bombers and IEDs necessitates military action that makes a population distrustful of the government and its representatives (Stein et al., 2007). Shooting at people who approach check points and convoys too quickly or too closely, patrolling at a distance in armoured vehicles, and operating out of large impenetrable fortifications have adverse strategic consequences that may tarnish the reputation of the CF.

It is not surprising then that the changing battle space is significantly impacting the CF's operational concept. Indeed, the moral domain has been identified as an increasingly important part of the battle space. As documented in the most recent *Land Operations 2021: Adaptive Dispersed Operations: The Force Employment Concept for Canada's Army of Tomorrow* (2007, p. 6),

> *"far more than in the past…conflict and its conduct will involve less emphasis on its physical and more on its informational and moral aspects. In short, the perceptual, psychological, and ideational will increasingly eclipse the physical as the chief battlegrounds of conflict."*

More than ever, equipping CF members at all ranks with the most effective means to make moral and ethical decisions in operations and to resolve moral and ethical dilemmas that may arise is a priority. In recent operations in Afghanistan, for example, in a country plagued by years of corruption and violence, it is vital that the CF adopt what Lt Col Hope has referred to as the "moral high ground" (recounted in *Fifteen Days: Stories of bravery, friendship, life and death from inside the new Canadian Army*, Blatchford, 2007). Indeed, to ensure the efficacy of Canada's Army of Tomorrow in insurgent warfare and operations other than war, "it is *necessary* that the army inculcates its ethos and its values of duty, integrity, discipline and honour" (emphasis added; Land Operations 2021, 2007, p.8). The critical questions revolve around how this ethical ethos can be best cultivated in order to maximize operational readiness and mission effectiveness at all levels of

the armed forces. Given the quick rotation of troops in and out of theatre today, how can moral instruction best equip CF personnel with the capacity to make effective moral and ethical decisions in operations? Given the narrow timeframe CF personnel have prior to deployment, are there methods of instruction that might be more effective? The following section investigates two different approaches to develop moral and ethical judgement and decision-making within a military context.

1.1   Approaches to Moral Education

According to Darcia Narvaez (2006), a prominent moral development researcher, there are two dominant educational approaches to promote moral development. These are rational moral approaches (principle or rule-based education), typically aligned with the philosophy of Immanuel Kant (*The Metaphysics of Morals*), and character-based education, typically aligned with the philosophy of Aristotle (*Nicomachean Ethics*). Despite each educational approach having its own merits, they are very different. For example, rational moral education attempts to develop autonomous moral judgement and decision-making. In principle-based learning, students essentially learn to resolve disputes and come to consensus primarily through appeals to the principle of justice (Narvaez, 2006). This form of learning has students take an impartial position on a moral issue in order to consider the welfare of all and act according to universal moral principles, rather than for self-interested principles (Frankena, 1973; cited in Narvaez, 2006). Through discussion of moral dilemmas, students are encouraged to consider their positions against higher levels of justice in an effort to advance their capacity for reflective reasoning (Narvaez, 2006). By emphasizing cognitive development in general, students are meant to change the structure of their thinking, but not necessarily their beliefs or values (Narvaez, 2006). A principle-based approach concerns itself with the right action in particular moral situations, and this action is justified and made legitimate on the basis of higher order rational principles. An example of this could be a higher order rational principle.

Ethical training programs that adopt a principle-based account of moral and ethical decision-making present a number of abstract principles designed to assist the decision maker when confronting tough moral situations. Principles based on the ideals of justice are intended to foster the capacity to do the right thing, regardless of the particularity of the circumstances. However, many scholars suggest that over reliance on a rational moral principle orientation presumes knowing what is right necessarily translates into doing what is right (Blasi, 2004, 2005; Walker, 2004). It goes without saying that students of morality should develop their cognitive capacity for moral reasoning with considerations to justice and fairness. Importantly, moral education involves learning what the particular issues are and learning how to respond to them effectively, making sound moral judgements and decisions. But moral instruction would do well to consider not only what is right and wrong on the basis of moral reasoning, but to provide students with appropriate value systems, such that these can become part of their identity and help guide moral and ethical decisions in situations that prevent adequate moral reasoning. The principle-based approach has been criticized for failing to adopt explicit content regarding good or bad behaviour (Narvaez, 2006), and research has shown that expert knowledge consists of both knowledge content and the faculties for applying the knowledge (Hogarth, 2001; cited in Narvaez, 2006). This distinction may be critical in the military domain as soldiers may find themselves in situations that require contravening a particular norm or convention, but are still expected to act in a professional, ethical manner.

For example, consider the ethical challenges soldiers confront when conducting house raids. These are necessary military tactics in counterinsurgent wars that can have lasting negative effects if they are not conducted with the utmost ethical standards. Undertaking home raids requires military forces to have prior evidence from multiple, credible sources of intelligence (Bailliet, 2007). They can be effective tactical operations because they catch insurgents off guard. As such, these raids are conducted in the night and, more often than not, other family members are present. Soldiers forcibly enter homes and often find not only insurgents but also women, children and the elderly. These counterinsurgent operations have the potential to be both traumatic and shameful. House raids, in fact, rely on a very broad interpretation of Article 8 of the European Convention of Protection of Human Rights and Fundamental Freedoms[1]. Because military necessity in these operations supersedes the law, how soldiers conduct themselves will largely depend on their own moral character rather than on their own adherence to conventional rules or morality. Rules for the relevant "rights" and "wrongs" (e.g., property rights) in such situations may not have the required moral effect in these operations because soldiers are essentially being asked to violate conventional law. In cases where adherence to established rules may be impossible (or when these rules do not provide adequate guidance), reliance on core values and a soldier's commitment to these may be the only recourse to guarantee ethical behaviour in such situations.

There is a growing recognition in both the academic and the military domain that moral education should consider a character-based approach. For example, Mark Osiel (1999, p. 23) argues that the most effective means of promoting moral behaviour in soldiers is through the development of a personal identity that reflects "the virtues of chivalry and martial honour". Instead of instructing soldiers on the rights and wrongs of the Geneva Convention and the Laws of Armed Conflict, he argues that soldiers who internalize a particular warrior code will be inspired to embody that code in their actions. Although largely anecdotal, Osiel provides evidence of soldiers who have been rescued by their warrior code before acting immorally (for a full review see Osiel, 1999). Invoking a specific moral identity within the context of a specific role may be a more effective strategy for moral education. Simply teaching in order to invoke moral identity (e.g., "Soldiers don't do that!") Osiel holds, is a better way of communicating ethical orientation than listing a number of principles from various tenets (e.g., International Criminal Court). In a presentation at the 7th Canadian Conference on Ethical Leadership, Don Snider (2006) of the Strategic Studies Institute of the US Army War College also favoured developing moral character in cadets through adherence to core army values over rational moral education.

Research has shown that many moral dilemmas that senior CF commanders faced in operations were resolved by a strong adherence to an identity that embraced the soldiers' army ethos or core values (Thomson, Adams, Thompson, & Baranski, 2008). Moral identity, defined as a network of moral traits or dispositions that make up one's self-concept, has been shown to be strongly associated with moral cognitions (perceptions and intentions) as well as moral behaviour. For example, studies have shown those with stronger moral identities (i.e., morality is a critical aspect of one's own self-definition) perceived donating time as being more caring, moral, socially

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[1]Article 8 of the European Convention for the Protection of Human Rights and Fundamental Freedoms states: 1) Everyone has the right to respect for his home, and 2) There shall be no interference by a public authority with the exercise of this right except such as is in accordance with the law and is necessary in a democratic society in the interests of national security, public safety or the economic well-being of the country, for the prevention of disorder or crime, for the protection of health or morals, or for the protection of the rights and freedoms of others. For a full discussion on morality and house raids see Bailliet, C.M. (2007). 'War in the home': An exposition of protection issues pertaining to the use of house raids in counterinsurgency operations. *Journal of Military Ethics,* 6, 3, 173 – 197.

responsible, and heartfelt than donating money, and were also more likely to donate their time (rather than money) than were individuals with weaker moral identities (Reed, Aquino, & Levy, 2007). Development of a particular kind of moral character that soldiers hold close to their sense of self seems consistent with descriptions of the process of moral and ethical judgement and decision-making. A greater appreciation for the inclusion of moral character in understanding moral functioning seems, therefore, warranted.

Character education seeks to inculcate particular virtuous traits or dispositions, such as courage or honesty, primarily through means of rote learning combined with participating in community traditions and ceremonies (Wynne & Ryan, 1993; cited in Narvaez, 2006). As such, it emphasizes guidance by tradition and authority in everything that one does. Communities, such as the CF, have "core values" to which members are to adhere (e.g., duty, loyalty, integrity, and courage are the core values of the Canadian military). The power of "core values" in part arises from their claim to a historical system into which each soldier is acculturated. The enculturation process is meant to develop a particular kind of character over the course of each soldier's tenure in the military. In contrast to the principle-based approach, students of character education know what and whose values are espoused, and, moreover, know how those values are manifested in action. Through training and practice, appropriate behaviour is transferred to new members from those who have long standing service in the force and who have the authority to reward good behaviour and punish bad behaviour. In the Army, for example, the Regimental Sergeant Major (RSM) may fill such a role. Acting in accordance with these core values simultaneously ensures that soldiers reaffirm and uphold them, as well as signalling the legitimacy of the soldier as a representative of the category "soldier". In other words, a soldier is a soldier, if and only if he or she embodies these core values.

The enculturation process is complex and lengthy, and its connection to developing moral character is obviously fundamental. Because character education can be described as a lived experience (i.e., it involves the whole of one's life and thus every situation is morally relevant), it is difficult to identify all of the potential opportunities to directly instruct military personnel about moral virtue. Over the course of a soldier's career there will be many instances for learning moral lessons. Some of these will be tangible, and others will not. As the importance of the moral domain expands in CF operations, it is important to identify these tangible means for moral instruction. However, as Moelker and Olsthoorn (2007) point out, there is surprisingly little written on character in the military context aside from the virtue courage. As such, identifying tangible means for character development remains a challenge.

Perhaps one useful method of direct moral character instruction is story telling followed by discussion. One long-standing tradition for conveying moral virtues such as courage, involves rich narratives of legends in battle. At the United States Naval Academy, for example, Shannon French (2003) instructs midshipmen preparing to become officers in the US Navy or Marine Corps by way of classic "warrior literature", such as Homer's *Iliad*. Guiding students through the texts, they are asked to consider the virtues of each character (i.e., moral exemplars), and to then discuss who they would seek to emulate and why (e.g., Achilles or Hector). Narratives help bring the specific moral virtue of interest to life and to provide a living example of this virtue, so that one who listens and contemplates the hero in the story is stirred and inspired to adopt a similar character. Vivid descriptions of moral exemplars may impact positively on moral character development and in turn moral conduct. Narratives may be a useful, proactive means for character education and development.

However, the effectiveness of story-telling as a strategy for developing moral character is still somewhat unclear at an empirical level. For example, it is one thing to engage in a course exercise

(e.g., seminar or composition writing) about virtue, and quite another thing to translate this information into decision-making and action. Research is required to examine the relationship between classroom character instruction and everyday moral and ethical decision-making and conduct. Can students readily translate moral lessons, such as those stemming from moral exemplar actions, into lasting dispositions that will promote good moral and ethical decision-making and behaviour? Some researchers argue that the motivation to act in accordance with one's morals (i.e., moral motive force) derives not from the capacity to apply moral reasoning to particular moral situations but from the extent to which one's morality is integrated into one's self-concept and identity (Blasi, 2004, 2005; Walker, 2004; Aquino & Reed, 2002). To what extent, therefore, do the moral lessons learned from narratives become sufficiently integrated into the student's identity such that acting incongruently would betray one's self? Research could begin by assessing the immediate impact of stories on, for example, students' capacity for moral and ethical decision-making. Better understanding of the impact of character-based moral instruction could emerge by comparing it to the impact of principle-based moral instruction.

One way in which to promote moral development using character-based instruction would involve the use of examples of people who exemplify moral principles. When using moral exemplars for moral instruction, it is important to choose an exemplar that will have the intended effect. For example, the use of some moral exemplars may not have the intended effect because they are mythological characters (e.g., Achilles) or legends (e.g., Sir Arthur William Currie) and thus, irrelevant to the average soldier. As such, moral lessons from stories may not be applicable because the perceiver may not see how virtues could be applied in their everyday lives. Narratives of moral exemplars that are more relevant to the student, therefore, may have a greater overall impact on a soldier's moral development. In other words, heroes who are seen as personally relevant and personally achievable may be more appropriate ways to promote lasting character development (e.g., Hugh Thompson who intervened in the My Lai massacre[2]). Indeed, as discussed below, there is good evidence that role models who are self-relevant and act in ways that are attainable for others have a positive impact, whereas role models who are irrelevant do not.

1.2 Moral Exemplars

The use of moral exemplars as a means for identifying and promoting desirable, virtuous dispositions is widespread. For example, consider figures such as Gandhi, Martin Luther King, or Mother Theresa. These individuals have been used as moral exemplars in general discussions of morality because they not only devoted their lives to moral causes, but also embodied an advanced fusion of the self and morality (Hardy & Carlo, 2005). In other words, their character is, in essence, defined by their virtue. As Weaver (2006) explains, considering others (e.g., moral exemplars) in various social situations and within given institutional frameworks can help us to identify the appropriate behaviours for such situations. In these situations, others can act as role models for behaviour and, consequently, provide the basis for our own role expectations. These role expectations provide the cognitive schemas for how we process information and can guide our future behaviour. Once these schemas for moral conduct are formed and become integral to our own character, they can then motivate us to act in consistent ways. This suggests that the ideas taught in institutional training and reinforced by superiors should lay the framework for students' character development. The extent to which a particular moral schema is dominant in an interpersonal network affects what a person learns and the behaviours that person adopts from the

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[2] For one account of My Lai and the role Hugh Thompson played in halting the massacres see Sherman (2005).

network (Weaver, 2006). Moral behaviours taught in training and reinforced by the institution after training would be more likely to become embedded within the trainees' character or identity.

It is important to note, however, that moral exemplars are not just public figures. Indeed, Walker, Pitts, Hennig, and Matsuba (1995) conducted interviews with participants investigating a number of moral issues, including identification with moral exemplars. They found that the most frequent categories of moral exemplars were friends and family, and not public figures such as Martin Luther King. They explained that this was because participants viewed integrity as a critical character trait defining moral excellence, and participants argued that the best way to gauge and to learn about moral excellence was through personal relationships.

Evidence in psychological research also suggests relevant (and perhaps more personal) role models in inspire others. Lockwood and Kunda (1997) conducted a number of studies investigating the impact of role models on participants' behaviour. They hypothesized that role models are more impactful when they are viewed as relevant to the perceiver. For example, a role model is considered relevant if a perceiver can find characteristic similarities between them. For these researchers, the characteristics could be age, race, gender, or even personality. They argued that when the number of similar features increases between a perceiver and a role model, the more relevant the role model is seen to be. This, in turn, leads to more social comparisons by the perceiver, which ultimately will affect a perceiver's self-view. Furthermore, these researchers hypothesized that the consequences of such a comparison will depend on the attainability of the relevant role model's behaviour. That is, role models whose successes seem attainable will inspire a perceiver because successes that are attainable are motivational. On the other hand, role models whose successes seem unattainable will be discouraging because unattainable successes may highlight the perceiver's own shortcomings and deficiencies. In essence, possible future selves influence how attainable the role models' successes are to the perceiver. If the perceiver believes that he or she can achieve the same level of success as the role model, then the role model's success will be a source of inspiration.

To test their hypotheses, Lockwood et al. (1997) exposed undergraduate students to a superstar role model either in the participants' chosen academic field or not in their chosen field. Participants rated themselves more positively along 40 adjectives when the superstar role model was in their chosen field. Furthermore, participants exposed to superstar role model in their chosen field typically stated that the role model was inspirational, whereas participants exposed to a superstar role model in another academic field typically did not report being inspired. In a follow-on study, undergraduate students read a profile about an outstanding graduating student. First year students, for whom the role model's achievements were still potentially attainable, given the time the students had to complete their academic career, rated themselves more positively on traits related to career success than did fourth year students. Fourth year students, by contrast, are nearing the end of their academic career and may have a more comprehensive view of what is attainable and what is not. According to these researchers, for fourth year students, the role model's achievements seem more unattainable. In addition, first year students focused on highlighting their similarity to the role model and what they could learn from them, whereas fourth year students focused on explaining why they could not learn anything from the role model. In a final study, university students were asked to read a profile about an outstanding student. Participants who viewed the role model's accomplishments as attainable rated themselves more positively on traits related to career success than did participants who did not view the role model's accomplishments as attainable. Taken as a whole then, these studies provide evidence that relevant superstar role models can inspire and enhance self-views if comparable successes seem attainable to the perceiver. On the other hand, superstar role models of unattainable success can be threatening for the perceiver.

Extrapolated to the moral domain, this research suggests that the relevancy of a moral exemplar will be of utmost importance if the exemplar is intended to have a positive impact on character development. Although one might believe that exposure to highly capable moral exemplars might inspire one to push oneself even harder to adopt similar dispositions, this is not always the case. Although this line of research investigating the impact of role models on behaviour does not explore the moral domain, it is important because current theorizing about moral exemplars (e.g., Hardy and Carlo, 2005) seems to cast moral exemplars as likely to have a uniformly positive role. However, the research detailed above suggests that the impact of role models is not necessarily always positive. Moreover, this research suggests that the actual function of moral exemplars in inspiring or de-motivating individuals may depend on the self-relevance of the moral exemplar. The actions illustrated by the moral exemplar must be attainable if they are to have the intended effect of inspiring similar action in the perceiver.

Because role models are likely to play a significant part in the moral education of soldiers as they are acculturated in the CF, the impact of particular moral exemplars needs to be considered. Again, providing soldiers with mythological characters or military legends may not have the intended effect of fostering moral character development. In fact, based on the research detailed above, it seems probable that these are unsuitable candidates for actual character education. Instead, character education should include stories portraying moral exemplars that are self-relevant to the average CF personnel.

Though many argue that a character-based approach is the best way to ensure ethical conduct among soldiers, and one means of accomplishing this is through the presentation of moral exemplars in stories, this has not been empirically validated. Research, in fact, shows that moral reasoning ability predicts moral action (Thoma, 1994; cited in Narvaez, 2006), providing support for a principle-based approach. How these character and principle-based approaches compare to one another has not been fully assessed. The current study compares character education against principle-based education. For the purposes of this study, two excerpts were composed. Considering the findings in the role model literature, one excerpt portrays a self-relevant CF moral exemplar in operations. Briefly, the story describes a Captain in the CF who rescues a couple from a violent mob while on a peacekeeping mission. His conduct, though highly virtuous, is considered both attainable and a probable goal for CF personnel. The other excerpt describes a number of ethical principles and how they apply to ethical problems. They are meant to foster a high degree of moral reasoning. In order to compare the impact of these two approaches, soldiers were required to complete a moral task that measured their moral and ethical decision-making. The following section describes briefly the instrument used to assess this.

1.3   Measuring Moral and Ethical Decision-making and Moral Identity

For the current project, it was important to select a valid instrument for measuring moral judgement and decision-making ability. One consideration was the widely used Defining Issues Test, Version 2 (DIT2 an updated version of the DIT, Version 1; Rest, Narvaez, Thoma & Bebeau, 1999). With the assumption that moral schemas guide an individual's moral and ethical judgement and decision-making, the DIT2 is a measure meant to reveal these. Participants read moral dilemmas and then they rate and rank the moral importance of particular items relating to the dilemma (e.g., questions individuals may ask when resolving a moral dilemma). Those items that make sense and tap an individual's preferred schemas are ranked highly important, whereas those items that make little sense or are unconvincing to an individual are ranked unimportant. Items also reflect the reasoning at Kohlberg's six stages, so an individual's level of moral reasoning can be quantified

(Kohlberg & Hersh, 1977). One of the merits of the DIT2 includes the ability to be used as a pre- and post-measure when trying to understand the effects of an intervention on moral reasoning. As mentioned above, we wanted to examine the impact of two types of moral instruction on participants' judgement and decision-making. For the purposes of this project then, the DIT2 seemed highly appropriate.

However, there are some who believe that the DIT2 only measures moral attitudes, and thus falls short of measuring moral judgement and decision-making processes. Georg Lind (2004) explains that any measure of moral judgement and decision-making needs to include moral tasks, such as working through moral dilemmas and considering counter arguments to one's position. Without this, he argues, it is difficult to assess moral judgement. The DIT2 does not have a moral task. To compensate for this shortcoming, he devised the Moral Judgement Test (MJT).

The MJT is an instrument specifically designed to assess an individual's capacity to apply moral principles to moral dilemmas irrespective of one's attitude or opinion on the issue. The key feature of true moral competence, *competence* being understood as the capacity to accept or reject moral arguments on the basis of the argument's moral quality and not simply one's moral position (Lind, 2004), is fair consideration of both sides of an argument. So, for example, being able to see complex arguments in support of abortion as just even though one is wholly opposed to abortion is indicative of a high level of moral judgement competency. Previous research showed that people lack moral judgement consistency when considering counter arguments (Keasey, 1974; cited in Lind, 2004). Instead, people reveal their dependence on moral attitudes and opinion. For the MJT, therefore, participants are asked to consider both pro and contra arguments to a particular moral dilemma, which they read previously. The pro and contra arguments are mirrored to reflect the same level of reasoning but with opposing outcomes. Each pairing of pro and contra arguments represents one of Kohlberg's (1977) six stages of moral reasoning. As such, the MJT also detects which stage (pre-conventional, conventional, or post-conventional) participants favour when resolving tough moral dilemmas. Lind (2004) considers this the attitudinal assessment. The MJT looks not at an isolated response but a composite of responses, showing a participant's pattern of reasoning. For Lind, the value of this instrument is it detects if participants base their answers on the moral qualities of the arguments or simply on their own personal opinion.

Another strength of the MJT is it ensures participants engage in a moral task, such as contemplating a moral dilemma and considering counter arguments to their own position. A previous study investigated moral and ethical decision-making in CF operations through interviews with CF commanders (Thomson, Adams, & Sartori, 2006). Interviewees described moral and ethical dilemmas they confronted in operations and recounted how they resolved these. Lind (2004) himself employs two quite familiar dilemmas for the MJT: the mercy-killing dilemma (Colby et al, 1987) and the worker's dilemma (Grun, 1975). To ensure the highest degree of fidelity and increase face validity, it was important for this study to use dilemmas that emerged from CF operations and would be relevant to military personnel. The research team identified two suitable dilemmas from this previous work. One dilemma describes a Sgt who witnesses the stoning of a woman, an acceptable punishment for adultery in the host country of the mission, and must decide if he should intervene with lethal force. He is in a dilemma because his values encourage him to intervene, but his rules of engagement (ROEs) forbid the use of force unless in self-defence. The second dilemma describes a Cpl who witnesses the abuse of a detainee by his Sgt. He must decide if he should tell the commanding officer about the Sgt's conduct or keep quiet and let it pass. The prepared responses to the dilemmas represent Kohlberg's six stages of moral reasoning, and include statements corresponding to these stages both supporting the decision as well as refuting the decision. There are a total of twelve statements for each dilemma.

Having found a suitable instrument that includes completing a moral task (resolving moral dilemmas), while at the same time measuring moral and ethical judgement and decision-making, the following research examined how two approaches of moral instruction would impact this. According to Lind (2004), the MJT is a suitable instrument for measuring the impact of interventions. Participants read a moral dilemma and completed the MJT both before and after receiving the moral instruction manipulation. Again, it was important to investigate the impact of character-based education compared to principle-based education in order to provide the CF with maximal empirical support regarding potential training initiatives in the area of operational moral and ethical decision-making. This methodology should reveal any differences in participants' moral judgment competencies as a result of receiving the moral instructions. How would a self-relevant moral exemplar impact moral and ethical decision-making? Would this be an effective means for promoting increased moral and ethical decision-making ability?

Another goal of the current research was to determine if a strong moral identity would positively correlate with moral reasoning ability. Moral identity reflects the degree to which issues of morality are central to an individual's self-concept, and it is believed that this predicts moral cognition and behaviour (Blasi, 2004). Indeed, research showed that moral identity predicted community involvement (Pratt, Hunsberger, Pancer, & Alisat, 2003) as well as predicted self-reported volunteerism and donation behaviour (Aquino et al., 2002; Reed et al., 2007). For the purposes of this study, it was of interest to determine if soldiers with a strong moral identity would show higher scores on the MJT. Would moral identity predict higher levels of moral reasoning capacity? To assess this, Aquino et al. (2002) Self-Importance of Moral Identity Questionnaire (MIQ) was selected for the current research as it is one of the only validated measures of moral identity to date.

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2   Method

2.1   Participants

Participants in this study were 106 reserve force military personnel (99 male and 7 female) from a local infantry regiment in southwestern Ontario, Canada. Table 1 shows the demographics of the participants in the study.

Table 1: Demographic Information

Variable	Category	N	%
First Language (n=106)	English	101	95
	Other	5	5
Country Living in (n=106)	Canada	106	100
	Other	0	0
Rank (n=104)	Senior Officers	5	5
	Junior Officers	6	6
	Warrant Officers	5	5
	Junior NCOs	88	84
Age (n=80)	Under 20	27	34
	20-30	37	46
	31-40	5	6
	41 and over	11	14

Participants varied in age from 18 to 56 with a mean age of 25 (std. dev. = 10.1). Fifty-one percent had a university or college degree, with the average number of years being 3 (std. dev. = 1.7). Senior Officers included Lieutenant-Colonels and Majors; Junior Officers were Captains, Lieutenants, and Second Lieutenants; Warrant Officers included Chief Warrant Officers, Master Warrant Officers, and Warrant Officers; and Junior Non-Commissioned Officers were Sergeants, Master Corporals, Corporals and Privates. Most of the participants were Privates (52%) and were infantry (83%). Most were from the Army (97%), with only one participant from the Navy (1%); 2% did not respond. All participants lived in Canada and the majority of the participants (95%) spoke English as a first language. Table 2 shows the military experience of participants.

Table 2: Military experience

Variable	Category	N	%
Time serving the CF	Less than a year	19	18
	1-3 years	41	39
	3-5 years	14	13
	5-10 years	15	14
	More than 10 years	17	16
Operational experience	No	89	86
	Yes	15	14

Education levels are shown in Table 3.

Table 3. Education Level

	N
High School	52
University / College	54
Total	106

Half of the participants had university or college training, with the other half having only high school. This is due to the fact that many participants were relatively young.

2.2 Experimental Procedures

Data collection took place at CF armouries in southwestern Ontario. Participants were run in groups of 10-30 at a time. The following details the experimental procedures, including the manipulation.

Pre-manipulation activities Prior to starting the experiment, participants received a general briefing informing them of 1) the general objectives of the study, 2) its relevance and potential benefit to the military, 3) the nature of their participation (i.e., format of questionnaire and time commitment), and 4) associated risks (see Annex B1). They were told that the study explored factors influencing decision-making in operational contexts. Participants then completed informed consent forms (see Annex B2). After completing this consent form, participants were asked to complete a Demographic Questionnaire (see Annex A1) as well as the Moral Identity Questionnaire (MIQ, Aquino et al., 2002; see Annex A2).

Participants read one of two moral dilemma scenarios[3] (see Annex A3 and A6). After reading the dilemma, participants completed the Moral Judgement Test (MJT, Lind, 1999; Annex A4 and A7), Multidimensional Ethics Scale (MDES, Reidenbach & Robin, 1990) and questions measuring moral intensity (Annex A5 and A8).

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[3] The order in which dilemmas were presented was counterbalanced.

Experimental Manipulation Participants were then given one of two moral instructions for training moral and ethical decision-making in the form of excerpts said to be from a CF military journal. In one condition, participants read a principle-based description of morality. This description included three principles (i.e., respect the dignity of all persons, serve Canada before self, obey and support lawful authority), a description about what each principle entails, and a further description about how to use the principles together (see Annex A9). In the second condition, participants read a character-based description of a CF moral exemplar. This description was used to illustrate a soldier making a moral and ethical decision in an operational context (see Annex A10). The length and content of the excerpts were matched to the extent possible. Although the excerpts focused on the same ethical principles, these principles were reflected either through a more formal "textbook" approach which worked to define and articulate these principles or by providing a description of an actual person putting these principles into action. Participants were randomly assigned to conditions. After reading one of these experimental stimuli (e.g., either principle-based or character-based), participants completed questions pertaining to the type of instruction they had received (e.g., *How relevant would you say this description is to you personally?* and *How important is it that you act in a way that is consistent with this excerpt?).*

Post-manipulation activities Participants then read the other moral dilemma and again completed the MJT, MDES, and moral intensity questions. Participants were then provided a short debrief of the study (see Annex B3), talking specifically about the hypotheses of the study (e.g., different kinds of instruction for training moral and ethical decision-making) and answering any questions from participants. Finally, participants took part in a focus group to discuss the factors that influenced their overall moral and ethical decision-making.

2.3   Measures

2.3.1   Quantitative Measures

Moral Identity Questionnaire An adapted version of Aquino and Reed's (2002) Self-Importance of Moral Identity Questionnaire (MIQ) was used to measure participants' moral identity. The scale includes 9 traits or attributes of a moral person, and asks participants to rate the extent to which each of these traits are a critical part of their own sense of self. As some of the attributes on the MIQ did not seem appropriate for a military sample, they were replaced by others deemed more appropriate. However, it was necessary to replace attributes with those that had also been empirically validated. Walker and Hennig (2004) conducted a study examining traits associated with moral exemplars (e.g., just, brave and caring) to determine if the moral traits associated with each were categorically different. Though they did show differences between moral exemplars and moral traits representation, there were a number of traits similar to all three. From this list of similarities, the research team chose replacement attributes. Of the original 9 traits used in the MIQ, the research team eliminated *caring*, *compassionate*, *fair*, *friendly*, *hardworking*, and *honest* and added *optimistic*, *respectful*, *strong*, *truthful*, *trustworthy*, *brave*, and *open-minded*. When possible, those that were removed from the original MIQ were replaced with attributes that shared a similar classification. For example, *compassionate* was exchanged for *respectful* because they both represented "a positive communal emotionality" (Walker et al., 2004). The new list comprised the following 10 traits, *optimistic*, *respectful*, *strong*, *truthful*, *generous*, *trustworthy*, *brave*, *helpful*, *kind*, and *open-minded*, which the research team thought would resonate more with military participants than those on the original MIQ.

Administering the MIQ required the participant to read the following, "*The person with these characteristics could be you or it could be someone else. For a moment, visualize in your mind the kind of person who has these characteristics. Imagine how that person would think, feel, and act. When you have a clear image of what this person would be like, answer the following questions in the table below.*" Participants were then required to answer 10 items on a 7-point Likert scale ranging from 1 (*I strongly disagree*) to 7 (*I strongly agree*). Aquino and Reed's factor analysis indicated the items had two clear underlying dimensions: Internalization and Symbolization. The former refers to the degree to which moral traits are central to one's self-concept and therefore represents the private domain. The Internalization subscale included the following five items: 1) *It would make me feel good to be a person who has these characteristics*, 2) *Being someone who has these characteristics is an important part of who I am*, 3) *I strongly desire to have these characteristics*, 4) *I would be ashamed to be a person who had these characteristics* (reversed scored), and 5) *Having these characteristics is not really important to me* (reversed scored). Symbolization refers to the degree to which moral traits are expressed in the participants' behaviour and which therefore represent the public domain. This subscale included the following five items: 1) *The types of things I do in my spare time (e.g., hobbies) clearly identify me as having these characteristics*, 2) *The kinds of books and magazines that I read identify me as having these characteristics*, 3) *The fact that I have these characteristics is communicated to others by my membership in certain organizations*, 4) *I am actively involved in activities that communicate to others that I have these characteristics*, and 5) *I often wear clothes that identify me as having these characteristics*. Reliability for both dimensions in the current study was found to be acceptable (Cronbach's α Internalization = 0.82 and Cronbach's α Symbolization = 0.72).

Moral Judgment Test Lind (2004) developed the Moral Judgment Test (MJT) to measure individuals' moral judgment competence as well as their moral attitudes. The MJT is able to assess a person's ability to judge both pro and contra arguments of a moral problem on the basis of their own moral principles, not on their opinion of the particular moral problem. In addition, the MJT provides a measure of a person's status in relation to the six Kohlbergian stages of moral reasoning.

For the MJT, participants are provided with difficult moral dilemmas to read and consider. For each dilemma, participants are asked to rate how much they accept or reject a set of six arguments in favour of the outcome and six arguments against the outcome. Each of the six arguments is constructed to represent the different moral qualities of reasoning described by Kohlberg's (1977) six stages of reasoning. As such, the two sets of arguments (i.e., pro and contra) are matched to represent the same qualities or levels of moral reasoning. This method allows researchers to identify whether participants base their ratings on the different moral qualities of the arguments or on the fact that the argument speaks in favour or against their opinions.

The MJT traditionally uses the mercy-killing dilemma and the worker's dilemma as the moral dilemmas[4]. To ensure the highest degree of fidelity and increase face validity, it was important to use dilemmas that emerged from CF operations and would be relevant to military personnel. Thomson et al. (2006) interviewed senior CF officers who described moral and ethical dilemmas they confronted in operations and recounted how they resolved these. For the purpose of this study, the research team created two military-related dilemmas based on these interviews and according to Lind's Guidelines for dilemma construction (Lind, 2008). One dilemma describes Sgt Bellwart witnessing the stoning of a woman, an acceptable punishment for adultery in the host country of the mission. He must decide if he should intervene with lethal force. His personal values and the

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[4] For details of these dilemmas refer to Lind (2004).

anguish on the woman's face invoke in him a strong moral desire to intervene. However, his ROEs forbid the use of force unless in self-defence. Caught between his personal values and restrictive ROEs, he must make a tough moral decision. The second dilemma describes Cpl Otto who witnesses the abuse of a detainee by his Sgt. He must decide if he should report the Sgt's conduct to the commanding officer or keep quiet and let it pass. Both dilemmas involve the harm of another individual and a tough moral decision.

Pro and contra questions were also developed for each dilemma. Again, these questions were designed to reflect each of Kohlberg's six stages of moral development (Kohlberg et al., 1977). The associated questions were pre-tested and later modified to ensure that different observers rated the items as being from the same Kohlbergian stages. There were 12 questions pertaining to each dilemma that were on a 9-point Likert scale ranging from -4 (*I strongly disagree*) to 4 (*I strongly agree*), with 6 questions being in favour of and 6 questions being against the decision. Stage 1 is the punishment and obedience orientation which is defined as obeying rules and considering the punishment to oneself when rules are broken. An example question relating to that stage is *Sgt Bellwart was right because… he probably won't be punished because the UN force commander has been trying to change the ROEs.* Stage 2 is the instrumental-relativist orientation which is described as satisfying personal interests. An example question is *Sgt Bellwart was wrong because… risking his career as a soldier for someone he doesn't know is unwise.* Stage 3 is the interpersonal concordance orientation which is defined as having good behaviour and good motives in order to obtain social approval. An example question is *Cpl Otto was wrong because… most people would approve if he spoke out.* Stage 4 is the law and order orientation in which there is a concern for the society as a whole. An example question is *Cpl Otto was right because… ensuring the security, stability, and order on the base is more important than the local youths.* Stage 5 is the social contract, legalistic orientation which looks at a society to determine what rights and morals it ought to uphold. An example question is *Sgt Bellwart was right because… the right to life should be guaranteed in law in every society.* Stage 6 is the universal ethical principle orientation which is defined as the principles of justice that are based on equality for all people. An example question is *Cpl Otto was wrong because… everyone has a right to be treated with respect, including uncooperative detainees.*

The MJT produces two sets of scores. The first score is the C-score, which indexes the person's moral judgment competence based on Kohlberg's six stages of moral reasoning (refer to Lind's website, Moral Judgment Test, 2008, on how to calculate the C-index). The C-score is operationally defined as "the ability of a subject to accept or reject arguments on a particular moral issue consistently in regard to their moral quality even though they oppose the subject's stance on that issue" (Lind, 2004, p. 24). C-Index ratings can range from 1 to 100. According to Lind, though representing a very rough estimation, these can be categorized as extraordinarily high (above 50), very high (40-49), high (30-39), medium (20-29), low (10-19) and very low (1-9). The MJT also produces a moral attitudinal score, which highlights the Kohlbergian stage one favours.

Moral Intensity Three questions were included to measure moral intensity (Jones, 1991) and one question to measure moral awareness. These questions were used by Singhapakdi, Vitell, and Kraft (1996). Although moral awareness is not a component of moral intensity, it is also included in this section because moral awareness about an issue is a critical antecedent to making a moral decision (Jones, 1991). The moral awareness question is *Overall, does this dilemma involve a moral issue?* (1 = *not at all*, 7 = *very much*). Three of the six components of moral intensity were used in the current study. The first component is the magnitude of consequences and is defined as the amount of harm done to others. The question used in the current study is *The possible harm from this decision would be* (1 = *minor*, 7 = *severe*). The second component is the measure of social

consensus and is defined as the degree to which an act will have social agreement. The social consensus question used is *Most people would consider this decision to be...* (1 = *inappropriate,* 7 = *appropriate*). The last component is the probability of effect and is defined as the probability the act will occur and will cause harm. The question pertaining to this measure is *The chances of any negative consequences occurring as a result of this decision are…* (1 = *not at all likely*, 7 = *very likely*). Participants read a moral dilemma and completed the moral awareness and moral intensity questions both before and after receiving the moral instruction manipulation. This methodology allows us to identify differences in participants' moral intensity judgement regarding the dilemmas after receiving the moral instructions.

Multidimensional Ethics Scale The original version of Reidenbach and Robin's (1990) Multidimensional Ethics Scale (MDES) was used to measure ethical judgement of business activities. As the scale is broken down into 3 moral dimensions (or approaches), the MDES can identify the ethical approach an individual takes when making moral decisions. For the current study, we used the same scale. It consists of 8 items, categorized into one of three dimensions, measured on a 7-point Likert scale. The first dimension, *broad-based moral equity*, includes items that relate strongly to ethical approaches that emphasize the notion of justice. For example, participants were asked *Would you describe this decision as just?* (1= *unjust*, 7 = *just*), *Would you describe this decision as morally right?* (1 = *morally wrong*, 7 = *morally right*), *Would you describe this decision as fair?* (1 = *unfair*, 7 = *fair*), and *Would this decision be acceptable to your family?* (1 = *unacceptable to my family*, 7 = *acceptable to my family*). The second dimension, *relativistic*, includes items relating to particular traditions and cultures. Participants were asked *Would you describe this decision as traditionally acceptable?* (1 = *traditionally unacceptable*, 7 = *traditionally acceptable*) and *Would you describe this decision as acceptable in your own culture?* (1 = *culturally unacceptable*, 7 = *culturally acceptable*). The final dimension, *contractualism,* includes items that relate to contracts. For example, participants were asked *Would you say this decision violates an unwritten contract?* (1 = *violates an unwritten contract*, 7 = *does not violate an unwritten contract*) and *Would you say this decision violates an unspoken promise?* (1 = *violates an unspoken promise*, 7 = *does not violate an unspoken promise*). Items were reversed scored as necessary. Reliability for the MDES scale in this study was found to be acceptable (Cronbach's α = 0.79).

Role Model Test After participants read the principle-based or character-based moral instruction, they answered 14 items on a 7-point Likert scale ranging from 1(*Not at all*) to 7 (*Very*). These items were created by the research team to assess whether the manipulation was relevant and attainable to the participants. These ideas of relevancy and attainability are based on Lockwood and Kunda's work assessing role models (Lockwood, Jordan & Kunda, 2002; Lockwood et al., 1997). According to these researchers, role models are more impactful when they are viewed as relevant to the perceiver. Furthermore, the consequences of such a comparison will depend on the attainability of the relevant role model's achievements. If the perceiver believes that he or she can achieve the same level of success as the role model, then the role model's success will be a source of inspiration. If not, the role model's success may be a de-motivator.

Three items assessed the relevance of the information presented in the excerpt and the extent to which this information motivated participants. An example question is *How relevant would you say this excerpt is to you personally? To what extent did the excerpt hold your attention?* (1 = *not at all interesting*, 7 = *very interesting*), *Did you clearly understand the information that was presented to you in the excerpt?* (1 = *not at all clear*, 7 = *very clear*).

Other items immediately following the experimental manipulation investigated the impact the excerpts might have on participants' general moral functioning. Four items assessed how well the excerpt would translate into ethical practice. These included *To what extent does the excerpt that you read help you to be a better person? To what extent does the excerpt that you read help you know how to treat other people? To what extent does the excerpt that you read help you act courageously in the face of danger? To what extent does the excerpt that you read help you distinguish right from wrong?* Two items measured how the excerpts would likely play out in participants daily lives, which included *To what extent can you apply the information you gained from reading the excerpt in your daily life? If you were faced with an ethical decision in operations, to what extent would the excerpt that you just read help you know what to do?* Two items addressed the extent to which the excerpt would help participants be *a good citizen* and *be a good soldier*. Scaling for these 10 items were between 1 (*not at all helpful*) and 7 (*very helpful*) on a 7-point Likert scale.

2.3.2   Qualitative Measures

Focus Group Analysis Once participants completed the questionnaires, the research team conducted an informal focus group to understand more fully what factors would influence a soldier's moral and ethical decision-making in an operational context. Participants were asked to reflect on the decisions the protagonists made in the two dilemmas and how they might make a similar decision. Specifically, they were asked what they were thinking about when they read the scenarios. The research team agreed that, when necessary, prompts derived from Dursun, Morrow, and Beauchamp (2005) were to be used to facilitate discussion. Prompts included questions meant to understand more fully the different ethical approaches participants might use for moral and ethical decision-making. Ethical approaches in Dursun et al. (2005) are consistent with the canon in moral philosophy and applied ethics, and include care based (Carol Gilligan), consequence based (John Stuart Mill), rule based (Immanuel Kant), and virtue based (Aristotle) approaches. The focus group also included asking about the perceptions on ethical training and instruction used for the current study, how they made their decision, and what influences were in place while making the decision. Their responses were content analyzed and categorized using the extensive taxonomy created in previous work (for a full description of each category see Thomson et al., 2006). Broad categories include person-based, contextual, and situational factors.

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3 Results

In this experiment, half of the participants read an excerpt detailing ethical principles (principle-based instruction) while the other half read an excerpt that described a CF soldier acting virtuously in operations (character-based instruction). In order to explore their capacity for moral and ethical decision-making before and after this instruction, participants were given two dilemmas that were counterbalanced for order effects. One dilemma included Sgt Bellwart, on a UN peacekeeping mission, who shoots into a crowd to prevent a woman from being stoned to death, violating ROEs. The other dilemma involves Cpl Otto who witnesses his Sgt abusing a detainee and, though he does not agree with the Sgt's excessive force, decides not to report the conduct to the commanding officer.[5]

3.1 Initial Analyses

3.1.1 Moral Identity Questionnaire (MIQ)

As an initial pre-test measure, participants were asked to complete the Moral Identity Questionnaire (MIQ). The MIQ is divided into two subscales, reflecting internalization and symbolization measures. These subscales showed a typical level of correlation ($r = 0.40$, $p < .05$) and acceptable reliabilities. Given that participants' pre-existing levels of moral identity could influence their reaction to the moral instruction they received, it was critical to check that MIQ scores for the principle-based and character-based groups did not differ. Means, standard deviations, and reliabilities (by condition and overall) are shown in Table 4.

Table 4. MIQ

		Valid N	Mean (StDev)	Cronbach's Alpha
Internalization	Character	53	6.3 (0.8)	0.86
	Principle	52	6.1 (0.8)	0.79
	Total	105	6.2 (0.8)	0.82
Symbolization	Character	53	4.9 (0.8)	0.67
	Principle	52	4.8 (0.9)	0.78
	Total	105	4.9 (0.9)	0.72

There were no differences on either internalization ($t(103) = 1.45$, $p = .15$) or symbolization ($t(103) = 0.17$, $p = .87$) subscales for participants receiving either the principle-based instruction or character-based instruction.

Additional analyses explored potential relationships between the MIQ scores and levels of moral reasoning. Correlations between the overall internalization score and the C-index score for the dilemmas revealed significant correlations for the Bellwart dilemma ($r = 0.25$, $p < .05$) and overall

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[5] Unless otherwise reported, results follow a 2 (Instruction: Character vs. Principle) x 2 (Dilemma: Bellwart vs. Otto) x 2 (Order: Bellwart-Otto vs. Otto-Bellwart) mixed three-way ANOVA design.

dilemmas ($r = 0.20$, $p<.05$), but not for the Otto dilemma. These findings show that participants who strongly internalized their moral identity showed higher consistency in their moral reasoning for the Bellwart dilemma and both dilemmas together Correlations between the overall symbolization score with the C-index score for the dilemmas revealed no significant correlations for dilemmas. Consistent with previous research (Pratt et al., 2003; Aquino et al., 2002; Reed et al., 2007), it seems that internalized moral identity predicts moral cognition and behaviour.

3.1.2 Moral and Ethical Decision-Making

Participants completed the Moral Judgment Test (MJT) both before and after receiving the experimental manipulation (i.e., principle- or character-based instruction). As noted earlier, participants read two operational scenarios containing ethical dilemmas, and then rated their own level of agreement with the decision that the actor in the scenario (either Sgt Bellwart or Cpl Otto) made. They then indicated their agreement with the "pro" and "con" arguments in support of the main actor's decision during the scenario. As noted earlier, the MJT is meant to be an indicator of a person's competence when making moral judgements, and the key feature of true competence is fair consideration of the pros and cons of an argument, independent of one's own moral stance and attitudes. So, for example, being able to see complex arguments in support of abortion as valid even though one is opposed to abortion is indicative of a high level of moral judgement competency.

This gauge of moral judgment competency is provided by a MJT indicator called a C-index. The higher the C-index score, the better a participant reasons through the "pro" and "con" arguments. As all participants read two dilemmas and answered questions pertaining to each, the first set of analyses examined levels of moral reasoning that participants displayed when reasoning about the scenarios involving Bellwart and Otto. Each question was rated on a 9-point Likert scale. As Table 5 indicates, participants showed a significant difference in the consistency of their moral reasoning (C-index) depending on the dilemma ($F(1, 105) = 25.72$, $p =.00$).

Table 5. C-Index between dilemmas

Dilemma	Valid N	Mean (StDev)
Bellwart	106	41.6* (20.9)
Otto	106	27.4* (18.2)
Overall	106	17.4 (10.7)

*significant at p < .05 level

In other words, participants did not reason consistently about both dilemmas. When looking at each dilemma separately, participants were more consistent working through the Bellwart dilemma than the Otto dilemma. Means for the Bellwart dilemma indicate a very high C-index rating, while the Otto dilemma had a medium rating. However, as Table 5 shows, the overall C-index is very low, which is somewhat counter-intuitive given the higher scores for the separate dilemmas. According to Lind (2004), C-indexes across multiple scenarios are sometimes lower because this calculation removes the variance associated with a specific dilemma context and looks at consistency across both dilemmas.

3.1.3   Moral Awareness, Moral Intensity and Multidimensional Ethics Scale (MDES)

In an effort to tap participants' moral awareness, they were asked to rate the extent to which they viewed the dilemma as involving a moral issue. Means for each dilemma are shown in Table 6.

Table 6. Moral awareness between dilemmas

Smallest N = 104	Total Mean (StDev)	Bellwart Dilemma Mean (StDev)	Otto Dilemma Mean (StDev)	Effect and P value
Moral Awareness	5.9 (1.3)	6.1 (1.3)	5.8 (1.4)	B > O (marginal)

Results showed that participants recognized a moral issue in both dilemmas.

The moral intensity of the dilemmas was also examined. Because the two dilemmas were constructed for the purposes of this study, they had yet to be used in research. It was, therefore, critical to understand how they would be perceived by participants. Three characteristics of moral intensity were included in this measure, the probability of the effect, the magnitude of the effect, and the probability of social consensus of the moral decision. Means and standard deviations as well as a comparison of each indicator of moral intensity by dilemma are shown in Table 7.

Table 7. Moral Intensity between dilemmas

Smallest N = 104	Total Mean (StDev)	Bellwart Dilemma Mean (StDev)	Otto Dilemma Mean (StDev)	Effect and P value
Probability of Effect	5.2 (1.5)	5.7 (1.2)	4.6 (1.6)	B > O, P < .05
Magnitude of Effect	5.2 (1.4)	5.5 (1.2)	5.0 (1.5)	B > O, P < .05
Social Consensus	3.8 (1.6)	4.7 (1.5)	3.0 (1.4)	O > B, P < .05

Although participants seemed to recognize the negative consequences of both dilemmas, participants rated the Bellwart dilemma to have a higher probability of promoting negative consequences. Similarly, for the magnitude of effect, participants rated the harm from the Bellwart's decision to be significantly more severe than Otto's decision. In essence, participants seemed to see the negative consequences of shooting a civilian and violating ROEs as worse than keeping quiet about abuse.

However, participants thought that Otto's decision not to report the abuse of a detainee was significantly more socially inappropriate than Bellwart's decision.

In sum, even though Otto's decision was seen as more inappropriate, Bellwart's dilemma was considered involving more probability of negative consequences and causing more harm. It is likely then that how participants responded to the two dilemmas may have differed because they evoked different levels of the probability of effect, magnitude of effect and social consensus. One possible reason for these differences in moral intensity components could relate to the fact that Bellwart acted aggressively to help another person, while Otto's response was more an inaction than an action. Future research could identify soldier's perceptions of consequences as a variable of active (Bellwart) versus passive (Otto) harm.

The Multidimensional Ethics Scale (MDES) was also used to explore participants' views of the decisions that Bellwart and Otto had made. These questions assess the following items: fair/unfair, just/unjust, acceptable/unacceptable to my family/traditionally/culturally, morally/not morally right, and violates/does not violate an unspoken promise/unwritten contract). The mean scores are presented in Table 8.

Table 8. MDES between dilemmas

Smallest N = 104	Total Mean (StDev)	Bellwart Dilemma Mean (StDev)	Otto Dilemma Mean (StDev)	Effect and P value
Overall Score	3.8 (1.5)	4.1 (.90)	2.7 (.85)	B > O, p < .05

Taken as a whole, participants rated the decisions of both protagonists to be morally wrong. However, when comparing Bellwart and Otto's decisions, participants did perceive them differently. Ratings for Otto's decision were significantly lower than Bellwart's decision. Specifically, compared to Bellwart, Otto's decision was rated significantly more unfair and unjust, significantly less culturally and traditionally acceptable, and significantly more indicative of violations of unspoken promises and unwritten contracts.

These findings are interesting especially given that Bellwart's decision was considered to have more severe harm and negative consequences than the Otto's decision. Perhaps participants were less forgiving of a soldier who does not act compared to one who does act, despite the immorality of the decisions (i.e., results showed shooting and keeping quiet were morally wrong). It may be that the inaction itself in the Otto dilemma demonstrates a lack of moral courage to speak out, something soldiers do not encourage. Whatever the explanation, participants viewed Otto's decision to keep quiet as more immoral than Bellwart's decision to violate ROEs.

3.2   Moral Reasoning about Operational Scenarios

Once participants completed the first moral dilemma, they received the experimental manipulation. Half of the participants read a description of ethical principles (principle-based instruction condition), while the other half read a story of a soldier who spontaneously demonstrated courage during a peacekeeping operation, rescuing a couple from an angry mob (character-based training condition). Again, the key issue is determining the impact of instruction on a moral and ethical decision-making task. Would there be a noticeable difference in moral dilemma resolution as a consequence of the kind of instruction participants received?

3.2.1   Moral Judgement Test (MJT)

As noted earlier, the MJT conceptualizes moral judgement competence in terms of the ability to reason out issues fairly (giving attention to the quality of the argument) rather than simply judging the worthiness of arguments based on one's own attitudes and opinions. Looking at this indicator of moral judgement, then, the first set of analyses explored whether the two different types of instruction had any impact on how participants resolved the second dilemma they received in comparison to the first dilemma. To accomplish this, an analysis was conducted using a 2 (Instruction: Character vs. Principle) x 2 (Dilemma: Bellwart vs. Otto) x 2 (Order: Bellwart-Otto vs. Otto-Bellwart) mixed three-way ANOVA design with the C-index scores as the dependent

variable. As shown in Table 9, this analysis showed that the type of instruction participants received had no impact on their moral competency scores.

Table 9. C-Index ANOVA

Source	df	F	p
Between subjects			
Instruction (I)	1	1.7	0.2
Order (O)	1	0.6	0.4
S within-group error	102	(353.9)	
Within subjects			
Dilemma (D)	1	25.7*	0.0
I X O	1	0.3	0.6
I x D	1	1.0	0.3
O x D	1	0.7	0.4
I x O x D	1	0.7	0.4
D x *S* within-group error	102	(416.6)	

Note. Values enclosed in parentheses represent mean square errors. *S* = subjects.
* $p < .05$

The only significant difference in C-index scores was between dilemmas. Again, participants were more consistent working through the Bellwart dilemma than the Otto dilemma. There were no other main effects and no interactions related to the type of moral instruction participants received. The relevant means are shown in Table 10.

Table 10. C-Index by instruction type

Instruction	Dilemma Order	Bellwart Valid N	Bellwart Mean (StDev)	Otto Valid N	Otto Mean (StDev)
Character	B-O	27	37.3 (19.6)	27	25.0 (20.4)
	O-B	26	45.5 (18.8)	26	23.7 (14.9)
Total		53	41.3 (19.5)	53	24.4 (17.8)
Principle	B-O	26	41.6 (24.8)	26	30.2 (16.3)
	O-B	27	42.3 (20.4)	27	30.9 (20.3)
Total		53	41.9 (22.4)	53	30.5 (18.3)
Grand Total		106	41.6 (20.9)	106	27.4 (18.2)

Immediately following the dilemma, participants rated their agreement with Bellwart's or Otto's decision. The ANOVA showed main effects for both Order and Dilemma on the dependent variable (agreement) as shown in Table 11.

Table 11. Agreement ANOVA

Source	df	F	p
Between subjects			
Instruction (I)	1	0.0	0.8
Order (O)	1	4.3*	0.0
S within-group error	102	(6.9)	
Within subjects			
Dilemma (D)	1	20.3*	0.0
I X O	1	0.7	0.4
I x D	1	1.7	0.2
O x D	1	11.2*	0.0
I x O x D	1	1.5	0.2
D x S within-group error	102	(5.1)	

Note. Values enclosed in parentheses represent mean square errors. S = subjects.
* $p < .05$

These significant main effects were qualified by a significant Order-by-Dilemma interaction effect, as shown in Figure 1.
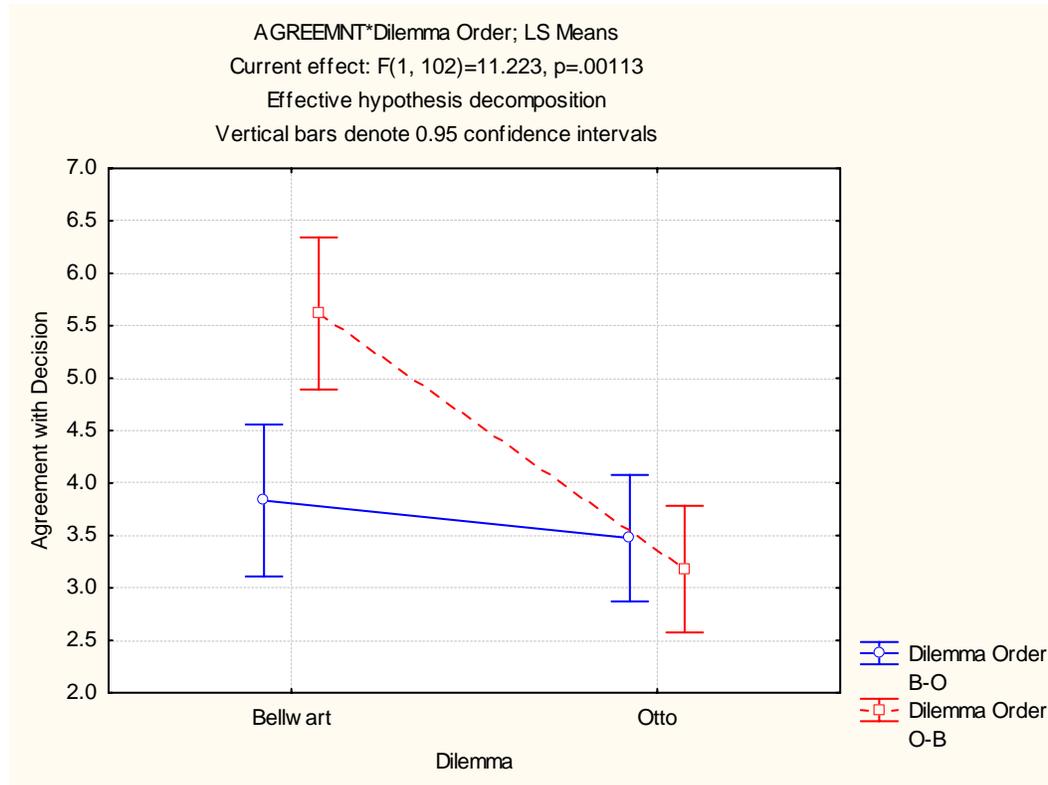
Figure 1. Opinion by dilemma and order

As the figure illustrates, participants showed a similar level of disagreement with Otto's decision to keep quiet and not report the actions of his Sgt, and this did not significantly change as a consequence of the order in which they received the dilemma. However, participants' level of agreement with Bellwart's decision to shoot into the crowd to save a woman from being stoned to death depended on the order in which they received these two scenarios. When they read about Bellwart's dilemma first, participants disagreed with his decision significantly more than when they read about him after Otto. It seems participants were more uncertain about Bellwart's decision to contravene ROEs following Otto's decision to keep quiet. Perhaps Otto's inaction prompted participants to consider if doing nothing is the right course of action. Table 12 shows mean agreement scores as a function of these conditions.

Table 12. Agreement by instruction type

	Dilemma Order	Valid N	Mean (StDev)
Bellwart			
character	B-O	27	-1.4 (2.8)
	O-B	26	0.3 (2.5)
	Total	53	-0.5 (2.8)
principle	B-O	26	-1.0 (2.7)
	O-B	27	0.9 (2.6)
	Total	53	-0.02 (2.8)
Total		106	-0.3* (2.8)
Otto			
character	B-O	27	-1.7 (2.6)
	O-B	26	-1.3 (2.2)
	Total	53	-1.5 (2.4)
principle	B-O	26	-1.3 (2.4)
	O-B	27	-2.3 (1.5)
	Total	53	-1.8 (2.0)
Total		106	-1.7* (2.2)
	B-O Total	106	-1.3* (2.6)
	O-B Total	106	-0.6* (2.6)

*significant at p < .05 level

The MJT also provides an indication of the level of moral reasoning participants favoured while resolving the moral dilemmas. Lind (2004) refers to this as a moral attitudinal measure. Results showed that of Kohlberg's six stages, participants favoured the fourth stage. For people in the fourth stage, moral action centres on maintaining authority and social order (Kohlberg et al., 1977). Further analyses explored the level of moral reasoning, the order of dilemmas, and the type of instruction. Results are shown in Table 13.

Table 13. Level of reasoning by instruction type and dilemma order

		Dilemma Order	Valid N	Mean (StDev)
Bellwart				
	Character	B-O	27	4.6 (1.1)
		O-B	26	4.5 (1.4)
		Total	53	4.5 (1.3)
	Principle	B-O	26	4.6 (1.0)
		O-B	27	4.8 (1.1)
		Total	53	4.7 (1.1)
	Total		106	4.6 (1.2)
Otto				
	Character	B-O	27	4.5 (1.5)
		O-B	26	4.2 (1.5)
		Total	53	4.3 (1.5)
	Principle	B-O	26	3.8 (1.8)
		O-B	27	4.1 (1.4)
		Total	53	4.0 (1.6)
	Total		106	4.2 (1.5)
Overall				
	Character	B-O	27	4.3 (1.2)
		O-B	26	4.4 (1.3)
		Total	53	4.4 (1.2)
	Principle	B-O	26	4.4 (1.2)
		O-B	27	4.4 (1.1)
		Total	53	4.4 (1.2)
	Total		106	4.4 (1.2)

3.2.2 Multidimensional Ethics Scale (MDES)

It was also important to explore participant's moral judgements about the scenarios using the MDES scale ratings. Given the nature of the instruction that participants received, it was important to explore whether participants would view the dilemmas differently.

These analyses showed a main effect of dilemma as shown in Table 14.

Table 14. MDES ANOVA

Source	df	F	p
Between subjects			
Instruction (I)	1	1.0	0.3
Order (O)	1	0.0	0.8
S within-group error	100	(0.7)	
Within subjects			
Dilemma (D)	1	121.0*	0.0
I X O	1	6.8*	0.0
I x D	1	0.1	0.8
O x D	1	5.7*	0.0
I x O x D	1	0.0	0.9
D x S within-group error	100	(0.8)	

Note. Values enclosed in parentheses represent mean square errors. S = subjects.
* $p < .05$

Participants rated Bellwart's decision as more ethically right than Otto. However, this effect was qualified by the first of two significant 2-way interactions. Specifically, there was a significant interaction between the dilemma and the order in which the dilemmas were read. This is illustrated in Figure 2.
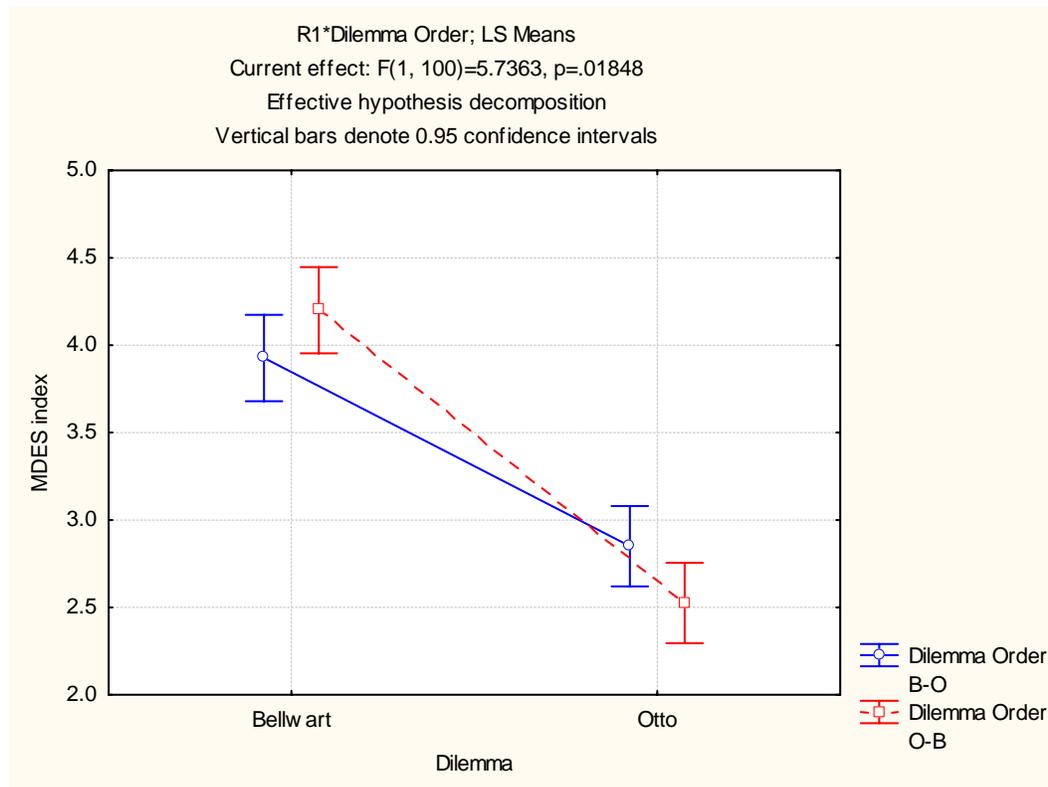
Figure 2. MDES by dilemma and order

Looking at ratings for Bellwart's decision, participants who received the Otto dilemma first rated Bellwart's decision more morally correct than those who received the Bellwart dilemma first. For Otto ratings, when the Otto dilemma was first, ratings were slightly lower than when it was second.

The second interaction was between the type of instruction and the order in which dilemmas were read, as shown in Figure 3.

MELS Condition*Dilemma Order; LS Means
Current effect: F(1, 100)=6.8139, p=.01043
Effective hypothesis decomposition
Vertical bars denote 0.95 confidence intervals
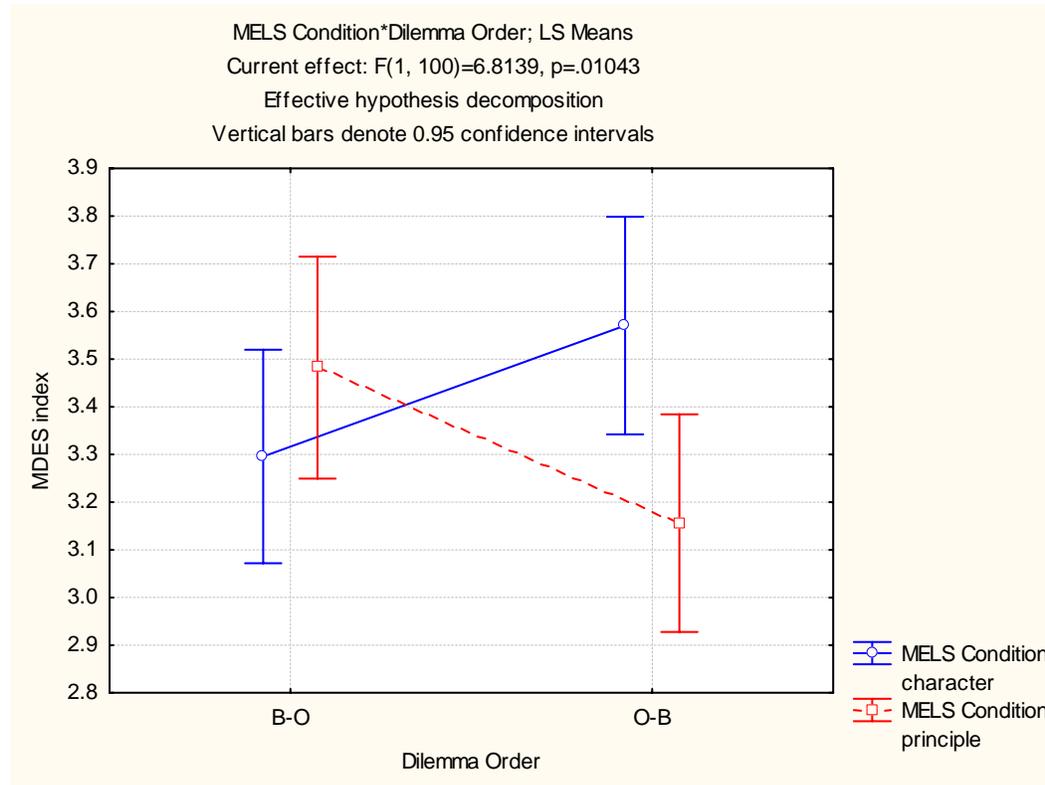
Figure 3. MDES by instruction and order

Participants who received the character-based instruction rated the dilemmas as more ethically right when they read about Otto and then Bellwart compared to when they read about Bellwart and then Otto. On the other hand, participants who received the principle-based instruction rated the dilemmas to be more ethically right when they read about Bellwart and then Otto than the reverse. Means for all of these conditions are shown in Table 15.

Table 15. MDES by instruction type

Instruction	Dilemma Order	Bellwart Valid N	Bellwart Mean (StDev)	Otto Mean (StDev)
Character	B-O	27	4.3 (1.0)	3.1 (1.1)
	O-B	26	4.9 (0.9)	3.1 (0.7)
Total		53	4.6 (1.0)	3.1 (0.9)
Principle	B-O	26	4.6 (1.0)	3.3 (1.1)
	O-B	26	4.5 (1.1)	2.6 (0.9)
Total		52	4.6 (1.0)	2.9 (1.0)
Grand Total		105	4.6 (1.0)	3.0 (1.0)

It is difficult to explain these order effects. However, it is likely that reading about one dilemma will have some kind of impact resolving a second dilemma. Determining what that impact is remains an empirical question.

3.2.3   Relevance of Moral Instruction

After reading the manipulation, participants rated the impact of the moral instruction on a number of different dimensions. For example, the first set of questions were intended to reveal the extent to which participants viewed the moral instruction as personally relevant and the extent to which participants were motivated to act in ways that are consistent with the moral instruction. Each question was analysed using a 1-way ANOVA and the means are shown in Table 16 (Cronbach's Alpha .822).

Table 16. Relevance and motivation by instruction type

(N=53)	Character-Based Instruction Mean (StDev)	Principle-Based Instruction Mean (StDev)	Effect and p value
How relevant would you say this excerpt is to you personally? (1=Not at all, 7=Very)	4.5 (1.8)	5.3 (1.5)	Character < Principle, p < .05
How important is it that you act in a way that is consistent with this excerpt?	5.6 (1.4)	5.6 (1.2)	n.s.
In your mind, how likely is it that you will act in a way that is consistent with this excerpt?	5.5 (1.1)	5.6 (1.4)	n.s.
Total	5.2 (1.1)	5.5 (1.3)	n.s.

Participants who received the principle-based instruction viewed it as significantly more relevant to them than those who received the character-based instruction. The rank of the main character may have influenced his perceived relevance to participants. The majority of participants were junior NCOs (sergeant, master corporal, corporal, private), whereas the protagonist was a Captain. Moreover, only 14% of the participants had operational experience. The actions of the moral exemplar, therefore, may not have felt attainable for participants who were just beginning their military career. Nevertheless, mean scores for acting consistently with the moral instruction and the likelihood that participants would actually act in ways consistent with the moral instruction were fairly high on the scale for both the character-based and principle-based conditions.

The second set of questions examining the moral instruction assessed the extent to which these two forms of instruction were likely to help participants behave ethically. Means are presented in Table 17 (Cronbach's Alpha .876).

Table 17. Translation into ethical practice

(N=53)	Character-Based Instruction Mean (StDev)	Principle-Based Instruction Mean (StDev)	Effect and p value
To what extent does the excerpt that you read help you to be a better person? (1=Not at all helpful, 7=Very helpful)	5.1 (1.4)	4.9 (1.3)	n.s.
To what extent does the excerpt that you read help you know how to treat other people?	5.2 (1.3)	5.2 (1.4)	n.s.
To what extent does the excerpt that you read help you act courageously in the face of danger?	5.4 (1.4)	4.6 (1.6)	Principle < Character, p < .05
To what extent does the excerpt that you read help you distinguish right from wrong?	5.2 (1.1)	4.7 (1.7)	n.s.
Total	5.2 (1.1)	4.8 (1.3)	n.s.

Participants who received the character-based instruction rated this instruction to be significantly more likely to help them act courageously in the face of danger than those who received the principle-based instruction ($F(1, 104) = 7.68$, $p = .01$). It is important to note that both the character-based and principle-based instruction emphasize the need to act with courage. Although the principle-based instruction was rated as more personally relevant, the character-based instruction seems to provide participants with a somewhat better guide for being able to put the examples that they see into action.

However, for items assessing the extent to which the moral instruction applies to their daily lives and the extent to which it would help them make ethical decisions in operations, participants reported no differences between conditions, as shown in Table 18.

Table 18. Real-life application by instruction type

(N=53)	Character-Based Instruction Mean (StDev)	Principle-Based Instruction Mean (StDev)	Effect and p value
To what extent can you apply the information you gained from reading the excerpt in your daily life? (1=Not at all, 7=Very)	4.7 (1.5)	5.1 (1.1)	n.s.
If you were faced with an ethical decision in operations, to what extent would the excerpt that you just read help you know what to do?	5.0 (1.3)	5.1 (1.5)	n.s.

Although both forms of instruction were rated relatively highly, they did not differ as a function of instruction.

Other questions assessed whether the two forms of moral instruction would help participants be a good citizen and soldier. Results showed that both forms of instruction seemed to provide relatively good information about how to be a good citizen and a good soldier, as shown in Table 19.

Table 19. Good citizen/soldier by instruction type

(N=53)	Character-Based Instruction Mean (StDev)	Principle-Based Instruction Mean (StDev)	Effect and p value
To what extent does the excerpt that you read help you be a good citizen? (1=Not at all, 7=Very)	5.3 (1.2)	5.3 (1.2)	n.s.
To what extent does the excerpt that you read help you be a good soldier? (1=Not at all, 7=Very)	5.5 (1.3)	5.4 (1.4)	n.s.

Finally, as shown in Table 20, participants also rated the two forms of instruction in terms of their interest value, the extent to which they held participants' attention, and the comprehension of the excerpt (Cronbach's Alpha .756).

Table 20. Interest, attention, and understanding of instruction type

(N=53)	Character-Based Instruction Mean (StDev)	Principle-Based Instruction Mean (StDev)	Effect and p value
How interesting was the excerpt to you personally? (1=Not at all, 7=Very)	5.8 (1.1)	4.5 (1.7)	Principle < Character, p < .05
To what extent did the excerpt hold your attention?	5.9 (1.0)	4.3 (1.5)	Principle < Character, p < .05
Did you clearly understand the information that was presented to you in the excerpt?	6.2 (1.0)	5.8 (1.4)	n.s.
Total	6.0 (0.8)	4.9 (1.3)	Principle < Character, p < .05

Those who read the character-based instruction considered it significantly more interesting ($F(1, 104) = 23.63$, $p = .00$) and it held their attention significantly more ($F(1, 104) = 41.92$, $p = .00$) than the principle-based instruction. Combined, character-based instruction was more interesting, better at holding attention and more accessible to participants.

3.3 Focus Group Analysis

Once participants completed the questionnaires, the research team conducted an informal focus group to understand the factors that would influence a soldier's moral and ethical decision-making in an operational context. Participants were asked to reflect on the decisions the protagonists made in the two dilemmas and how they might make a similar decision, as well as what they were thinking about when they read the scenarios. Responses were categorized using the extensive taxonomy created in previous research (for a full description see Thomson et al., 2006). Broad categories used included person-based, contextual, and situational factors. Focus group discussions each lasted approximately 15 minutes. Results from the focus group are discussed in the sections that follow.

3.3.1 Person-based Factors

Person-based factors relate to the soldier on an individual level. Relevant themes that emerged from the focus group under this category related to self-identity and values/attitudes.

Self-identity

Self-identity is an ontological category, describing the essential characteristics of a person. This includes definitions of oneself, in terms of one's roles (e.g., I am a leader), personal goals, aspirations, expectations (including identifying with role models), as well as the categories to which one belongs (e.g., being Canadian). Previous research showed that interviewees (senior CF commanders) used their self-identities as a guide when deliberating on moral dilemmas in operations (Thomson et al., 2006). Many officers chose to remain consistent with their sense of self, and preserving their self-identity acted as motivation for their moral conduct. In the current

study, though less frequent, focus group participants also showed the importance of self-identity in their discussions about the actions of the characters in the scenario.

For example, participants looked to their categorical membership as a means to resolve the dilemma facing Sgt Bellwart. Despite the moral urge to intervene, participants argued that violating ROEs did more than merely break the law; such an action would be antithetical to their own expectations relevant to their role as soldiers. As one participant articulated, working within a hierarchical social group meant forfeiting certain rights, sometimes including the right to use one's own moral judgement as a guide rather than following "the rules". He continued to explain that soldiers do what they are told. Another participant noted the challenge of multiple roles that soldiers sometimes face when making ethical decisions in operations. For example, he explained that reservists are told by the chain of command to be citizens first and soldiers second. However, if a soldier was to take this instruction at face value, his own moral compass might trump the law (i.e., ROEs) in a given circumstance. Believing this to be unacceptable, this participant argued that it had to be soldier first and citizen second. He argued that one defining characteristic of a soldier is obedience, and that a soldier is a soldier because he or she is obedient. Many soldiers argued that strong adherence to their roles would drive the decision in a particular direction, i.e., to withhold force and uphold ROEs. Either way, attempting to be consistent with the perceived requirements of multiple roles could invoke its own moral dilemma.

Of course, participants also considered how the decision to act or not would affect their self-identity in the future. Similar to commanders' reflections on the moral decisions they made in operations (Thomson et al., 2006), participants argued that the moral decision they would make in the dilemmas they read about would be based to some extent on whether that decision would allow them to face themselves in the mirror, to go to sleep at night, or to live with themselves after the fact. In this case, adherence to the role of soldier may provide a coping mechanism after the fact, as this role would help them live with the constraints on their actions.

Values and Attitudes

An attitude can be understood as "a psychological tendency that is expressed by evaluating a particular entity with some degree or favour or disfavour", whereas values are typically understood as a specific kind of attitude concerning "abstract goals or end states of human existence", such as freedom or equality (Eagly & Chaiken, 1993, p. 5-6). Values often arise from the result of family and socialization processes, and as such they are more personal than principles associated with a particular ethical ideology. They are said to guide human behaviour.

In the current study, some participants argued that Bellwart decided to shoot into the crowd to prevent a woman from being stoned to death as a result of his own personal values or morals. They explained that his actions reflected a personal belief system about right and wrong. Though some agreed with his decision to violate ROEs, participants more often argued that a soldier in this situation should not act in a way that is consistent with personal values because it might put other people at risk. Interestingly, focus group responses suggested that curtailing the influence of personal values on moral and ethical decision-making in operations might be optimal. In fact, a couple of participants went so far as to declare that Bellwart made the wrong decision when he used his values and attitudes to guide his decision. Interestingly, however, they also argued that they would have done the same thing. Despite acknowledging the potential conflict between morality guided by one's values and the law, most participants generally opted for upholding ROEs.

3.3.2 Contextual Factors

Contextual factors can be understood as the backdrop for moral and ethical decision-making. These factors differ from situational factors because the former are more temporal and variable in nature, whereas contextual factors are broader and more consistent. Many contextual themes emerged from the focus group discussions, including organizational culture, military training, and national culture.

Organizational Culture

According to Edgar Schein (1992; cited in English, 2004, p. 18), organizational culture can be understood as "a pattern of shared assumptions that the group learned as it solved its problems of external adaptation and internal integration, that worked well enough to be considered valid and, therefore to be taught to new members as the correct way to perceive, think, and feel in relation to these problems." If the people that work within an organization have basic assumptions that are consistent with the organization's espoused values, these values will be embodied and manifested in their behaviour with a higher degree of congruency. Organizational culture was reported to be one of the most influential factors on participants' moral and ethical decision-making.

Participants spoke about the hierarchical structure of the CF and the importance of trusting the leadership for making the right decisions around issues such as providing valid ROEs. In particular, participants explained that ROEs are drafted by those with greater strategic understanding of the mission, and therefore they should be obeyed, because sharing common intent with the command structure is paramount to successful missions. In this sense, the chain of command supports moral and ethical decision-making for soldiers. However, over reliance on orders and the chain of command presents challenges. For example, soldiers are expected to obey superiors, but are also expected to disobey unlawful commands. The Defence Ethics Program, for example, demands that CF personnel obey only lawful authority. In the current study, many participants identified the potential conflict between morality and the law in response to the Bellwart dilemma. It is important to understand when a soldier would (or should) supersede the chain of command for moral considerations. How would those lower in the chain of command know when to act morally, if to do so violated a rule or order, such as shooting into a crowd to protect someone from being killed?

History and tradition are critical aspects of CF organizational culture that likely implicate soldiers' moral and ethical decision-making. For example, the legacy of Somalia was in the forefront of discussions about Cpl. Otto's decision, suggesting it also was salient when participants were responding to Otto's dilemma. Participants acknowledged what happened in Somalia was wrong, and it was a failure of leadership from the top down. Similarly, some said the Sgt's action in the Otto dilemma was excessive and he "crossed the line" once the detainee kept quiet. In fact, questionnaire responses indicated the majority of participants disagreed with Otto's decision to keep quiet. However, <u>knowing that</u> something is wrong does not always translate into <u>knowing how to act</u> in accordance with this position.

It was obvious from focus group responses that participants felt constrained by a "soldier" culture that fostered group and unit cohesion. Some participants mentioned it would be very difficult to "rat out" a Sgt in a situation similar to the Otto dilemma because Cpl is a lower rank and, more significantly, would probably be fearful of group reprisal. Military literature maintains soldiers are very concerned with letting down their unit (Kellett, 1982; Grossman, 1995). Participants argued that unit cohesion is vital in operations, and that being in a hierarchical group or collective requires developing and maintaining bonds for survival. Group processes include unwritten codes and agreements that are known by members of the sections, sometimes explicitly known through

discussions or implicitly known through collective action. To violate these, they said, could lead to being ostracized by the unit. Illustrating the collective nature of the unit, one participant explained that reporting the Sgt in the Otto dilemmas would show disrespect for the rest of the unit and break bonds. Another said that to shoot into the crowd in the Bellwart dilemma would likely erode the local people's trust in the unit. Participant responses reinforced the notion that camaraderie (i.e., their concern for members of their unit) can be a critical aspect of moral and ethical decision-making.

Clearly, group processes play a major role guiding moral and ethical decision-making and action in CF operations. Research should investigate the role of these group processes (e.g., unwritten codes) in enculturation and in shaping moral and ethical decision-making in operations. The preceding discussion suggests that questions about individual versus collective agency should be investigated. Is there a perception of collective responsibility in the military culture that might diminish individual responsibility? If yes, what are the implications of this phenomenon on moral and ethical decision-making in an operational context?

National Culture

Among other things, culture consists of norms and values, routines and scripts, and rules and procedures that shape a person's thinking, motivation, behaviour and interactions with others.[6] For CF personnel, issues of national culture can have prominent impact on ethical thought and behaviour when deployed overseas. In previous research, CF commanders said it was important to uphold Canadian values because often other cultures permit behaviours that are unacceptable to Canadian ethical standards (Thomson et al. 2006). However, in the current project, participant responses suggest that taking action to uphold Canadian values or standards may be unacceptable. Further, they argued that acts of omission and acts of commission cannot be viewed similarly. By way of example, some participants argued that Bellwart's interference with the local culture because of what he perceived as a moral transgression was wrong and would likely damage relationships with local population. Interfering with local mores, participants argued, should not be the business of CF personnel. A couple of participants argued against exporting Canadian values to other cultures. Reflecting on past tours, one participant thought the CF is doing just that in Afghanistan. Focus group responses suggest, like personal values, cultural values should also be curtailed in operation so as not to be insensitive to other cultures.

Military Training

Another contextual factor that emerged in focus group discussions was military training. Some participants seemed to diminish the role of ethical training for CF personnel by arguing that ethics was learned at the family level. As such, moral and ethical decision-making was not a consequence of military training, but represented a soldier's personal beliefs and values. They argued that training ethics in the CF was complicated because Canada is a multicultural nation with many different value systems in play. Giving priority to one ethical system or set of values would necessarily entail prioritizing this system at the expense of another.

Participants also argued that military training can be understood on two levels. On one level, military training can be formal, consisting of workshops and courses on ethics. These typically are designed to promote a particular value or ethical system over others. This formal training may have

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[6]For an integrated review of the literature regarding cross-cultural differences on psychological processes see Thomson, Adams, Taylor, & Sartori, 2008.

limited use for disseminating organizational values throughout the force. However, military training can also be informal and still promote a particular ethic at the organizational level. This training consists of indirect processes of influence, such as socialization and experience. As such, it subtly enforces organizational values through member participation, as "the soldier" and "the organization" become increasingly integrated. In fact, participants' responses to Bellwart's decision reflected this. They argued that his decision to contravene ROEs, though morally justifiable, went against organizational values (e.g., obedience). Research should examine more fully the underlying impact of informal military systems to determine how these impact moral and ethical decision-making.

Rules of Engagement (ROEs)

For participants, ROEs had a profound impact on their moral and ethical decision-making. Despite the fact that participants thought that what Bellwart did could be morally justified, they argued his actions were wrong because he contravened ROEs. Because ROEs represent the soldier's guide for the lawful execution of force, violating these, in essence, goes against their code. In the dilemma that Bellwart faced, participants argued that moral and ethical decision-making could be best resolved by adhering to organizational regulations.

3.3.3 Situational Factors

Situational factors can be understood as temporal and variable factors that can influence moral and ethical decision-making. For example, the level of risk inherent in a situation will vary and this will likely influence the moral and ethical decision-making process. Hypothetically speaking, if the risk is low, the decision to act may be easy. On the other hand, if the risk is high, the decision to act may be much more difficult and complex. Moral intensity and available choice alternatives were two situational factors that emerged in focus group discussions.

Moral Intensity

Participant responses indicated that their moral and ethical decision-making would be driven to a large extent by the perceived magnitude of the consequences of the action. By way of example, participants argued that Bellwart's decision would have negative consequences for the CF as a whole. Participants argued that Bellwart placed his fellow soldiers at greater risk because locals would not differentiate the actions of one soldier from those of other soldiers because they all wear the same uniform. In this sense, the actions of one represent the actions of all CF members. Otto's decision not to act also might tarnish the reputation of the CF and, as such, have negative impacts. When considering a moral and ethical decision, participants suggested they would rely on the perceived magnitude of consequences to help determine the decision they would make. According to participants, the perceived magnitude of consequences would be influenced by the impacts on force protection (e.g., local reprisal) and on the potential impact on the success of the overall mission (e.g., erosion of local trust).

Available Choice Alternatives

Participants also noted the role of the available choice alternatives (i.e., options available at the time of the decision) in moral and ethical decision-making. In some cases, alternatives included resolving the dilemma in a different way. For example, in the Bellwart case, one participant suggested that the protagonist could have driven a vehicle over to the crowd accompanied by his section. Others suggested shooting into the air may have been a compromise to actually shooting a non-combatant. In discussing moral and ethical decision-making, participants showed a capacity to

resolve the dilemma by accepting a compromise between doing nothing (i.e., watching) and doing something (going as a unit to the scene).

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4   Discussion

4.1   Key Findings and Lessons Learned

The purpose of the current study was to examine the impact that different moral instruction might have on moral reasoning. Pitting principle-based and character-based moral instruction against one another, we expected to see differences in moral reasoning ability when participants were given a moral task (resolving moral dilemmas). Specifically, we expected to see an increase in moral reasoning ability in participants who received the character-based moral instruction compared to those who received the principle-based instruction. This increase, we hypothesized, would arise, in part, because of the personal relevance of the example shown in the character-based excerpt. Based on the research on role models (Lockwood et al., 1997), we argued that character-based moral instruction would impact more positively because participants would be upwardly inspired by a relevant moral exemplar. However, the type of moral instruction did not have an impact on participants' moral reasoning ability. Moreover, counter to our hypothesis, participants rated the principle-based instruction to be significantly more relevant to them personally than the character-based instruction. As this was the first time the experimental stimuli were used, the following discussion raises a number of possible reasons to explain these findings.

First, it is plausible to argue that a key underlying assumption of this study may have been problematic. The primary dependent variable in this study was moral reasoning, and the assumption was differences in the kind of moral instruction received would influence moral reasoning. However, moral reasoning may be very difficult to change with a single intervention, as conventional descriptions of moral reasoning emphasize its longitudinal nature. Kohlberg et al. (1977) described moral reasoning as developing in stages throughout childhood. For example, children initially reason at lower levels, moving progressively higher as they become teenagers and then adults. Because moral development can be understood as a "qualitative reorganization of the individual's pattern of thought rather than…the learning of new content" (Colby & Kohlberg, 1984), perhaps providing participants with one excerpt would not have the intended effect of altering moral reasoning. Invoking full blown structural changes in reasoning capability may require a longer period of time involving time for personal reflection and thinking through the moral instruction in more detail. Designing a study that provides participants with somewhat more time and opportunity to reflect on the instruction that they receive may provide a best test of the value of character and principle-based instruction. Existing literature may provide some indication of the optimal time frame (e.g., days, weeks or months).

Another unexpected result was the perceived differences between the dilemmas that were used to explore moral reasoning. Although the dilemmas were designed to stimulate similar levels of moral reasoning (C-scores), this was not the case. In fact, the dilemmas produced very different C-scores. According to the rating scale found in Lind (2004), the C-score on the Bellwart dilemma was rated very high (mean score 41.6 out of a possible 100) and medium (mean score 27.4 out of a possible 100) on the Otto dilemma. As Lind (2004) points out, measuring dilemmas separately will produce higher C-scores because the variance as a result of dilemma context is excluded. The fact that the dilemmas evoked markedly different levels of moral reasoning on C-scores is worth further exploration.

One major difference in the dilemmas that could have impacted the results is that one represented an act of commission (Bellwart dilemma) and the other an act of omission (Otto dilemma). For example, Bellwart prevented someone from being killed (the woman) by shooting into the crowd and wounding one of the stone throwers. Otto, on the other hand, despite having serious misgivings about the Sgt's conduct toward a detainee, did not inform the CO of the Sgt's immoral actions. He decided to keep quiet. In this dilemma, keeping quiet is an act of omission. In fact, focus group discussions often centred on the Sgt's immoral action perpetrated against the detainee and not Otto's decision not to report the incident. Participants thought that the Sgt had "crossed the line". Sweeny (2008) holds that blame is dependent on who caused an event to occur, because acts of commission carry with them intent of an actor (Spranca, Minsk, & Baron, 1991). Attributions of blame lay more with the antagonist in the Otto dilemma (the Sgt) and not with the protagonist (Cpl Otto). Action and non-action likely will be judged differently because the latter do not cause tangible outcomes, whereas the former do. This could have a profound impact on how one reasons through the moral dilemma. To understand the notion of moral responsibility further, dilemmas could be modified so that both protagonists act (Bellwart shoots and Otto reports) or do not act (Bellwart does not shoot and Otto does not report). This may provide insight into participants' perceptions of acts of omission and acts of commission, and the degree of moral responsibility arising from both.

Participants also viewed the two dilemmas as having different levels of the probability of effect, magnitude of effect, and social consensus. Despite the probability of negative consequences stemming from both scenarios, participants thought that, in the case of Bellwart, shooting into the crowd to prevent the stoning of a woman was more likely to produce negative consequences. Similarly, regarding the magnitude of the consequences, participants rated the harm from the Bellwart's decision to be significantly more severe than Otto's decision. In essence, participants see shooting a civilian and violating ROEs as more morally intense than keeping quiet with respect to negative consequences. However, participants thought that Otto's decision not to report the abuse of a detainee would be significantly more socially inappropriate than Bellwart's decision. Subsequent focus group responses suggested that for some participants, the failure to report the abuse of the detainee called to mind the Somalia incident in which CF soldiers abused and killed a Somalian youth while in custody. The negative connotations arising from this legacy likely account for the differences in ratings on social consensus. In focus group discussions held after the questionnaire measures were completed, soldiers raised Somalia as an analogy to the Otto dilemma.

Participants also rated the decisions that the protagonists made differently. For scores on the Multidimensional Ethics Scale (MDES), Bellwart's decision was perceived as significantly more ethical than Otto's decision. In other words, Otto's decision was viewed negatively among participants. In fact, on questionnaire items, there was very little agreement with Otto's decision to keep quiet, and his behaviour was seen as relatively inappropriate. However, some inconsistency between participants' questionnaire ratings and focus group discussions regarding Otto's dilemma was also evident. For example, participants spoke of the need to maintain unit cohesion and bonds. Speaking out against the Sgt would likely shatter this and was, therefore, questioned as the best course of action. Focus group discussions suggested that participants were more ambivalent about Otto's decision than Bellwart's as a consequence of group norms and influences. There was also discussion about unwritten contracts and unspoken promises with respect to reporting a fellow soldier but not with respect to breaking ROEs. Although ratings about Otto's dilemma were negative, questionnaire items assessed the culture outside of the CF. In focus group discussions, some soldiers felt Otto's actions were actually acceptable and in line with the culture of the CF.

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This implies the distinct nature of military culture may not have been tapped in the questionnaire items. To equate the ideals of broader society with the values in play inside the CF may be unfair. This observation is in keeping with previous work describing the very unique nature of military culture (English, 2004). It is likely then that how participants responded to the two dilemmas may differ because they viewed these quite differently. For the future, it would be ideal to attempt to match the dilemmas to a greater degree. The opportunity for more pre-testing of these dilemmas and perhaps even an informal validation may assist the matching process.

There were also unexpected differences in moral reasoning as a product of the order in which the dilemmas were read. These order effects cannot be easily explained, but they suggest that the dilemmas influenced each other. For example, regardless of the order of receiving the Otto dilemma, participants were similarly decided about his decision. All participants disagreed with Otto's decision. However, participants' level of agreement with Bellwart's decision to shoot into the crowd to save a woman from being stoned to death depended on the order in which they received these two scenarios. When they read about Bellwart's dilemma first, participants disagreed with his decision significantly more than when they read about him after Otto. After reading about Otto, participants were more uncertain about their own level of agreement with Bellwart's decision to contravene ROEs. Moreover, those who read about Otto first rated Bellwart's decision to be more morally correct (combined MDES scale) than those who read about Bellwart first. Although Bellwart acted forcefully to save the woman in the crowd, Otto's decision was an act of omission. Perhaps Otto's inaction prompted participants to consider if doing nothing is the right course of action. This difference could have influenced how participants perceived these dilemmas. These ideas, however, are speculative and future research would be required to understand these order effects.

The failure of character-based instruction to evoke higher levels of moral reasoning is also important to explore in more detail. As noted earlier, one of the most surprising findings of this study is the low perceived relevance of the moral exemplar in the character-based scenario compared to the principle-based experimental stimuli. The principle-based instruction was rated more personally relevant to participants. We expected that an actual CF member within a military situation performing an act of heroism would be more relevant than a formal articulation of principle. Perhaps participants who received the character-based moral instruction may have had trouble relating to Harry, the moral exemplar in the scenario, because he was a commissioned officer (i.e., Captain) in the CF, while 84% of the participants in the study were junior non-commissioned officers (including Sergeants, Master Corporals, Corporals, and Privates). As noted earlier, the impact of a given exemplar is influenced by the perceived relevance to the target (Lockwood et al., 1997). For the purposes of the current project, the research team chose membership in the CF as the most relevant attribute of the protagonist. Perhaps matching other key attributes, such as rank, to participants may be necessary for future research to ensure the character is in fact self-relevant. Participants may have viewed his rank as unattainable, and hence, the moral exemplar (and his achievements) may have been seen to be less relevant. A prospective role model is likely to be much more effective when his or her status is perceived as attainable (Lockwood et al., 1997). Mission type might also have influenced the self-relevant rating as Harry was participating in a UN peacekeeping mission in Africa, rather than the more current combat mission in Afghanistan. As media attention and CF training attention shift to combat in Afghanistan, the very salience of this mission may overshadow other kinds of missions (such as peacekeeping missions in the Congo and Sudan). Rank and mission type, therefore, may have influenced the self-relevance ratings of the two kinds of moral instruction, which may have diminished the effectiveness of character-based instruction in this study.

Moreover, an unexpectedly high level of familiarity with the principle-based instruction could have also positively influenced the effectiveness of (and acceptance of) these materials. During the focus group, participants were asked if they had received specific moral instruction from the CF, and some indicated they had. The principle-based instruction, derived from the Statement of Defence Ethics, is a common approach to CF moral instruction. Moreover, the Statement of Defence Ethics appears in many CF documents. If participants have experienced or viewed that particular kind of instruction before, this may have made the information more accessible and hence perceived as more personally relevant by participants. Classic psychological research suggests that previous exposure to stimuli promotes positive attitudes toward them (Zajonc, 1968). Familiarity and positive attitudes may also make them more personally relevant. The high perceived relevance of this principle-based instruction may also be influenced by social desirability effects, as CF members are all meant to embrace these principles and obligations as part of the CF ethos.

However, there are some findings regarding the character-based instruction that are worth noting. Participants who read the character-based instruction considered it significantly more interesting and it held their attention significantly more than the principle-based instruction. As well, the character-based instruction was more likely to encourage a soldier to act courageously in the face of danger than the principle-based instruction. This finding suggests character-based instruction in the form of a story may translate more readily into ethical behaviour than principle-based instruction.

Another finding worth noting relates to the correlation between high ratings of moral identity and moral reasoning ability. The MIQ was administered to check for pre-existing differences in moral identity for participants in the two experimental groups. However, it was also critical given previous research to explore the relation between moral identity and moral reasoning (Pratt et al., 2003; Aquino et al., 2002; Reed et al., 2007). Analyses between the overall internalization score and the C-index score for the dilemmas revealed significant correlations for the Bellwart dilemma, and overall dilemmas, but not for the Otto dilemma. These findings show participants who strongly internalized their moral identity showed higher consistency in their moral reasoning for the Bellwart dilemma and both dilemmas combined.

Observations from the focus groups are also important to highlight because they point to a number of ways in which participants might resolve a complex moral dilemma in operations. There were a number of factors that seemed to drive moral and ethical decision-making. With respect to person-based factors, participants were largely driven by self-identity, i.e., there desire to embody the role expectations of a soldier. Participants emphasized the importance of "doing what you are told" as this is essentially what soldiers do. Indeed, some argue that obedience is the cardinal virtue of a soldier (Keitel, 1965; cited in Osiel, 1999), and expressions of this reveal a soldier's true calling (Osiel, 1999). Participant responses implied personal values and attitudes were surrendered when one becomes a soldier, and acting on the basis of one's own personal values was discouraged. With respect to contextual factors, participants' moral and ethical decision-making was shaped to a large extent by CF organizational culture. On the one hand, reliance on the chain of command (or the "higher ups") provided soldiers with the necessary governance to act in a way that is both consistent with the commander's intent and ethical. Participants emphasized the importance of recognizing and trusting the chain of command. Using Dursun's et al. (2005) taxonomy for ethical approaches to decision-making, adherence to organizational regulations intermingled with a strong desire to reflect the social role (i.e., soldier) suggest a rule based approach. Participants' MJT moral attitudinal scores also showed they favoured Stage 4, upholding authority and the social order, over all of the other stages when reasoning through moral dilemmas. This stage is defined as submitting

to laws and social conventions to maintain the social order. Obedience is a primary virtue for this stage.

A second factor of organizational culture that participants mentioned was unit cohesion and the concern for the well-being of those in the section. Group or collective processes, such as unwritten codes of honour and bonding, seemed to underlie participants' moral and ethical decision-making. Participants showed concern for their comrades, despite the fact that a fellow soldier may have "crossed the line". Care for those in one's unit was essential to unit cohesion and security. The magnitude of the consequences (i.e., moral intensity) also influenced the moral and ethical decision-making process. Participants explained that the impacts on the unit (i.e., force protection) following the moral decision need to be considered before acting. For example, violating ROEs not only contravenes authority and breaks the law, but also endangers all those who wear the uniform (of the CF) as the probability of the locals lashing out was perceived to be high. Ultimately, concern for the well-being of one's force, i.e., a care based ethical approach (Dursun et al., 2005), may significantly shape moral and ethical decision-making in operations.

Though culture was not raised as a particular process of their moral and ethical decision-making, participants mentioned the incongruence between Canadian culture and the cultures where CF personnel are deployed (e.g., Afghanistan). Participants' comments suggested this had the potential to put CF personnel (e.g., Bellwart) in particularly tough moral circumstances or dilemmas. On the one hand, CF personnel believe upholding Canadian values in operations protect soldiers from becoming morally lax in environments (such as war zones) where immorality is lessened (Thomson et al., 2006). By contrast, participants in this study warn acting from Canadian values could have negative consequences. What exactly these negative consequences were was discussed. However, consistent with cross-cultural research (see Thomson, Adams, Taylor, & Sartori, 2007 for an integrated literature review), participants argued that Western beliefs and values differ fundamentally from Eastern beliefs and values, and that it may be wrong for people from one culture to impose their beliefs and values on other cultures. In the case of the Bellwart scenario, for example, participants argued that although Western cultures have come to believe that people of both sexes are equal, women were historically seen as inferior to men. Enactment of punishment (e.g., stoning adulteresses) may be quite divergent. However, for Westerners to impose their more recent equality beliefs on other cultures that do not hold this belief is perhaps wrong. Like personal values and attitudes, cultural influences, they argued, should be curtailed. Understanding just how culture influences and shapes moral and ethical decisions in operations requires further investigation as this will be an important issue facing the CF as their operational role expands around the globe.

Indeed, cultural nuances are often very subtle and difficult to detect, let alone interpret. In operations, however, CF personnel will be forced to assess not only their own thoughts, motives, feelings, and actions but also those of individuals from allied forces (e.g., Nigerian, Ukrainian, etc.) and the host country (e.g., Congolese, Afghani, combatant or non-combatant). Cultures' influence on thinking, motivation, feeling, and acting cannot be understated, and better understanding these subtleties will be especially important for the CF of the future. Both current and future operations are likely to rely on "winning the peace" through positive interactions with the local population. As the focus of insurgent wars like that in Afghanistan today frequently iterates between combat and security, stability, and development, soldiers are expected to show high levels of diplomacy as well as cultural sensitivity to local populations. But without adequate understanding of the influence of culture in our moral and ethical decision-making, cross-cultural differences have the potential to harm relationships with local populations. Determining just how culture impacts moral and ethical decision-making in operations should be investigated.

In sum, there were five key findings in the current study. Results indicated the type of instruction did not impact moral reasoning for dilemmas. However, the order in which dilemmas were completed did impact agreement with the decision, MDES ratings and ratings relating to the type of instruction received. There were differences between dilemmas regarding C-scores, probability of effect, magnitude of effect, social consensus, and MDES ratings. There were also differences regarding the relevance of instruction. There was a correlation that replicated previous work from Aquino et al. (2002) indicating strong moral identity correlates with moral cognition. The focus group analysis examined the major processes that participants invoke when making a moral and ethical decision, specifically self-identity, CF organizational culture, culture, and magnitude of the consequences (i.e., moral identity).

4.2 Future Research

Future research should work to better understand some of the discrepant findings emerging from the current study. This section details a number of potential possibilities.

One interesting finding that could be addressed in future research is the apparent incongruence between quantitative and qualitative measures regarding the Otto dilemma. Questionnaire items suggest participants disagreed with Otto's decision to keep quiet, but focus group discussions revealed participants' apprehension with reporting a section member. They argued that group processes, such as unit cohesion and bonding, were vital for force protection in operations. Participant responses indicated that unwritten contracts and unspoken promises between members of the unit may be significant determinates of moral and ethical decision-making. It may be that contemplating the dilemma independently rather than collectively yields two distinct processes of moral and ethical decision-making. Perhaps others play a significant role in shaping moral judgement and decisions as some prominent moral psychologists argue. For example, Haidt's (2001) Social Intuitionist Model of Moral Judgement suggests that our reasoning about moral issues moves through a collaborative justification process, and individuals combine their reasoning capacities to either reinforce or diminish their moral intuitions. Collective culture and cultural practices play a fundamental role in Haidt's model. Participants' qualitative responses to the dilemmas may show implicit evidence of the influence of collective processes in cognitive judgements and subsequent moral decisions. This suggests that being able to access individual responses in comparison to responses emerging out of a group setting may be key to further understanding the discrepancy between quantitative and qualitative responses. Future research could have small groups of participants discuss the dilemmas and instructional materials in order to promote the benefits of learning from each other, and help them to elaborate on their own moral intuitions or "hunches" in conjunction with other people. It may be that providing participants more opportunity to refine their own views with other teammates would shed light on the some of the cultural processes at play in moral and ethical decision-making.

Because there was a perceived difference in the probability of effect, magnitude of effect and social consensus of the dilemmas, future research could also include the moral dilemmas from Lind (2004) in conjunction with the military ones constructed and used in the current study. The doctor's dilemma and the worker's dilemma have been extensively tested and could be considered a reliable benchmark. Including these dilemmas would allow exploration of whether the types of moral reasoning seen in the operational dilemmas would parallel the processes used to reason about dilemmas in general societal contexts. It may be, for example, that the operational dilemmas invoke unique issues of military ethos and "code" for military personnel that would be absent for more generic dilemmas. The military examples might be too prominently tailored to the military context.

Using a more diverse sampling frame may be another way to explore this issue. Non-military samples (i.e. civilians) might show differences in moral reasoning about the two military dilemmas. The current study suggests that military ethos and culture may well have influenced many of the key findings (e.g. promoting the greater good of the unit over reporting a fellow member of the unit). In this sense, it would be interesting to compare how non-military personnel would view the scenarios in relation to military personnel. Given the results of the current study, one issue worth exploring is how civilians would view similar moral and ethical decisions. For example, would civilians also disagree with Otto's decision to keep quiet and discuss openly that it was his best option?

As stated previously, results of the current study suggest it is may be unrealistic to expect that moral reasoning will change in such a short time period as it involves cognitive structural change and not simply learning new content (Colby et al., 1984). Given that moral reasoning takes time to develop and change, one possible alternative would be to expand the length of intervention. Instead of providing participants with a one page excerpt, the moral instruction could be a one hour "chalk and talk" session (or a number of sessions). Participants could receive one of the two types of moral instruction used in the current project to determine if one method of instruction has a greater impact on moral cognition. It may also be the case that having more time to reflect on the dilemma outside of the formal experimental context may provide participants more opportunity to internalize the principles exemplified in the character-based dilemma. For example, perhaps testing participants one month after they receive the instruction may facilitate a more prominent impact on moral reasoning this longer time frame would provide more time to reflect and to internalize the instruction.

Even if short-term instruction does not seem likely to influence moral reasoning, however, it may still influence other critical correlates of moral decision-making and behaviour. Other indicators may be more malleable. For example, it may be more fruitful to explore lesser antecedents to changes in moral reasoning. These could include exploration of the accessibility in memory of moral constructs primed during the instruction, such as using reaction time paradigms. It would also be possible to measure moral behaviour directly. For example, to investigate the correlation between moral identity and moral conduct, Reed et al. (2007) measured participants' actual donating behaviour. Participants could receive moral instruction at a given point and then be elicited for donation behaviour (e.g., donating non-perishable food) at a second point of time. Donation behaviour may provide input into the effect of the moral instruction. This method might also be assessed by substituting donation activity for an existing military exercise that requires some kind of ethical behaviour. Another task, the well-known prisoner's dilemma (see Poundstone, 1992, for a detailed account of the prisoners dilemma), could also be used to examine moral and ethical decision-making. In fact, as the prisoner's dilemma typically involves a situation in which one chooses to "cooperate" or "defect", it could be modified to include the content of the Otto dilemma as the protagonist's choices model those in the prisoner's dilemma. Again, it is easy to say one thing and do another. Measuring participants' moral behaviour might provide more information about both the direct and indirect impact of moral instruction.

Future research should also work to explore whether the self-relevance of the moral exemplar might influence the impact of exposure to a character-based exemplar. In the current study, there was some indication that participants may not have seen the main character in the scenario to be personally relevant to them. It would be valuable to understand why this might have been the case, whether the rank of the character or the fact that he was a commissioned officer might have affected his perceived relevance. Conducting an experiment that provides only character-based instruction, while pitting various types of moral exemplars against each other, would be one way to

explore the exemplars that junior CF personnel are likely to be most inspired to emulate. Presenting exemplars of different ranks to a wide variety of military participants might help to establish whether the best type of moral exemplar depends on this person's absolute status (e.g., high ranking officers are always inspirational) or dependent on the match between one's own status and the exemplar (e.g., privates are more likely to be inspired by privates), as the Lockwood and Kunda (2002) research would suggest. Or more complexly, perhaps the best moral exemplar for a given person may be linked to individual differences in motivation. The extent to which a given person might be inspired to match the achievement of a moral exemplar rescuing a couple from an angry crowd might depend on the extent to which this person sees military service as a job versus a life-long mission, working to help the Canadian Forces "Fight Chaos". Varying the nature of character-based instruction on several different dimensions such as achievability (helping someone versus saving someone), rank (CO versus NCO), mission type (Africa versus Afghanistan), and virtue (perseverance versus courageous) would help to disentangle the influence of moral exemplars. And, although the current study used a paper-and-pencil approach, presenting the moral exemplar using different media may also have differential effects. Reading an excerpt might arguably be somewhat less inspirational (and hence likely to impact moral thought and behaviour) than viewing a video clip, even though both sources contain much of the same information. In fact, the written scenario used in the current study parallels the exact situation depicted in the recent movie "Shake Hands with the Devil", the autobiographical account of Lt Gen Romeo Dallaire's UN command in Rwanda during the genocide. Being able to see the actual behaviour may promote a stronger influence than reading about a scenario on paper. Comparing these two media may further our understanding of story telling as a means to promote ethical conduct.

Using scenario-based approaches to explore moral issues seems a natural extension given that these approaches provide coherent stories that could help young soldiers shape their own moral identities. Learning more about story-telling as an enculturation process and as a means of promoting ethical conduct should be pursued. Military systems such as the CF have rich traditions and heroes that are preserved and passed down by word of mouth to new recruits. Understanding which of these heroes are most likely to inspire ethical thought and behaviour, and which are most likely to be become integrated into one's moral identity would be an important contribution. When presented with a real-life example, soldiers may aspire to achieve similar levels of virtue. Determining the best method of teaching ethics within the military context could have substantial benefits for the CF of the future.

Overall, focus group discussions provided evidence that soldiers may adopt a different approach to moral and ethical decision-making as a consequence of the moral dilemma they confront in operations. Adopting Dursun's et al. taxonomy for ethical approaches to decision-making, focus group results explicitly identified three primary approaches, including rule based, consequence based, and care based. For example, thinking about the Bellwart dilemma, participants seemed to adopt a rule and consequence based approach to moral and ethical decision-making. Participants explained that following ROEs was paramount because these derive from "higher ups" in the know and a soldier qua soldier obeys these ROEs (Keitel, 1965; cited in Osiel). They also mentioned that there could be serious consequences arising from shooting a civilian. Participants argued that a soldier in a similar situation should reflect on the potential negative consequences to the CF as a whole (as locals lash out at anyone wearing a CF uniform) and the overall mission. Perceived consequences were a strong determinant of moral and ethical decision-making. On the other hand, unit cohesion and concern for the well-being of the section appeared to be very influential in shaping moral and ethical decision-making. A character-based approach, though demonstrating loyalty to fellow soldiers, may in fact lead to the suppression of moral judgement. Research could

examine the underlying sociological and group processes in soldier's thinking about moral and ethical decision-making in order to be able to determine empirically those issues that need to be addressed and align these with organizational expectations. These focus group findings suggest a number of ethical approaches drive the decision-making process, and these might vary as a product of the unique dilemmas that CF members face.

Focus group discussions also suggested that differences in rank might lead to different psychological processes for moral and ethical decision-making. Previous research exploring ethical decision-making in operational contexts focused solely on the experiences of senior commissioned officers (Thomson et al., 2006). Consequently, many of the moral decisions were made at the command level. It would be interesting to do a similar study with non-commissioned officers to compare the two decision-making processes. In the current study, obedience and loyalty emerged as significant factors shaping decision-making. This influence may emerge because NCOs are often constrained by military standards by procedures in the fulfilment of operations. In contrast, CF commanders often took matters into their own hands and selected a course of action that ran counter to operational demands and regulations to ensure they acted ethically (see Thomson et al., 2006 for detailed examples). Full, comprehensive interviews with NCOs who have themselves confronted moral dilemmas in operations may provide greater clarity regarding the processes at work when resolving moral dilemmas in operations. Focus group discussions for the current project showed a willingness of NCO personnel to raise issues they thought important to understanding moral and ethical decision-making from their perspective. Semi-structured interviews with soldiers may disentangle some of the factors identified in focus group discussion in such a way as to highlight the principle factors in moral and ethical decision-making. Moreover, a side by side comparison between COs and NCOs may reveal different moral and ethical decision-making processes. Again, appreciating the different socialization process for COs and NCOs may shed light on the potentially different psychological processes for moral and ethical decision-making.

4.3 Implications for CF

Military training requires a broad understanding of the current operations facing the CF. The CF is primarily operating in Afghanistan fighting an insurgent war. This kind of conflict and Canada's role in these conflicts differs widely from previous conventional conflicts (e.g., World War II, Korea, etc). As such, concepts of operation (e.g., need for dismounted patrols over mounted patrols) and training must reflect these differences if the CF is to be maximally effective. By analogy, moral and ethical dilemmas that CF personnel confronted in the conflicts in the 1990s (e.g. former Yugoslavia) may be profoundly different than those that are emerging today. Decision making processes for resolving dilemmas will also naturally vary as a product of many influences such as rank, mission, and level of involvement, to name a few. It is critical that the sophistication of ethics training needs to stay in step with the increasingly complex operational demands. One prominent disconnect noted in the literature is that between culture and ethics. For example, Bailliet (2007) argues that cultural norms (or values) are being violated by US soldiers when they conduct home raids in Iraq, not because American soldiers are inherently malicious or unethical, but because they have not received adequate or comprehensive culture training. Though fundamentally important, instructing soldiers about the Laws of Armed Conflict or various Conventions may not be the most effective moral instruction. Moral training needs to address more subtle nuances that include specific attention to both the individual (e.g., moral identity) as well as to critical intersections with cultural and social factors.

Moral and ethical decision-making training, though important, will likely compete for other more pressing CF training needs as operations in Afghanistan continue. For the CF looking to train soldiers in the area of moral and ethical decision-making, it may be more effective to share stories of soldiers who acted virtuously in operations, underscoring role expectations for CF personnel. This research began exploring this possibility. Understanding the psychological processes that are positively impacted by moral exemplars will likely contribute to CF training of moral and ethical decision-making, because as the results showed character-based approach to moral instruction is accessible through story telling (promoting greater interest, attention, and comprehension) and more appropriate. The desired virtue (e.g., courage, integrity, perseverance, etc.) may come alive through the characters, and subsequent reflection on these may promote the desired moral conduct for CF personnel. Again, as Osiel (1999) points out, stating "Soldiers don't do that!" may be more effective in ensuring ethical conduct than detailed descriptions of moral principles and obligations, for they lack the vivid content. Rich personal examples that both instruct and inspire CF personnel to work to exemplify the values that they are bound to protect could be critical to this effort. Moral and ethical decision-making is a complex phenomenon, especially in military operations. Further research evaluating the current CF training initiatives will ensure soldiers receive moral instruction in a way that is effective, relevant and efficient, and ultimately meet the needs of the CF in the new operational environment.

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ANNEX A.

A1. Demographic Questionnaire

Please provide the requested background information in the spaces provided.

Demographics:	
What country do you live in?	$ Canada $ Other (specify) _____
In what year were you born?	
What is your first language?	$ English $ French $ Other (specify) - _____
What is your sex?	$ Male $ Female
What is your highest level of education?	$ High school $ University/college degree Years of university/college _____
Your Elemental Command:	$ Army $ Navy $ Air Force
Your Rank:	
Your MOC:	
Length of Military Service	$ Less than 1 year $ 1-3 years $ 3-5 years $ 5-10 years $ > 10 years
Operational Experience	No Yes If yes, please list $ $

A2. Moral Identify Questionnaire

Listed below are some characteristics that might describe a person.

Optimistic	**Respectful**	**Strong**	**Truthful**	**Generous**
Trustworthy	**Brave**	**Helpful**	**Kind**	**Open-minded**

The person with these characteristics could be you or it could be someone else. For a moment, visualize in your mind the kind of person who has these characteristics. Imagine how that person would think, feel, and act. When you have a clear image of what this person would be like, answer the following questions in the table below.

1) It would make me feel good to be a person who has these characteristics.	*I strongly disagree*				*I strongly agree*		
	1	2	3	4	5	6	7
2) Being someone who has these characteristics is an important part of who I am.	*I strongly disagree*				*I strongly agree*		
	1	2	3	4	5	6	7
3) I strongly desire to have these characteristics.	*I strongly disagree*				*I strongly agree*		
	1	2	3	4	5	6	7
4) I would be ashamed to be a person who had these characteristics.	*I strongly disagree*				*I strongly agree*		
	1	2	3	4	5	6	7
5) The types of things I do in my spare time (e.g., hobbies) clearly identify me as having these characteristics.	*I strongly disagree*				*I strongly agree*		
	1	2	3	4	5	6	7
6) The kinds of books and magazines that I read identify me as having these characteristics.	*I strongly disagree*				*I strongly agree*		
	1	2	3	4	5	6	7
7) Having these characteristics is not really important to me.	*I strongly disagree*				*I strongly agree*		
	1	2	3	4	5	6	7
8) The fact that I have these characteristics is communicated to others by my membership in certain organizations.	*I strongly disagree*				*I strongly agree*		
	1	2	3	4	5	6	7
9) I am actively involved in activities that communicate to others that I have these characteristics.	*I strongly disagree*				*I strongly agree*		
	1	2	3	4	5	6	7
10) I often wear clothes that identify me as having these characteristics.	*I strongly disagree*				*I strongly agree*		
	1	2	3	4	5	6	7

A3.   Moral Dilemma

Please read the following <u>short story</u> and answer the questions that follow.

To Shoot or Not to Shoot

Sgt Bellwart and his unit are part of an overseas United Nations (UN) peacekeeping mission, monitoring the ceasefire between the United Army and the Rebel Force. Recent reports have indicated that a few local women have been stoned to death for adultery. Though not an acceptable practice in Canada, this is an acceptable means of punishment in the local community. Sgt Bellwart knows that efforts have been made by the UN Force Commander to rewrite the ROEs so that UN personnel can intervene when they witness such a practice. But, to date, this has been rejected by NDHQ, and the existing ROEs only permit the use of force by UN personnel in self-defence. One day while watching from his Observation Post (OP), Sgt Bellwart notices a group of people throwing stones at a woman who has been accused of adultery, obviously with the intention of killing her. As he looks closer with his binoculars, he can see the terror and anguish on the woman's face. She is pleading for her life. He feels angry and frustrated and he urgently wants to help the woman, Sgt Bellwart believes that he might be able to disperse the crowd if he fires on it. After a moment's deliberation, he raises his C7, takes aim and fires, wounding one of the stone throwers.

11) Would you agree or disagree with Sgt Bellwart's decision?

I strongly disagree   *uncertain*   *I strongly agree*

-4   -3   -2   -1   0   +1   +2   +3   +4

A4. Moral Judgement Test

Please read the following statements _in favour_ of Sgt Bellwart's action. Please indicate to what extent you agree or disagree with the statement. <u>There are no right or wrong answers</u>. We are only interested in how much <u>you</u> agree or disagree with the statements.

Sgt Bellwart was _**right**_ because…										
12) …he is prepared to accept the consequences of his actions.	_I strongly disagree_								_I strongly agree_	
	-4	-3	-2	-1	0	+1	+2	+3	+4	
13) …most soldiers would have approved of his actions.	_I strongly disagree_								_I strongly agree_	
	-4	-3	-2	-1	0	+1	+2	+3	+4	
14) …acting in a way that is similar to the UN force commander's perspective may help his career.	_I strongly disagree_								_I strongly agree_	
	-4	-3	-2	-1	0	+1	+2	+3	+4	
15) …everyone has the right to intervene when another person's life is in danger.	_I strongly disagree_								_I strongly agree_	
	-4	-3	-2	-1	0	+1	+2	+3	+4	
16) …the right to life should be guaranteed in law in every society.	_I strongly disagree_								_I strongly agree_	
	-4	-3	-2	-1	0	+1	+2	+3	+4	
17) …he probably won't be punished because the UN force commander has been trying to change the ROEs.	_I strongly disagree_								_I strongly agree_	
	-4	-3	-2	-1	0	+1	+2	+3	+4	

Please read the following statements _against_ Sgt Bellwart's actions. Please indicate to what extent you agree or disagree with the statements. <u>There are no right or wrong answers.</u> We are only interested in how much <u>you</u> agree or disagree with the statements.

Sgt Bellwart was _**wrong**_ because…									
18) …he should have adhered to the mission ROEs.	_I strongly disagree_								_I strongly agree_
	-4	-3	-2	-1	0	+1	+2	+3	+4
19) …he broke the law by acting on his own conscience, without considering how this might impact the overall UN mission.	_I strongly disagree_								_I strongly agree_
	-4	-3	-2	-1	0	+1	+2	+3	+4
20) …risking his career as a soldier for someone he doesn't know is unwise.	_I strongly disagree_								_I strongly agree_
	-4	-3	-2	-1	0	+1	+2	+3	+4
21) …he could be court-martialled for acting against the ROEs.	_I strongly disagree_								_I strongly agree_
	-4	-3	-2	-1	0	+1	+2	+3	+4
22) …his actions could damage relationships with the locals.	_I strongly disagree_								_I strongly agree_
	-4	-3	-2	-1	0	+1	+2	+3	+4
23) …the life of the crowd member he shot is just as valuable as that of the woman being stoned.	_I strongly disagree_								_I strongly agree_
	-4	-3	-2	-1	0	+1	+2	+3	+4

A5. Moral Intensity and Multi-Dimensional Ethics Scale

**Thinking about the <u>short story</u> that you just read, please answer the following questions.
<u>There are no right or wrong answers</u>. We are only interested in <u>your</u> opinion.**

24) Overall, does this dilemma involve a moral issue?	*Not at all*						*Very much*
	1	2	3	4	5	6	7
25) The possible harm from this decision would be…	*Minor*						*Severe*
	1	2	3	4	5	6	7
26) Most people would consider this decision to be…	*Inappropriate*						*Appropriate*
	1	2	3	4	5	6	7
27) The chances of any negative consequences occurring as a result of this decision are…	*Not at all likely*						*Very likely*
	1	2	3	4	5	6	7
28) Would you describe this decision as just?	*Unjust*						*Just*
	1	2	3	4	5	6	7
29) Would you describe this decision as acceptable in your own culture?	*Culturally unacceptable*						*Culturally acceptable*
	1	2	3	4	5	6	7
30) Would you describe this decision as morally right?	*Morally wrong*						*Morally right*
	1	2	3	4	5	6	7
31) Would you say this decision violates an unwritten contract?	*Violates an unwritten contract*						*Does not violate an unwritten contract*
	1	2	3	4	5	6	7
32) Would this decision be acceptable to your family?	*Unacceptable to my family*						*Acceptable to my family*
	1	2	3	4	5	6	7
33) Would you describe this decision as fair?	*Fair*						*Unfair*
	1	2	3	4	5	6	7
34) Would you say this decision violates an unspoken promise?	*Does not violate an unspoken promise*						*Violates an unspoken promise*
	1	2	3	4	5	6	7
35) Would you describe this decision as traditionally acceptable?	*Traditionally acceptable*						*Traditionally unacceptable*
	1	2	3	4	5	6	7

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A6.   Moral Dilemma

Please read the following <u>short story</u> and answer the questions that follow.

Infiltrators on the Base

Cpl Otto and his unit are part of a United Nations (UN) reconstruction mission. They reside on a large base with a number of other units from Canada. Over the past couple of months, security on the base has become more difficult to maintain as infiltrations by local youths looking for things to steal has increased. Though none of these youths carry fire arms, they have been known to carry knives. When caught, they often show little regard for the soldiers detaining them. The detainees talk back, shout, they do not listen. Despite these ongoing problems, however, it was clear to everyone on the base that mistreatment of detainees was absolutely forbidden.

One night, Cpl Otto and members of his section caught and detained one of these youths. The youth was very spirited, and he refused to keep quiet when told by the Sgt in charge. The Sgt yelled at him to "Shut up!", but the detainee refused and kept on arguing. In order to let the detainee know who was in charge, the Sgt began to push him around, throwing in punches and kicks, in full view of Cpl Otto and the other section members. The Sgt continued to punch and kick the detainee, long after he had stopped arguing. Cpl Otto began to feel uncomfortable with the Sgt's behaviour. But, as Cpl Otto looked around the room, none of the other members of his section seemed to mind the Sgt's conduct. Cpl Otto continued to feel uncomfortable with the Sgt's treatment of the detainee, and continued to wonder whether he should report the Sgt to the CO. He deliberated about what to do the following day, but he chose to keep quiet.

50) Would you agree or disagree with Cpl Otto's decision?

I strongly disagree				*uncertain*				*I strongly agree*
-4	-3	-2	-1	0	+1	+2	+3	+4

A7. Moral Judgement Test

Please read the following statements ***against*** Cpl Otto's actions. Please indicate to what extent you agree or disagree with the statements. <u>There are no right or wrong answers.</u> We are only interested in how much <u>you</u> agree or disagree with the statements.

Cpl Otto was ***wrong*** because…									
51)… a well-functioning society requires law and order and the protection of individuals' rights.	*I strongly disagree*								*I strongly agree*
	-4	-3	-2	-1	0	+1	+2	+3	+4
52)… everyone has a right to be treated with respect, including uncooperative detainees.	*I strongly disagree*								*I strongly agree*
	-4	-3	-2	-1	0	+1	+2	+3	+4
53)… he has a duty to report unlawful conduct.	*I strongly disagree*								*I strongly agree*
	-4	-3	-2	-1	0	+1	+2	+3	+4
54)… once word gets out, he could be court-martialled as an accomplice.	*I strongly disagree*								*I strongly agree*
	-4	-3	-2	-1	0	+1	+2	+3	+4
55)… failing to report the Sgt's behaviour could negatively impact Cpl Otto's career.	*I strongly disagree*								*I strongly agree*
	-4	-3	-2	-1	0	+1	+2	+3	+4
56)… most people would approve if he spoke out.	*I strongly disagree*								*I strongly agree*
	-4	-3	-2	-1	0	+1	+2	+3	+4

Please read the following statements ***in favour*** of Cpl Otto's actions. Please indicate to what extent you agree or disagree with the statements. **There are no right or wrong answers. We are only interested in how much you agree or disagree with the statements.**

Cpl Otto was ***right*** because…									
57)… the success of the mission and its overall impact on the society is more important than the mistreatment of one detainee.	*I strongly disagree*								*I strongly agree*
	-4	-3	-2	-1	0	+1	+2	+3	+4
58)… people have the right to choose what is acceptable and unacceptable behaviour.	*I strongly disagree*								*I strongly agree*
	-4	-3	-2	-1	0	+1	+2	+3	+4
59)… to avoid trouble, it is best that he keep quiet.	*I strongly disagree*								*I strongly agree*
	-4	-3	-2	-1	0	+1	+2	+3	+4
60)… ensuring the security, stability, and order on the base is more important than the local youths.	*I strongly disagree*								*I strongly agree*
	-4	-3	-2	-1	0	+1	+2	+3	+4
61)… a soldier protects himself by protecting his own.	*I strongly disagree*								*I strongly agree*
	-4	-3	-2	-1	0	+1	+2	+3	+4
62)… some might disapprove of him speaking out against a fellow soldier.	*I strongly disagree*								*I strongly agree*
	-4	-3	-2	-1	0	+1	+2	+3	+4

A8. Moral Intensity and Multi-Dimensional Ethics Scale

Thinking about the <u>short story</u> that you just read, please answer the following questions. <u>There are no right or wrong answers</u>. We are only interested in <u>your</u> opinion.

63) Overall, does this dilemma involve a moral issue?	*Not at all* *Very much* 1 2 3 4 5 6 7
64) The possible harm from this decision would be…	*Minor* *Severe* 1 2 3 4 5 6 7
65) Most people would consider this decision to be…	*Inappropriate* *Appropriate* 1 2 3 4 5 6 7
66) The chances of any negative consequences occurring as a result of this decision are…	*Not at all likely* *Very likely* 1 2 3 4 5 6 7
67) Would you describe this decision as just?	*Unjust* *Just* 1 2 3 4 5 6 7
68) Would you describe this decision as acceptable in your own culture?	*Culturally unacceptable* *Culturally acceptable* 1 2 3 4 5 6 7
69) Would you describe this decision as morally right?	*Morally wrong* *Morally right* 1 2 3 4 5 6 7
70) Would you say this decision violates an unwritten contract?	*Violates an unwritten contract* *Does not violate an unwritten contract* 1 2 3 4 5 6 7
71) Would this decision be acceptable to your family?	*Unacceptable to my family* *Acceptable to my family* 1 2 3 4 5 6 7
72) Would you describe this decision as fair?	*Fair* *Unfair* 1 2 3 4 5 6 7
73) Would you say this decision violates an unspoken promise?	*Does not violate an unspoken promise* *Violates an unspoken promise* 1 2 3 4 5 6 7
74) Would you describe this decision as traditionally acceptable?	*Traditionally acceptable* *Traditionally unacceptable* 1 2 3 4 5 6 7

A9. Experimental Stimuli – Principle-Based Instruction

The following <u>excerpt</u> comes from an article printed in a CF military journal. We are interested in understanding the impact the information has on the reader. Please read the following excerpt carefully and take some time to think about it.

The principles below are meant to be universal ethical obligations owed to humanity, society and lawful authority.

Principle I: Respect the dignity of all persons

This principle illustrates Canada's desire to be a member of "one human family". The respect owed to others reflects the belief that all human beings ought to be treated as ends in themselves, and never merely as a means to an end. In other words, human beings are not just tools to be used for our own purposes, but are unique individuals who also have goals. Human beings should not be measured by their wealth, race, religion, or any other instrumental value. Rather, people should be measured by their humanity and their ability to have their own life. This principle demands that people should not be tortured, brutalized, injured, coerced, bullied, manipulated, discriminated against, harassed, treated unfairly, or otherwise ill-treated by another human being. This principle also demands that every person should be treated with tolerance and consideration. For example, accepting allowances made for service members of different religious groups demonstrates a respect for their values and beliefs. The demands that arise from this principle must be followed in every situation, with the exception of a war being fought to establish justice and restore human rights. In such cases, intentional killing, harm to others, and acts of destruction that are usually forbidden are acceptable as long as these acts are limited to combatants and reflect lawful command.

Principle II: Serve Canada before self

This principle affirms the functional responsibility of the CF as an institution of a democratic government to serve the people. For the military in particular, this principle reflects the hierarchy between public and private goods. What this means is that the collective needs of the CF and Canada take priority over one's personal needs. Members of the CF have a duty to provide security to Canada and Canadians as well as those peoples they are asked to protect in operations. This principle also demands that CF members ensure ideals, such as peace, justice, freedoms, and equality, are protected.

Principle III: Obey and support lawful authority

This principle represents the respect for the general rule of law and the lawful policies, directives, and orders of superiors in the chain of command. Individuals in a position of authority within the chain of command must be mindful of ethical considerations when issuing commands. One challenge facing service members is adhering to demands of legitimate authority when these compete with one's personal conscience. Ultimately, this principle makes apparent the fact that each person is responsible for his or her own actions.

These principles should be understood as hierarchical. In cases when they conflict, Principle I takes precedence over Principles II and III, and Principle II takes precedence over Principle III. Along with these principles, individuals are expected to act with integrity, loyalty, courage, honesty, fairness, and responsibility.

A10. Experimental Stimuli – Character-Based Instruction

The following <u>excerpt</u> comes from an article printed in a CF military journal. We are interested in understanding the impact the information has on the reader. Please read the following excerpt carefully and take some time to think about it.

While serving on a United Nations peacekeeping mission in the country of Bantu, Harry, a Captain in the CF, came across a mob outside the Congress of National Development (CND). The Bantu Government Force (BGF), the Presidential Guard and the militia usually had people stationed nearby to monitor the comings and goings, often stopping and harassing visitors, so it wasn't unusual to see an angry mob there. But as Harry drove by, he could see the mob was armed with clubs and yelling at the Bantu Patriotic Force (BPF) guards stationed inside the complex. It quickly became apparent that members of the mob had attacked a couple who had been visiting the CND, and were now taunting the BPF guards to try to save them. Harry thought that the dignity of the couple had been totally violated. Typical of the current conflict, the mob had showed little consideration for the couples' humanity as a result of their religious affiliation.

Realizing how rapidly this situation could escalate, Harry intervened by ordering the BPF to stay inside the compound and not respond to the provocation. He believed that this command was necessary to prevent a further escalation of violence. With little consideration of his own personal well-being, Harry then plunged into the crowd. As he got to the centre of the mob, he discovered a man sprawled on the ground with blood splattered everywhere. His face had been smashed open, exposing his bone. Close by lay a heavy pregnant woman, her arm cut, twisted, and obviously broken. Harry lifted the man onto his shoulder and made directly for the vehicle. As he moved forward, a man with a club separated himself from the crowd and stood squarely in Harry's way. Without a moment's hesitation, Harry drove his fist into the man's solar plexus, knocking him to the ground. Once Harry had the man inside the vehicle, he went back and fetched the woman and carried her to safety.

Harry drove to the hospital. When he arrived with his casualties, he was greeted with the usual emergency room pandemonium. The pregnant woman, who had been talking incessantly in her native tongue on the ride to the hospital, suddenly began to weep uncontrollably. A young boy translated her anguished cries to English. It turned out she had been carrying a baby in her arms when she was attacked and she had no idea where her child was or if it had been harmed. Harry swung around and raced back.

By the time he got there the crowd had dispersed. The assailants were gone, but crouched along a wall across the street was a woman cradling a baby. Harry asked her if the child belonged to the wounded pregnant woman, and she nodded "yes". Harry immediately took the baby back to the hospital to be reunited with its family.

When Harry visited a week later, he found them alive and well.

Thinking about the <u>excerpt</u> that you just read, please answer the questions in the table below. There are no right or wrong answers. We are only interested in <u>your</u> opinion.

36) How relevant would you say this excerpt is to you personally?	*Not at all relevant*					*Very relevant*	
	1	2	3	4	5	6	7
37) How important is it that you act in a way that is consistent with this excerpt?	*Not at all important*					*Very important*	
	1	2	3	4	5	6	7
38) In your mind, how likely is it that you will act in a way that is consistent with this excerpt?	*Not at all likely*					*Very likely*	
	1	2	3	4	5	6	7
39) How interesting was the excerpt to you personally?	*Not at all interesting*					*Very interesting*	
	1	2	3	4	5	6	7
40) To what extent did the excerpt hold your attention?	*Not at all attentive*					*Very attentive*	
	1	2	3	4	5	6	7
41) Did you clearly understand the information that was presented to you in the excerpt?	*Not at all clear*					*Very clear*	
	1	2	3	4	5	6	7
42) To what extent can you apply the information you gained from reading the excerpt to your daily life?	*Not at all*					*Very much*	
	1	2	3	4	5	6	7
43) To what extent does the excerpt that you read help you to <u>be a better person</u>?	*Not at all helpful*					*Very helpful*	
	1	2	3	4	5	6	7
44) To what extent does the excerpt that you read help you know <u>how to treat other people</u>?	*Not at all helpful*					*Very helpful*	
	1	2	3	4	5	6	7
45) To what extent does the excerpt that you read help you <u>act courageously in the face of danger</u>?	*Not at all helpful*					*Very helpful*	
	1	2	3	4	5	6	7
46) To what extent does the excerpt that you read help you <u>distinguish right from wrong</u>?	*Not at all helpful*					*Very helpful*	
	1	2	3	4	5	6	7
47) To what extent does the excerpt that you read help you <u>be a good citizen</u>?	*Not at all helpful*					*Very helpful*	
	1	2	3	4	5	6	7
48) To what extent does the excerpt that you read help you <u>be a good soldier</u>?	*Not at all helpful*					*Very helpful*	
	1	2	3	4	5	6	7
49) If you were faced with an ethical decision in operations, to what extent would the excerpt that you just read help you know what to do?	*Not at all helpful*					*Very helpful*	
	1	2	3	4	5	6	7

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ANNEX B.

B1. Information Sheet

INFORMATION SHEET
Decision-making in an operational context: A laboratory study (L-619).

This work is being conducted by a consulting firm named Human*systems* Inc. in Guelph, Ontario. Humansystems has been contracted by Defence Research and Development Canada (DRDC) Toronto, a human protection and performance laboratory within DND, to conduct this study of decision-making in an operational context. We would like to provide you with more information about this project and what your involvement would entail, should you choose to participate.

The issue of operational decision-making is clearly fundamental to the success of all military operations. As such, training military personnel to make effective decisions in operations is also paramount. However, currently, there is little research that directly addresses this important issue of training. The present study will explore some of the instructional approaches for training decision-making in an operational context in order to determine which has the greatest impact for operational readiness. This work will make an important contribution toward understanding the merits of different approaches to teaching decision-making, and will impact future CF training in this area as a result. Once the results have been collated, we intend to feed the information we learn back into the CF training cycle.

For the current study then we will be asking you to read a number of vignettes and to complete a few short questionnaires regarding your decision-making related to these vignettes. The study should take no more than one hour to complete. Your participation in this study is <u>completely voluntary</u>. You may also end your participation in the study at any time, and may decline to answer any of the items on the questionnaires as you see fit. All information you provide on the questionnaire is considered <u>completely confidential</u>. Results communicated or reported will contain <u>no identifying information</u>. You may withdraw from this study at any time with no penalty to you.

We have worked to minimize any risks that are associated with your participation in this study. The study, though remaining <u>completely confidential</u>, provides actual soldiers' stories from operations and asks personally sensitive questions. Because decision-making can sometimes be very difficult, some participants might have some difficulty answering these kinds of questions. The experimental debriefing that we will provide to you will give us an opportunity to talk about these issues if they arise. This will ensure that you understand what the study is aimed to achieve, as well as to ensure that the study and questionnaire(s) have not caused you any distress. Indeed, we encourage you to provide us feedback about any of your questions, suggestions or concerns about the study. In addition, all your questionnaire data will be accessed only by members of the research team, and your responses will remain confidential. There are no other known or anticipated risks to participants in this study.

Should you have any questions or concern regarding this project before, during, or after participation, feel free to contact Defence Research and Development Canada Toronto (DRDC Toronto), P.O. Box 2000, 1133 Sheppard Avenue West, Toronto, Ontario M3M 3B9. This contact can be made by surface mail at this address or in person, by phone or e-mail, to any of the DRDC Toronto numbers and addresses listed below:

- Principal DRDC Toronto Investigator: Ann-Renee Blais, (416-635-2000, ext. 3082), ann-renee.blais@ drdc-rddc.gc.ca.

- ▪ Chair, DRDC Human Research Ethics Committee (HREC): Dr. Jack Landolt, (416-635-2120), jack.landolt@ drdc-rddc.gc.ca.

This project has been reviewed by, and received ethics approval from the Human Research Ethics Committee at DRDC Toronto (Protocol Number L-619).

Thank you in advance for your interest in this project.

B2. Voluntary Consent Form

VOLUNTARY CONSENT FORM
Decision-making In An Operational Context: A Laboratory Study
Protocol Number: L-619

Principal Investigator: Michael Thomson

DRDC Toronto Principal Investigator: Dr. Ann-Renee Blais

Co-investigators: Dr. Megan Thompson (DRDC); Dr. Barb Adams and Dr. Andrea Brown (Humansystems)

I,		(name)
		(address)
		(phone number)

hereby volunteer to participate in the study, Decision-making in an Operational Context (L-619**)**.

I have been told that I will participate in a study investigating decision-making in an operational context.

I understand that:

… my participation in this study is <u>completely voluntary</u>.

… I may refuse to participate in the study without prejudice at any time

… I will be asked to read a number of vignettes and answer a few short questionnaires exploring the factors that are associated with decision-making. This study should take me no more than one hour. I may decline any individual items on the questionnaire that I prefer not to answer.

… I have been informed that the questionnaire, though remaining <u>completely confidential</u>, asks questions that I may find to be sensitive. Because decision-making can sometimes be very difficult, I might have some difficulty answering these kinds of questions. I understand that I will be debriefed thoroughly about the goals of the study and will have the opportunity to ask questions of the researchers. There are no other known or anticipated risks to participants in this study.

… my questionnaire responses will be treated with <u>complete confidentiality</u>, and will not be revealed to anyone other than the DRDC Toronto research team and the Human*systems* research team without my consent except as data unidentified as to source.

… I may withdraw my consent at any time, before, during or after my participation, without prejudice; my involvement as a participant will cease immediately and I will have the option of requesting that my data be destroyed.

… the Investigator(s), or their designate, may terminate my participation in the study at any time, regardless of my wishes. However, this would not impact me professionally.

… I will receive remuneration for my participation.

… the data may be reviewed by an accredited human research ethics audit committee for the

purpose of review of research and data storage procedures as they relate to ethical guidelines for research involving human participants. I understand that any summary information resulting from such a review will not identify me personally.

… an experimental debriefing will be provided to me by on-site researchers. I will have an opportunity to talk about any study related issues if they arise.

I have read the information sheet, and have had the opportunity to ask questions of the Investigators. All of my questions concerning this study have been fully answered to my satisfaction. However, I understand that I may obtain additional information about the research project and have any questions about this study answered by contacting Dr. Ann-Renee Blais at DRDC Toronto (416-635-2000, ext. 3082).

There are no other known or anticipated risks to participants in this study.

<u>For Canadian Forces (CF) members only:</u> I understand that I am considered to be on duty for disciplinary, administrative and Pension Act purposes during my participation in this experiment. This duty status has no effect on my right to withdraw from the experiment at any time I wish and I understand that no action will be taken against me for exercising this right.

I understand that I will receive a copy of the information sheet so that I may contact any of the above-mentioned individuals at some time in the future should that be required. I grant permission to the principal investigator to <u>quote me directly from the questionnaire</u> but without attribution or reference to my identity.

Volunteer's Name _____

Signature: _____

Date: _____

FOR SUBJECT ENQUIRY:

Should I have any questions or concern regarding this project before, during, or after participation, I am encouraged to contact Defence R&D Canada - Toronto (DRDC Toronto), P.O. Box 2000, 1133 Sheppard Avenue West, Toronto, Ontario M3M 3B9. This contact can be made by surface mail at this address or in person, by phone or e-mail, to any of the DRDC Toronto numbers and addresses listed below:

- Principal DRDC Toronto Investigator: Ann-Renee Blais, (416-635-2000, ext. 3082), ann-renee.blais@ drdc-rddc.gc.ca.

Chair, DRDC Human Research Ethics Committee (HREC): Dr. Jack Landolt, 416-635-2120, jack.landolt@ drdc-rddc.gc.ca.

I understand that I will be given a copy of the information sheet so that I may contact any of the above-mentioned individuals at some time in the future should that be required.

B3. Debriefing Sheet

DEBRIEFING SHEET

Thank you for participating in our study. This work is being conducted by a consulting firm named Human*systems* Inc. in Guelph, Ontario. Humansystems has been contracted by Defence Research and Development Canada (DRDC) Toronto, a human protection and performance laboratory within DND, to conduct this study of decision-making in an operational context.

The issue of operational decision-making is clearly fundamental to the success of all military operations. As such, training military personnel to make effective decisions in operations is also paramount. However, currently, there is little research that directly addresses this important issue of training. The present study explores some of the instructional approaches for training ethical decision-making in an operational context. To explore this, you were asked to read a number of vignettes and to complete a few short questionnaires regarding your decision-making related to these vignettes. You also were asked to read a passage from a military journal and complete a questionnaire related to that passage. You either read a description of ethical principles or an example of a CF soldier who had to make an ethical decision and the outcome of that decision. The information you provided will help us understand instructional approaches for training ethical decision-making in an operational context.

This work will make an important contribution toward understanding the merits of different approaches to teaching decision-making, and will impact future CF training in this area as a result. Once the results have been collated, we intend to feed the information we learn back into the CF training cycle.

We apologize for not telling you the full purpose of the study earlier. However, doing so might have had an impact on the answers you provided. As we are still running this study, we would ask that you do not discuss this study with anyone who might be participating in the study.

Should you have any questions or concern regarding this project, feel free to contact Defence Research and Development Canada Toronto (DRDC Toronto), P.O. Box 2000, 1133 Sheppard Avenue West, Toronto, Ontario M3M 3B9. This contact can be made by surface mail at this address or in person, by phone or e-mail, to any of the DRDC Toronto numbers and addresses listed below:

- Principal DRDC Toronto Investigator: Ann-Renee Blais, (416-635-2000, ext. 3082), ann-renee.blais@ drdc-rddc.gc.ca.

- Chair, DRDC Human Research Ethics Committee (HREC): Dr. Jack Landolt, (416-635-2120), jack.landolt@ drdc-rddc.gc.ca.

This project has been reviewed by, and received ethics approval from the Human Research Ethics Committee at DRDC Toronto (Protocol Number L-619).

Thanks again for taking part in the study.

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3. TITLE (The complete document title as indicated on the title page. Its classification is indicated by the appropriate abbreviation (S, C, R, or U) in parenthesis at the end of the title)

The Impact of Moral Exemplar Training on Moral Judgment and Decision–making in an Operational Context (U)

Impact de l'instruction au moyen de modèles moraux sur le jugement moral et la prise de décisions dans un contexte opérationnel (U)

4. AUTHORS (First name, middle initial and last name. If military, show rank, e.g. Maj. John E. Doe.)

Michael H. Thomson; Barbara D. Adams; Courtney D. Tario; Andrea L. Brown; Andrew Morton

5. DATE OF PUBLICATION (Month and year of publication of document.) July 2008	6a NO. OF PAGES (Total containing information, including Annexes, Appendices, etc.) 89	6b. NO. OF REFS (Total cited in document.) 87

7. DESCRIPTIVE NOTES (The category of the document, e.g. technical report, technical note or memorandum. If appropriate, enter the type of document, e.g. interim, progress, summary, annual or final. Give the inclusive dates when a specific reporting period is covered.)

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10a. ORIGINATOR'S DOCUMENT NUMBER (The official document number by which the document is identified by the originating activity. This number must be unique to this document) DRDC Toronto CR 2008–107	10b. OTHER DOCUMENT NO(s). (Any other numbers under which may be assigned this document either by the originator or by the sponsor.)

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(U) The changing battle space is significantly impacting the Canadian Forces' (CF) operational concept. The moral domain has been identified as an increasingly important part of this. More than ever, equipping CF members at all ranks with the most effective means to make moral decisions in operations and to resolve moral and ethical dilemmas that arise is a critical priority.

This study examined the impact of two different forms of moral instruction on moral reasoning discussed in the literature, namely principle–based and character–based education (Narvaez, 2006). Although ethics instruction has often involved description of formal ethical principles, there is a growing recognition in both the academic and the military domain that moral education should consider a virtue or character–based approach.

Reserve force military personnel (n = 106) were recruited to participate in this study. Participants first filled in their demographic information and answered the Moral Identity questionnaire. They then read about a dilemma and answered questions measuring their moral judgement and ratings of the dilemmas. Participants were then given either principle–based or character–based moral instruction and answered questions assessing the relevance, comprehension and applicability to real life. Participants read the second dilemma and answered similar questions as the first. They participated in a focus group to understand what factors would influence a soldier's moral and ethical decision–making in an operational context.

Results showed the type of moral instruction did not have an impact on participants' moral reasoning ability. Participants rated the principle–based instruction to be significantly more relevant to them personally, but it held their attention significantly less and was less interesting than the character–based instruction. There was a correlation that replicated previous work from Aquino and Reed (2002) indicating participants who strongly internalized their moral identity showed higher consistency in their moral reasoning for one dilemma and both dilemmas combined. The focus group analysis assessed the factors that participants considered while making a moral and ethical decision, including CF organizational culture, self–identity, and national culture.

Possible theoretical accounts of these findings, lessons learned and future research are discussed.

(U) L'espace de combat changeant a un impact important sur le concept opérationnel des Forces canadiennes (FC). Le champ de la morale jouerait un rôle de plus en plus important à cet égard. Plus que jamais, il est essentiel de donner aux membres des FC de tous grades les moyens les plus efficaces de prendre des décisions morales pendant les opérations et de résoudre les dilemmes moraux et éthiques qui se présentent.

Cette étude porte sur l'impact de deux formes différentes d'instruction morale abordées dans la littérature sur le raisonnement moral, soit l'éducation fondée sur les principes et l'éducation fondée sur les modèles (Narvaez, 2006). Bien que l'instruction éthique comporte souvent une description de principes éthiques formels, on reconnaît de plus en plus, dans les domaines tant scolaire que militaire, que l'éducation morale devrait comprendre une approche fondée sur la vertu ou les modèles.

Des militaires des forces de réserve ont été recrutés (n = 106) pour participer à cette étude. Les participants ont d'abord fourni les données démographiques les concernant puis ont répondu à un questionnaire d'identité morale. Ils ont ensuite lu un texte décrivant un dilemme et ont répondu à des questions visant à mesurer leur jugement moral et leur

appréciation des dilemmes. Les participants ont ensuite reçu une instruction morale fondée sur les principes ou fondée sur les modèles, puis ont répondu à des questions visant à mesurer la pertinence, la compréhension et l'applicabilité à la vraie vie. Les participants ont lu un deuxième dilemme et ont répondu à des questions similaires aux premières. Ils ont pris part à un groupe de discussion pour comprendre quels facteurs influent sur les décisions morales et éthiques d'un soldat dans un contexte opérationnel. Les résultats indiquent que le type d'instruction morale n'a pas eu d'impact sur la capacité de raisonnement moral des participants. Les participants ont jugé que l'instruction fondée sur les principes était beaucoup plus pertinente pour eux personnellement, mais elle a beaucoup moins retenu leur attention et était moins intéressante que l'instruction fondée sur les modèles. On a constaté une corrélation similaire à celle observée dans les travaux antérieurs de Aquino et Reed (2002), soit que les participants qui avaient fortement internalisé leur identité morale présentaient un raisonnement moral plus constant pour un même dilemme et pour les deux dilemmes combinés. L'analyse des discussions de groupe a permis d'évaluer les facteurs pris en compte par les participants pour prendre une décision morale et éthique, y compris la culture organisationnelle des FC, l'identité personnelle et la culture nationale.

Les explications théoriques possibles de ces résultats, les leçons apprises et les pistes de recherche future sont aussi abordées.

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(U) moral instruction; moral identity; moral reasoning

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